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PREFACE

After thirty years of study of our British Basidiomycetae I have ventured to write this text-book at the request of many mycological friends. The well-known classification of Fries is now insufficient for modern requirements and must be altered to embody the results obtained from a more detailed anatomical and microscopical examination of these plants. The present work is based chiefly on the excellent system set forth by N. Patouillard in his *Essai taxonomique sur les familles et les genres des Hyméno-mycètes*, published in 1900. Since this date several alterations and additions to this scheme have been made, due to the investigations of the eminent mycologists J. Bresadola, E. A. Burt, H. Bourdot and A. Galzin, F. von Hoehnel and V. Litschauer, and René Maire. My very best thanks are due to Mr J. Ramsbottom for his invaluable technical advice and assistance in the preparation of the manuscript and for kindly correcting the proof-sheets of this work, and to Miss E. M. Wakefield for valuable information respecting the Thelephoraceae. I am also very greatly indebted to Messrs A. D. Cotton, C. H. Grinling, A. A. Pearson and J. Ramsbottom for obtaining the large subsidy for the publication of this work, to the generous contributors to the same, and to The Royal Society for a grant-in-aid of £10.

CARLETON REA.

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INTRODUCTION

Fungi are non-chlorophyllous cryptogams reproduced by spores. In the larger fungi these spores are borne either to the exterior of a cell called the basidium or are contained within a sac-like cell called the ascus. Fungi with basidia constitute the BASIDIOMYCETAE, whilst those with asci are known as the ASCOMYCETAE. The present work deals only with the former group.

The Basidiomycetae were, until quite recently, divided into two main groups, Hymenomycetae and Gasteromycetae: in the former the spores are freely exposed to the air at maturity, whilst in the latter they remain inclosed within the body of the fungus. The spores on germination either give rise to threads or hyphae (collectively known as the mycelium or spawn) or they produce secondary spores termed sporidiola which on germination develop the mycelium. This mycelium constitutes the vegetative portion of the fungus and consists of septate hyphae, in some cases with lateral outgrowths known as clamp connections which arise near the septa and connect two adjacent cells. The mycelium is either filamentous or forms cord-like strands. At their extremities the hyphae give rise to other hyphae which terminate in basidia, sterile paraphyses which act as spacing elements and in some cases other sterile cells termed cystidia. These elements together constitute the hymenium and generally form a homogeneous layer but in some of the Gasteromycetae the basidia are irregularly distributed as in Scleroderma. The tissue between the hymenial layers is known as the trama. The basidium may consist either of a continuous cell, or be longitudinally divided, or transversely septate. It is usually surmounted at the apex by short stalks, the sterigmata, which bear the spores; sometimes these are lateral or arise from the division of the transversely septate basidia: sometimes the spores are borne directly on the hyphae. In some genera long vesicular hyphae are present which traverse the tissue in various directions and these are often filled with a granular coloured or colourless latex. The vegetative hyphae constitute the main portion of the sporophore except in
INTRODUCTION

the small effused forms. The hymenium may be spread over radiating gills or plates as in the mushroom, line the interior of tubes or pores as in Polyporus, cover teeth-like projections as in Hydnum, be immersed in a gelatinous mass as in Tremella, or be borne on variously shaped structures known as receptacles as in the Phalloids.

The sporophore is of different shapes, e.g. globose as in puff-balls, sessile with outstretched flaps as in Stereum, erect, clavate, coralloid or dendroid as in Clavaria, or differentiated into distinct stem, pileus or cap and hymenium-bearing surface as in the mushroom. When young the sporophore is often completely surrounded by a universal veil or membrane termed the volva which is ruptured by the growth of the stem and in many species portions or traces of this remain permanently at the base of the stem. A second membrane or partial veil consisting of either interwoven or arachnoid threads often protects the hymenial surface before it is mature and extends from the stem to the margin of the pileus: it either disappears completely or remains as a ring on the stem, or in appendiculate fragments at the margin of the pileus. The wall surrounding the Gasteromycetae is termed the peridium and consists of one, two, or more layers, the exoperidium to the exterior and the endoperidium to the interior. The peridium sometimes incloses separate hymenium-bearing bodies, the peridiola, which are either free, attached by a cord (funiculus) or form a compound structure. The contents of the peridium are collectively known as the gleba; in addition to spores there are often certain threads, the capillitium, which arise either directly from the base, from the walls of the peridium or are attached to a denser central portion, the columella.

In some cases the external walls of the hyphae deliquesce and this gives a jelly-like consistency to the whole fungus as in Tremella, whilst in other cases the deliquescence is confined to certain areas and constitutes a valuable diagnostic feature. In the genus Coprinus the edge of the gill gradually undergoes a process of autodigestion which ensures the economical dispersion of the spores. The tramal plates of many Gasteromycetae finally dissolve and disappear. All fungi since they have no chlorophyll and are thus unable to form carbohydrates are either saprophytes obtaining their nourishment from dead organic matter or are
parasites dependent on a living host. Sometimes the mycelium forms a somewhat dense stratum (stroma) on which the receptacle is seated or immersed; at other times it forms hard compact masses known as sclerotia which often lie dormant for a considerable length of time.

In more recent classifications the BASIDIOMYCETAE are primarily divided into two main divisions, the Homobasidiae and the Heterobasidiae. In the former, the basidium is an undivided cell usually clavate in shape: the spores on germination give rise to a mycelium which reproduces the sporophore. In the latter, the basidia are either transversely, longitudinally, or vertically septate, or sometimes continuous, but the spores on germination give rise to sporidiola which germinate in their turn to form the mycelium which reproduces the fruit body.

The Homobasidiae are divided into two main subdivisions based upon their parasitic or saprophytic habit. The parasitic forms constitute the subdivision Exobasidinae, the saprophytic forms the subdivision Eu-Homobasidinae. The latter are divided into the three orders Gasteromycetales, Agaricales and Aphyllophorales.

The Gasteromycetales include the species having the hymenium still surrounded at maturity by a peridium: the Agaricales have the hymenium originally protected by a volva or a ring but at maturity fully exposed, whilst the Aphyllophorales have the hymenium exposed from the first.

The Heterobasidiae are divided into four orders according to the nature of the basidium, viz. Auriculariales, Tremellales, Tulasnellales and Calocerales. In the Auriculariales the basidia are transversely septate; in the Tremellales the basidia are longitudinally, cruciately divided; the Tulasnellales have simple basidia but the sterigmata are at first of such a wide diameter that they were formerly considered to be spores, whilst the Calocerales have cylindrical basidia terminated by two pointed, usually long, sterigmata. All these orders are in general saprophytic and have the hymenium fully exposed from the first but the Auriculariales include the three parasitic suborders Pucciniineae, Coleosporiineae and Ustilagineae which are not dealt with in the present work and one suborder the Ecchyineae which has the hymenium inclosed within a peridium at maturity.
LIST OF ABBREVIATIONS

cm., centimetre.
mm., millimetre.
\( \mu \), one-thousandth part of a millimetre.
P., Pileus.
Pe., Peridium.
R., Receptacle.
st., stem.
v.v., Living specimens seen by the author.
KEY TO THE DIVISIONS AND GENERA OF BRITISH BASIDIOMYCETAE

BASIDIOMYCETAE.

I. Basidia simple; spores giving rise to a mycelium on germination  
   { HOMOBASIDIAE.
II. Basidia longitudinally divided, transversely septate, or simple; spores producing sporidiola on germination  
    { HETEROBASIDIAE.

HOMOBASIDIAE.

*EU-HOMOBASIDIINEAE.

Saprophytes.

1. Hymenium inclosed within a peridium at maturity  
   { GASTEROMYCETALES.
2. Hymenium at first covered by a volva, or a ring, becoming fully exposed at maturity, usually inferior, and spread over the surface of gills, fleshy pores, or a smooth surface  
   { AGARICALES.
3. Hymenium exposed from the first, amphigenous, or unilateral, and spread over pores, teeth, anastomosing gills, or a smooth surface  
   { APHYLLOPHORALES.

**EXOBASIDIINEAE.

Parasites.

4. Hymenium effused, rarely consisting of basidia only. Parasitic on leaves, etc. (especially Ericaceae)  
   { EXOBASIDIALES.

HETEROBASIDIAE.

1. Basidia transversely septate, cylindrical, straight, or curved  
   { AURICULARIALES.
2. Basidia longitudinally cruciately divided, subglobose \( \rightarrow \) **TREMELLALLES.**

3. Basidia simple, subglobose, with 2–4 very thick stout sterigmata. Spores producing sporidiola on germination \( \rightarrow \) **TULASNELLALES.**

4. Basidia simple, cylindrical, with two long pointed sterigmata. Spores always becoming septate on germination, and producing sporidiola \( \rightarrow \) **CALOCERALES.**

**HOMOBASIDIACEAE.**

*EU-HOMOBASIDIINEAE.*

**GASTEROMYCETALES.**

I. Superficial. Peridium globose, with a middle gelatinous layer, at length ruptured, and exposing the gleba on a variously shaped receptacle, volvate at the base

1. Receptacle trellised, or irregularly branched above; gleba internal, or between the branches \( \rightarrow \) **PHALLINEAE.**

2. Receptacle hollow, cylindrical, or fusiform; gleba external \( \rightarrow \) **PHALLACEAE.**

II. Subterranean, rarely superficial. Peridium globose, simple, indehiscent; hymenium lining the cell-like cavities of the gleba

1. Tramal plates arising from radial, basal, sterile hyphae \( \rightarrow \) **HYMENOGASTRINEAE.**

2. Tramal plates arising from the peridium \( \rightarrow \) **HYMENOGASTRACEAE.**

III. Superficial. Peridium globose, or variously shaped, of two or more layers, dehiscing by an apical aperture, or by the gradual falling away of the upper peridial walls; hymenium lining the cell-like cavities of the gleba. Capillitium and sometimes a columella present

Same characters as the suborder **LYCOPERDACEAE.**
IV. Superficial, or growing on wood or dung. Peridium campanulate, or cup-shaped, of one to three layers, inclosing lenticular peridiola, sometimes attached by a funiculus, and with or without a fugacious epiphragm
Same characters as the suborder NIDULARIAE.

NIDULARIINEAE.

V. Subterranean, or superficial. Peridium globose, or variously shaped, of one or more layers, sometimes prolonged into a stem-like base. Basidia irregularly scattered, sometimes intermixed with sterile veins.

PECTOBASIDIINEAE.

SCLERODERMINEAE.

A. Gleba pulverulent when mature.

Gleba traversed by sterile veins.

(a) Capillitium rudimentary. Peridium simple, rarely double

SCLERODERMATACEAE.

(b) Capillitium well developed. Peridium highly differentiated

CALOSTOMATACEAE.

(b) Gleba without sterile veins.

Peridium of two layers, produced below into a stem-like base

TULOSTOMATACEAE.

Peridium of one layer, sessile, seated on a ring-like mass of mycelium

GLISCHRODERMATACEAE.

B. Gleba slimy when mature

SPHAEROBOLACEAE.

CLATHRACEAE.

Receptacle sessile, forming a hollow, globose lattice

Clathrus.

Receptacle stipitate, terminating in free arms, or branches

Lysurus.

Receptacle stipitate, crowned by a disc from which the arms radiate

Aseroe.

PHALLACEAE.

Gleba campanulate, adnate throughout to the receptacle

Cynophallus. (Mutinus.)

Gleba campanulate, reticulate, free, attached by the apex to the receptacle

Phallus.
Hysterangiaceae.
Peridium globose, separable. Gleba cartilaginous, or mucilaginous, cavities at first empty

Hymenogastraceae.
A. Peridium without external mycelial strands.
   Spores elliptical to fusiform, with a prominent papilla; sterile base well developed
   Spore globose, or broadly elliptical, echinulate, or verrucose.
   Tramal plates splitting, sterile base well developed
   Tramal plates not splitting, no sterile base
B. Peridium with external mycelial strands; gleba cavities at first hollow, spores elliptical, smooth

Lyco-perdaceae.
A. Exoperidium consisting of a pseudo-parenchymatous layer.
   1. Capillitium threads attached to the peridium, or the columella, not consisting of a distinct stem and branches
   2. Capillitium threads free, consisting of a distinct stem and pointed branches.
      Sterile base present
      Sterile base absent
B. Exoperidium consisting of a pseudo-parenchymatous layer, and a fibrous layer, splitting open in a star-like manner.
   Endoperidium with many stems, and dehiscing by many mouths
   Endoperidium with a single stem, or sessile, and dehiscing by a single mouth

Nidulariaceae.
Peridium subglobose, of one layer, without an epi- phragm. Peridiola without a funiculus
Peridium cup-shaped, of two layers, with an epi- phragm. Peridiola attached by a papilla to the funiculus

Hysterangium.
Hymenogaster.
Octaviana.
Hydnangium.
Rhizopogon.
Lycoperdon.
Bovistella.
Bovista.
Myriostoma.
Geaster¹.
Nidularia.
Crucibulum.
¹ Cf. Astraeus.
KEY TO GASTEROMYCETALES

Peridium campanulate, or cylindrical, of three layers, with an epiphragm. Peridiola umbilicately attached to the funiculus

Cyathus.

SCLERODERMATACEAE.

Subterranean. Peridium soft, fleshy, with branched mycelial strands springing from every part of the exterior, not sharply separated from the gleba

Melanogaster.

Superficial. Peridium leathery, or corky, of one or two layers, sharply separated from the pulverulent gleba

Scleroderma.

Superficial. Peridium membranaceous, distinctly separated from the gleba, which at maturity consists of peridiola

Pisolithus. (Polysaccum.)

CALOSTOMATACEAE.

Endoperidium inserted at the base of the exoperidium, the latter splitting open in a star-like manner

Astraeus.

TULOSTOMATACEAE.

A. Capillitium smooth.

Endoperidium dehiscing by an apical aperture

Tulostoma.

Endoperidium dehiscing by the gradual falling away of the peridial walls from the base upwards

Queletia.

B. Capillitium with ring-like, or spiral markings

Battarrea.

GLISCHRODERMATACEAE.

Same characters as the family

Glischroderma.

SPHAEROBOLACEAE.

Same characters as the family

Sphaerobolus.

AGARICALES.

I. Hymenium inseparable from the pileus, spread over the surface of gills

AGARICINEAE.

II. Hymenium inseparable from the pileus, spread over the surface of narrow, obtuse gills, or folds, or quite smooth

CANTHARELLINEAE.

III. Hymenium soft, separable from the pileus, lining the inside of pores, or pore-like gills

BOLETINEAE.
KEY TO AGARICALES

AGARICINEAE.

Same characters as the suborder Agaricaceae.

AGARICACEAE.

I. Receptacle fleshy, trama not vesiculose, nor traversed by lacticiferous vessels, not membranaceous, not rapidly putrescent, nor tough and woody.

A. Pileus distinct, and easily separable from the fleshy stem.

*Without a ring, or a volva.

Spores white
Spores pink
Spores green
Spores ochraceous
Spores purple, or fuscous

**With a ring on the stem.

Spores white, ring rarely fugacious, always manifest in the adult stage
Spores white, ring very fugacious, not manifest in the adult stage
Spores pink
Spores purple, or fuscous
Spores black, or blackish fuscous

***With a volva at the base of the stem.

Spores white
Spores pink
Spores ochraceous
Spores purple, or fuscous

****With a ring on the stem, and a volva at the base of the stem.

Spores white

B. Pileus confluent and homogeneous with the fleshy stem.

*With a membranaceous ring on the stem.

Spores white

Schulzeria.
Pluteus.
Glaucospora.
Pluteolus.
Pilosace.

Lepiota.
Hiatula.
Annularia.
Psaliota.
Anellaria.

Amanitopsis.
Volvaria.
Locellina.
(Asellina.)
(Asellina absoluta.)
Clarkeinda.
(Chitonia.)

Armillaria.
KEY TO AGARICALES

Spores ferruginous, rough; general veil persistent
   }  Rozites.
Spores ochraceous, or ferruginous, generally smooth; general veil none, or fugacious
   }  Pholiota.
Spores purple, or fuscous
   }  Stropharia.

**With an arachnoid or filamentous general veil.

1. Veil forming an arachnoid, fugacious ring on the stem. Spores ochraceous, or ferruginous
   }  Cortinarius.

2. Veil concrete with the epidermis of the pileus.
   Spores ochraceous, or ferruginous, elliptical, smooth
   }  Inocybe.
   Spores ochraceous, or ferruginous, irregular, angular, echinulate, or verrucose
   }  Astrosporina.

***Gills sinuate.
   Spores white
   }  Tricholoma.
   Spores pink
   }  Entoloma.
   Spores ochraceous, or ferruginous
   }  Hebeloma.
   Spores purple, or fuscous
   }  Hypholoma.

****Gills decurrent, or adnato-decurrent by a tooth.
   Spores white; hymenium not waxy, nor pulverulent
   }  Clitocybe.
   Spores white; hymenium pulverulent
   }  Laccaria.
   Spores white; hymenium waxy
   }  Hygrophorus.
   Spores pink
   }  Clitopilus.
   Spores ochraceous, or ferruginous
   }  Flammula.
   Spores greenish fuscous, or blackish; gills mucilaginous
   }  Gomphidius.

C. Pileus confluent with, but heterogeneous from, the cartilaginous stem.

*Gills adnate, or sinuato-adnate.
†Margin of pileus at first incurved, or exceeding the gills.
   Spores white
   }  Collybia.
   Spores pink
   }  Leptonia.
   Spores ochraceous, or ferruginous
   }  Naucoria.
   Spores purple, or fuscous
   }  Psilocybe.
   Spores black, or blackish
   }  Panaeolus.
††Margin of pileus straight, at first adpressed to the stem.

- Spores white: Mycena.
- Spores pink: Nolanea.
- Spores ochraceous, or ferruginous: Galera.
- Spores purple, or fuscous: Psathyra.
- Spores black, or blackish: Psathyrella.

**Gills decurrent.

- Spores white: Omphalia.
- Spores pink: Eccilia.
- Spores ochraceous, or ferruginous: Tubaria.

D. Pileus confluent with the excentric, or lateral stem, dimidiate, sessile, or resupinate.

- Spores white, gill edge entire: Pleurotus.
- Spores white, gill edge longitudinally split: Schizophyllum.
- Spores pink: Claudopus.
- Spores ochraceous: Crepidotus.

II. Receptacle fleshy, trama vesiculose and traversed by lacticiferous vessels. Spores white, or yellow.

- Latex watery, uncoloured: Russula.
- Latex milk-white, or coloured, rarely like serum: Lactarius.

III. Receptacle membranaceous, or fleshy membranaceous, fragile, rapidly putrescent, or shrivelling up.

- Spores ochraceous, or ferruginous: Bolbitius.
- Spores black, or blackish fuscous. Gills auto-digested from below upwards: Coprinus.

IV. Receptacle membranaceous, tough, reviving with moisture, not putrescent.

- Spores white: Marasmius.

*Pileus with a thin, unspecialized cellular pellicle

**Pileus with a thick, cellular pellicle.

- Cells of the pellicle upright, echinulate, or verrucose: Androsaceus.
  (Marasmius p.p.)
- Cells of the pellicle decumbent, very long, fibrillose: Crinipellis.
V. Receptacle coriaceous, fleshy coriaceous, or woody. Spores white.

Pileus fleshy coriaceous, gills somewhat soft  \textit{Panus}.
Pileus membranaceous coriaceous, gills coriaceous, branched, obtuse  \textit{Xerotus}.
Pileus coriaceous, or woody, pliant; gills firm, often toothed  \textit{Lentinus}.

\textbf{CANTHARELLINEAE.}

Same characters as the suborder  \textit{Cantharellaceae}.

\textbf{Cantharellaceae.}

*Spores white.

Receptacle fleshy, stipitate; gills simple  \textit{Nycalis}.
Parasitic on other Agarics
Receptacle fleshy, stipitate; gills forked  \textit{Cantharellus}.
Receptacle fleshy, membranaceous, funnel-shaped or umbilicate. Hymenium veined, or smooth  \textit{Craterellus}.
Receptacle membranaceous, spathulate, or cup-shaped, pendant. Hymenium veined, or smooth  \textit{Dictyolus}.
(\textit{Cantharellus p.p.})

**Spores ochraceous.

Receptacle fleshy coriaceous, stipitate; Hymenium fold-like  \textit{Neurophyllum}.

\textbf{BOLETINEAE.}

Same characters as the suborder  \textit{Boletaceae}.

\textbf{Boletaceae.}

1. Hymenium spread over gills, which anastomose by veins, and form irregular pores, especially at the apex of the stem. Spores white, ochraceous, or ferruginous  \textit{Paxillus}.
2. Hymenium lining the inside of fleshy tubes.

Spores white, or pale yellowish  \textit{Gyroporus}.
(\textit{Boletus p.p.})
Spores pink  \textit{Tylopilus}.
(\textit{Boletus p.p.})
Spores purple  \(\{\text{Phaeoporus.}\)  
\(\{\text{(Boletus p.p.)}\)

Spores blackish, or fuscous. Pileus covered with imbricate scales  \(\text{Strobilomyces.}\)

Spores ochraceous, ferruginous, or olivaceous.

Tubes short, alveolar, decurrent  \(\text{Boletinus.}\)

Tubes very short, gyroso-plicate  \(\text{Gyrodon.}\)

Tubes long  \(\text{Boletus.}\)

**APHYLLOPHORALES.**

I. Receptacle pileate, stipitate, sessile, or resupinate; hymenium inferior  \(\text{POROHYDNINEAE.}\)

II. Receptacle erect, dendroid, coralloid, simple, or branched, never pileate; hymenium more or less amphigenous  \(\text{CLAVARIINEAE.}\)

**I. POROHYDNINEAE.**

1. Hymenium lining tubes coherent throughout their length, forming a layer distinct from the substance of the pileus, sometimes becoming torn into teeth, or gill-like plates, and separated by dissepiments sterile on the edge  \(\text{POLYPORACEAE.}\)

2. Hymenium lining tubes, or covering gills, or teeth, homogeneous with the substance of the pileus, not forming a distinct layer, sterile on the edge  \(\text{POLYSTICTACEAE.}\)

3. Hymenium spread over veins, anastomosing pores, or quite smooth; edge of veins or pores fertile  \(\text{MERULIACEAE.}\)

4. Hymenium inferior, lining free and separate tubes  \(\text{FISTULINACEAE.}\)

5. Hymenium spread over the surface of spines, granules, warts, or other protuberances, or quite smooth, intervening spaces fertile. Receptacle fleshy, coriaceous, waxy, crustaceous, or floccose, rarely none  \(\text{HYDNACEAE.}\)
KEY TO APHYLLOPHORALES

6. Hymenium spread over a smooth, rugose, or ribbed surface, either resting upon an intermediate layer of hyphae running longitudinally between it and the mycelium, or seated directly upon the mycelium

7. Hymenium covering the whole of the interior of cup-shaped, urceolate, or cylindrical receptacles, smooth, or veined

**Polyporaceae.**

Receptacle stipitate, or sessile, fleshy, cheesy, or coriaceous. Tubes homogeneous, or heterogeneous, dissepiments entire, or toothed. Spores white, or coloured

Receptacle stipitate, fleshy. Tubes becoming torn into teeth, or gill-like plates, and anastomosing at the base. Spores white

Receptacle sessile, hard, woody, or corky. Pileus often concentrically zoned, covered with a hard crust, or villose. Tubes homogeneous, or heterogeneous, often stratose. Spores white, or coloured

Receptacle stipitate, or sessile, corky. Pileus covered with a rigid, laccate, shining crust. Tubes often stratose. Spores coloured, oval, truncate at the base

Receptacle resupinate, membranaceous, soft, coriaceous, or corky. Tubes often inserted directly on the mycelium, round, or angular. Spores white, or coloured

**Polystictaceae.**

Receptacle sessile, thin, coriaceous, or membranaceous. Tubes homogeneous, developing from the centre outwards. Spores white

Receptacle sessile, or resupinate, membranaceous, or coriaceous. Tubes alveolar, becoming torn, or toothed. Spores white
Receptacle sessile, corky, or coriaceous. Hymenium spread over gills, which anastomose at the base, homogeneous with the substance of the pileus, and not forming a distinct layer. Spores white

Receptacle sessile, corky. Tubes homogeneous with the substance of the pileus, not forming a distinct layer, regular, round, or oblong. Spores white, rarely yellowish

Receptacle stipitate, or sessile, spongy, or corky. Tubes homogeneous with the substance of the pileus, not forming a distinct layer, irregular, sinuous, or labyrinthiform, often becoming torn, or toothed. Spores white.

**Meruliaceae.**

Receptacle sessile, or resupinate, more or less gelatinous. Veins anastomosing to form irregular pores. Spores white or coloured

Receptacle erect, or resupinate, waxy, firm. Veins radial. Spores white

Receptacle sessile, spongy coriaceous. Veins gill-like, crisped. Spores white

Receptacle resupinate, waxy. Hymenium granular, or smooth. Spores coloured, smooth. No cystidia

Like *Coniophora*, but with cystidia

**Fistulinaceae.**

Same characters as the family

**Hydnaceae.**

Receptacle none. Spines simple, cylindrical, acute, seated directly on the fugacious mycelium. Spores white

Receptacle simple, or branched, stipitate, sessile, or dimidiate, fleshy, coriaceous, or corky. Spines subulate. Spores white, or coloured

Receptacle resupinate, or reflexed, membranaceous coriaceous. Spines subulate, apex hispid. Spores white, oval, or oblong. Cystidia present.

*_Lenzites._*

*_Trametes._*

*_Daedalea._*
Receptacle resupinate, thin, waxy, inseparable. Tubercles or spines obtuse, often deformed, irregularly scattered, or confluent. Spores white, or coloured. Cystidia none, cystidioles (sterile basidia) sometimes present  

Receptacle resupinate, thin, waxy. Spines thin, subulate, generally entire, distinct, or connate at the base. Spores white. Cystidia none, cystidioles very thin, or absent  

Receptacle resupinate, thin, membranaceous, pelliculose, or crustaceous. Tubercles or spines obtuse, or pointed, entire. Spores white, or coloured. Cystidia none  

Receptacle resupinate, thin, membranaceous, waxy, crustaceous or mealy. Spines conical, ciliate, or penicillate at the apex. Spores white. Cystidia present  

Receptacle resupinate, subgelatinous. Spines very minute, sterile. Spores white  

Like *Odontia*, but spores coloured, smooth  

Receptacle resupinate, soft, floccose. Spines soft, conical, villose, fimbriate at the apex. Flesh coloured. Spores coloured, verrucose, or echinulate  

Receptacle pileate, stipitate, sessile, or resupinate, without a distinct pellicle, coriaceous. Hymenium smooth, granular, or faintly ribbed. Flesh coloured. Spores coloured, angular, echinulate, or verrucose  

Receptacle resupinate, soft, floccose. Hymenium granular, or smooth, floccose. Flesh coloured. Spores coloured, echinulate, or angular  

Like *Hypochnus*, but spores violet, smooth  

Receptacle resupinate, effused, flocculose-pulverulent, *Hypochnus*-like. Spores straw coloured, sub-elliptical, hyaline-appendiculate  

Receptacle resupinate, subgelatinous, then cartilaginous. Hymenium smooth. Spores olive, elliptical, smooth  

[Irregular abnormal growths the conidial forms of Porohydnineae]  

Radulum.  

*Acaia*.  

(*Hydnnum p.p.*)  

*Grandinia*.  

*Odontia*.  

*Kneiffia*.  

*Hydnopsis*.  

*Caldesiella*.  

*Phylacteria*.  

(*Thelephora p.p.*)  

*Hypochnus*.  

(*Tomentella.*)  

*Hyponectella*.  

*Jaapia*.  

*Aldrigea*.  

*[Ptychogaster.]*
1. Hymenium separated from the mycelium by an intermediate layer of hyphae.
   - Receptacle erect, much branched, branches flattened in a lamellar, or plate-like manner, fleshy. Hymenium smooth. Spores white
   - Receptacle simple, or branched, stipitate, sessile, effuso-reflexed, rarely resupinate, coriaceous. Hymenium smooth. Flesh pale. Spores white. Cystidia hyaline
   - Like Stereum, but cystidia, or setae coloured. Flesh coloured. Spores white, or coloured
   - [Like Stereum, but hymenium smooth, granular, or faintly ribbed. Flesh coloured. Spores coloured, angular, echinulate, or verrucose] [Phylacteiridae.]
   - Receptacle sessile, or produced behind into a stem-like base, coriaceous, or woody. Hymenium with fan-like folds, or radiating woody, branched ribs, or veins. Spores white

2. Hymenium seated directly on the mycelium.
   - Receptacle resupinate, waxy, or floccose. Hymenium smooth, with scattered protuberances caused by the breaking through of fasciculate, sterile, mycelial hyphae. Spores white. Cystidia none
   - Receptacle saucer-shaped with a free margin, or resupinate and adnate, floccose, or crustaceous, becoming coriaceous. Hymenium smooth, pulverulent, with much granular, or crystalline matter. Spores white, large; basidia large, sterile basidia or paraphyses moniliform, or racemose
   - Receptacle resupinate, waxy, crustaceous, or floccose. Hymenium waxy, smooth, or tubercular, continuous, often cracked. Spores white, rarely faintly coloured, smooth. No cystidia; sterile basidia (cystidioles) sometimes emergent
   - Like Corticium but the hyphae and hymenium traversed by long, cystidia-like bodies, whose walls are never thickened, nor incrusted with crystalline deposits (gloeocystidia)

1 Cf. Eichleriella. 2 Cf. Sebacina.
KEY TO APHYLLOPHORALES

Receptacle incrusting, variously branched, lobed, or effused, fibrillose-floccose, soft. Spores white, echinulate. Growing on fallen twigs, and mosses

[Receptacle resupinate, soft, floccose. Hymenium granular, or smooth, floccose. Flesh coloured. Spores coloured, echinulate, or angular]

[Like Hypochmus, but spores violet, smooth]

[Like Hypochmus, but spores violet, smooth]

[Like Corticium, but with prominent, hyaline, or subhyaline cystidia in the hymenium or subhymenial tissues, which are generally thick walled, or incrusted with crystalline deposits. Spores white, rarely slightly coloured]

[Like Coniophora, but with cystidia]

Cyphellaceae.

Receptacles sessile, scattered, crowded, or confluent, coriaceous-gelatinous. Hymenium smooth, becoming wrinkled, or veined. Spores white, or pale

Receptacles stipitate, or sessile, scattered, or crowded, membranaceous, or waxy. Hymenium smooth, or veined. Spores white

Receptacles sessile, seated on a superficial, felt-like, then floccose and fugacious mycelium, gregarious, or fasciculate. Hymenium smooth. Spores white

Receptacles sessile, more or less crowded, distinct, seated on, or immersed in an effused, membranaceous, or floccose stroma. Spores white

Like Cyphella, but spores coloured, smooth, or echinulate

Cristella.
(Thelephora p.p.)

[Hypochmus.
(Tomentella.)]

[Jaapia.]

[Coniophora.]

Peniophora.

[Coniophorella.]

Cytidia.
(Auriculariopsis.)

Cyphella.

Solenia.

Porothelium.

Phaeocyphella.
II. **Clavariineae.**

Same characters as the suborder **Clavariaceae.**

II. **Clavariaceae.**

Receptacle erect, simple, or branched, branches cylindrical, smooth, or longitudinally striate, fleshy, or subcoriaceous, generally putrescent. Spores white, or ochraceous, smooth, or rough. Growing on the ground, or on wood

- **Clavaria.**

Receptacle erect, simple, very rarely branched, cylindrically-clavate, with a long, thin stem, often springing from a sclerotium, fleshy, waxy, or tough. Spores white. Growing on fallen twigs and dead leaves

- **Typhula.**

Receptacle erect, simple, very rarely forked, club shaped, with a short, thick, glabrous, or villose stem, fleshy, or waxy. Spores white. Growing on herbaceous plants

- **Pistillaria.**

Receptacle filiform, simple, or branched, firm, tough. Spores white. Growing on the ground, or on wood

- **Pterula.**

**EXOBASIDIINEAE.**

**EXOBASIDIACEAE.**

Same characters as the order **Exobasidiaceae.**

Exobasidiaceae.

Mycelium vegetating in the interior of the living host, and giving rise, on the exterior, to basidia

- **Exobasidium.**

**HETEROBASIDIAE.**

**AURICULARIALES.**

1. Parasites, with, or without, probasidia **PUCCINIIINEAE**

   **COLEOSPORIINEAE**

   **USTILAGINEAE**

2. Saprophytes, without probasidia

   (a) Hymenium fully exposed from the first **AURICULARIINEAE.**

   (b) Hymenium inclosed within a peridium **ECCHYNINEAE.**

1 Not dealt with in the present work.
KEY TO AURICULARIALES

AURICULARIINEAE.

Same characters as suborder

Auriculariaceae.

Auriculariaceae.

Receptacle effused, incrusting, membranaceous, soft, floccose. Hymenium smooth. Basidia more or less incurved, transversely septate; sterigmata subulate, unilateral. Spores white

Helicobasidium.

Receptacle effused, or upright, thin, waxy, or gelatinous. Hymenium smooth. Basidia cylindrical, straight, transversely septate. Spores white

Platygloea.

Receptacle dimidiate, cup-shaped, sessile, or substipitate, gelatinous coriaceous, then cartilaginous. Hymenium smooth, reticulate, or ribbed. Basidia cylindrical, transversely 3-septate. Spores white, cylindrical, or subreniform

Auricularia.

Receptacle erect, filiform, or subclavate. Hymenium smooth. Basidia cylindrical, transversely 3-septate. Spores white

Ecronartium.

(= Helicobasidium sec. Patouillard.)


Stilbum.

ECCHYNINEAE.

Same characters as suborder

Ecchynaceae.

Ecchynaceae.

Peridium globose, stipitate, or substipitate, thin, fugacious. Threads of gleba bearing the basidia on their lower portion, either in tufts, or scattered. Basidia transversely 3-septate, bearing the spores either sessile, or on very short sterigmata. Spores brown

Ecchyna.
TREMELLALES.

Same characters as the order

TREMELLACEAE.

Receptacle foliaceous, brain-like, or tubercular, gelatinous, soft, fertile over the whole surface, very rarely papillose, sometimes with an irregular nucleus formed by mineral concretions. Spores white, globose or elliptical. Growing on dead wood, rarely on the ground.

Like *Tremella*, but spores coloured

Receptacle erect, ear-shaped, or spathulate, substipitate, or sessile, gelatinous, firm. Hymenium inferior, smooth, or indistinctly veined. Spores white. Growing on the ground, or on rotten wood.

Receptacle cupulate, discoid, foliaceous, or effused, marginate, pendant, sterile on upper surface, gelatinous, soft, pellucid. Hymenium inferior, smooth, reticulately veined, or foliaceous, often papillose. Spores white, allantoid. Growing on wood.

Receptacle dimidiate, substipitate, or sessile, gelatinous. Hymenium with fertile spines or teeth. Spores white. Growing on wood.

Like *Odontia*, but with subgelatinous teeth, and longitudinally septate basidia. Spores white. Growing on dead wood.

Receptacle effused, incrusting, like *Corticium*, coriaceous, gelatinous, or waxy. Hymenium smooth. Spores white. Growing on the ground, or on wood.

Like *Sebacina*, but hymenium possessing true cystidia

Like *Sebacina*, but hymenium possessing gloeocystidia filled with a coloured juice

Receptacle cup-shaped, or resupinate with the margin free, or reflexed, membranaceous, waxy, or coriaceous, soft. Hymenium smooth, rugulose, or tubercular. Spores white. Growing on dead branches.
KEY TO TULASNELLALES, CALOCERALES

TULASNELLALES.

Same characters as the order

Tulasnellaceae.

Receptacle effused, fleshy membranaceous, or gelatinous, then cartilagineous. Hymenium smooth, exposed from the first. Spores white, producing sporidiola on germination; sterigmata very thick and stout. Growing on dead wood, and fallen pine needles

Tulasnella.

CALOCERALES.

Same characters as the order

Caloceraceae.

Receptacle more or less tubercular, or cup-shaped, entirely gelatinous. Hymenium smooth, or plicate. Spores white, simple, septate, or muriform. Growing on dead wood

Dacryomyces.

Receptacle cup-shaped, or lobed, stipitate, or substipitate, gelatinous, or cartilagineous; stem firm, indurated. Hymenium smooth. Spores white, elliptic-oblong, becoming 1–3-septate. Growing on dead wood

Ditiola.

Receptacle erumpent, convex, then plane, sessile, gelatinous, or floccose. Hymenium smooth, becoming plicate. Spores yellowish, oblong, becoming 8–10–, or more, septate. Growing on dead, rarely living, wood

Femsjonia.

Receptacle upright, cylindrical, apex globose, or elongate, stipitate, gelatinous, firm. Hymenium smooth, or rugously plicate, confined to the upper portion of the receptacle. Spores white. Growing on dead wood

Dacryomitra.

Receptacle upright, cylindrical, simple, or branched, gelatinous-coriaceous, cartilagineous when dry. Hymenium smooth, amphigenous. Spores white. Growing on wood

Calocera.
**BASIDIOMYCETAE.**
Fungi reproduced by spores borne on basidia.

**HOMOBASIDIAE.**
Basidia simple; spores on germination giving rise to a mycelium.

**EU-HOMOBASIDIINEAE.**
Saprophytes.

**GASTEROMYCETALES.**
Hymenium inclosed at maturity within a peridium.

**PHALLINEAE.**
Peridium globose, consisting of three layers, the middle one gelatinous, at length ruptured, with the lower portion forming a volva at the base. Gleba at length mucilaginous, consisting of labyrinthiform cells, attached to the variously shaped receptacle, and finally borne upwards.

**CLATHRACEAE.**
Receptacle *trellised*, or dividing into arms, or branches at the apex, sessile, or stipitate. Gleba internal, or between the arms or branches.

**Clathrus** (Micheli) Pers.

(κλειθρων, lattice.)
Peridium globose, becoming torn into irregular lobes at the apex. Receptacle forming an obovate, or globose, hollow *lattice*, covered on the inside with the mucilaginous gleba. Basidia bearing 4–8, sessile, or subsessile, smooth, colourless, cylindrical spores. Growing on the ground.

1. **C. ruber** (Mich.) Pers. (= *Clathrus cancellatus* (Tourn.) Fr.)
   Rolland, Champ. t. 108, no. 245, as *Clathrus cancellatus*.
   *Ruber*, red.

Volva 5–10 cm., *white*, globose, becoming torn into irregular lobes at the apex, attached at the base by a cord-like mycelium. Receptacle *vermilion*, or *pinkish red*, obovate, or globose, sessile, forming a hollow, pentagonal net-work, perforated in lattice-, or trellis-fashion, flattened on the outer surface, torn, and irregular on the inner side, and covered with olive brown mucus. Spores white, cylindrical, 5–6 × 2µ. Smell extremely foetid. Woods, plantations, gardens and stoves. Sept.—Nov. Rare. (v.v.)
Lysurus Fr.

(λυσις, loosing; ὤψις, tail.)

Peridium globose, becoming torn at the apex into irregular lobes. Receptacle stipitate, dividing at the apex into free arms, or lobes, distinct from the stem, bearing the mucilaginous gleba. Basidia with 4–6, sessile, or sub sessile, cylindrical, or oblong, coloured spores. Growing on the ground.

2. L. australiensis Cke. & Mass. (= Lysurus borealis (Burt) P. Henn.)


Australia, belonging to Australia.

Volva 4–5 cm., white, globose, becoming torn above into irregular lobes, attached to the soil around the base by numerous white, cord-like mycelial strands. Receptacle 6 × 2 cm., whitish, cylindrical, attenuated at the base, hollow, cellular, dividing at the apex into six arms. Arms deep reddish brown, mucilaginous on the inside, 15–20 mm. long, 4–5 mm. wide at the base, attenuated at the apex, with a longitudinal groove down the centre and transversely ribbed, not cellular, differing in texture from the receptacle, erect, slightly incurved at the apex. Spores reddish brown, oblong elliptical, 3 × 1·5μ. Pasture where refuse of sacks had been emptied out, and amongst stable refuse. Sept.—Nov. Rare. (v.v.)

Aseroe La Billard.

(ἀσνόπος, disgusting.)

Peridium globose, becoming torn at the apex into irregular lobes. Receptacle stipitate, crowned at the apex by a disc, from which the arms radiate; arms covered with the gleba. Growing on the ground.


Receptacle stipitate, red, or pale rose, sheathed by the volva at the base, pervious at the apex, which is expanded into a bright red disc, furnished at the margin with from five to eight bifid rays. Spores "hyaline, oblong, 6–10 × 1·5–2μ." Petch. On soil brought from Australia. Rare.

Phallaceae.

Receptacle hollow, cylindrical, or fusiform, with, or without, a campanulate pileus at the apex. Gleba external.

1 Recorded as a distinct British species by Wakefield in Kew Bulletin of Miscel. Inf. no. 7 (1918), 231.
Cynophallus. Phallus

Cynophallus (Fr.) Cda.

(Mutinus Fr.)

(κύων, dog; φαλλός, penis.)

Peridium oval, or oblong, becoming split at the apex into two or three lobes. Receptacle hollow, cylindrical, or fusiform. Pileus apical, adnate, covered on the outside with the mucilaginous gleba. Basidia with 4–6, sessile, oblong, or cylindrical, pale yellowish spores. Growing on the ground.


Caninus, pertaining to a dog.

Volva 1–2 cm., white, or yellowish, oval, or oblong, splitting into two or three lobes at the apex, springing from a white, cord-like mycelium at the base. Receptacle 6–9 × 1 cm., white, or rosy, subfusiform, apex perforate or imperforate, hollow, cellular. Pileus red, 2 cm. long, adnate to the apex of the receptacle, acutely digitaliform, covered at first with green mucus. Spores pale yellowish, oblong, 3–5 × 2μ. Smell slight. Amongst dead leaves, and on old stumps, especially in mixed woods. June—Dec. Common. (v.v.)


Bambusinus, pertaining to bamboos.

Receptacle 10–12 × 1 cm., bright red, or pinkish, the upper half sporiferous and tapering into an acute point, purplish red, covered at first with green mucus. Spores cylindrical, 4 × 1.5μ. Smell very foetid. Probably introduced with plants from Java. Rare.

Phallus (Micheli) Pers.

(φαλλός, penis.)

Peridium globose, becoming torn into irregular lobes at the apex. Receptacle hollow, cylindrical, or fusiform. Pileus reticulated, apical, attached only by the apex, covered on the outside with the mucilaginous gleba. Basidia with 4–8, sessile, oblong, pale yellowish spores. Growing on the ground.


Impudicus, shameless.

Volva 3–5 cm., white, or yellowish, globose, then oval, splitting into irregular lobes at the apex, springing at the base from dense masses of white, cord-like mycelium. Receptacle white, cylindrical, attenuated at both ends, 10–30 × 1–3 cm., cellular, hollow, perforate at the apex. Pileus 3–5 cm. long, cylindrical, white, at first covered with green mucus, attached at the apex to the receptacle by a narrow disc,
PHALLUS. HYSTERANGIUM


var. togatus (Kalchbr.) Cost. & Duf. Togatus, cloaked.

Differs from the type in having a white, reticulately pierced, pendant veil, attached to the base of the pileus. Woods. Sept.—Oct. Rare.

var. iosmos (Berk.) Cke. Curt. Brit. Ent. x, t. 469.

ιόν, violet; δρυμή, scent.

Differs from the type in its pale reddish grey colour, the strongly toothed borders of the reticulations on the conical pileus and the sweet smell of violets when fresh. Sandhills. Rare.


Imperialis, imperial.

Volva 2:5–7 cm., pink on the outside, white inside, pear-shaped, splitting at the apex into several lobes, springing at the base from a pinkish, or pale blue, cord-like mycelium. Receptacle white, slightly pinkish at the extreme base, 10–25 × 2–3 cm., cylindrical, attenuated at both ends, hollow, cellular. Pileus 3–5 cm. long, white, at first covered with dark green mucus, campanulate, attached at the apex by a broad, circular disc which often becomes yellowish and crenate, reticulated on the outside. Spores hyaline, 3–4 × 1:5–2μ. Smell pleasant, like that of Glycyrrhiza (Liquorice). Micaceous sandy soil. Oct. Rare. (v.v.)

HYMENOGASTRINEAE.

Peridium globose, consisting of one layer, indehiscent. Gleba formed of cells lined by the hymenium. Cystidia often present.

HYSTERANGIACEAE.

Gleba cells radially arranged on the sterile basal hyphae. Spores olivaceous, oblong, or oblong elliptical. Subterranean.

Hysterangium Vitt.

(υστέρα, the womb; ἄγγείον, a vessel.)

Peridium globose, separating from the gleba at maturity. Gleba cartilaginous, or mucilaginous, cells at first empty. Basidia sometimes bearing eight spores. Spores olivaceous, oblong, or oblong elliptical. Subterranean.
8. **H. nephriticum** Berk.  

Pe. 1–2.5 cm., *white*, globose, or globoso-depressed, springing from a much branched, white mycelium, tomentose, peridium rather thick, elastic. Gleba *pinkish, then pale blue, or grey, and finally greenish*, cells minute, *radiating from the base*, contracting into a very small space when dried. Spores greenish olivaceous in the mass, drab colour under the microscope, oblong elliptical, pointed at both ends, or blunt at the one end, 10–12 × 4μ. Smell at first like that of *Helianthus tuberosus*, then disagreeable. Gregarious, sometimes confluent. Buried in the ground. Woods. May—Feb. Uncommon. (v.v.)


G. H. K. Thwaites.


**Hymenogaster** (Vitt.) Tul.  

(*ὑμήν, a membrane; γαστήρ, belly.)

Gleba cells empty at first, sterile base well-developed. Basidia generally with two sterigmata. Spores coloured, *elliptical to fusiform*, with a prominent papilla. Subterranean, or superficial.


*Muticus*, curtailed.

Pe. 1.5–2.5 cm., *white, then tinged with brown*, globose, scarcely lobed, at length much cracked. Gleba *pale yellow-brown*, cells loose, small. Spores pale brown, obovate, oblong, very obtuse (figured by Massee as apiculate at both ends), 18–21 × 10–12μ. Smell slight. Under trees. Nov. Rare.

Pe. 2–3 cm., *white, then brownish*, subglobose, soft, silky, peridium very thin. Gleba *bright yellow*, cells small, flexuose. Spores yellowish, oval, or elliptical, 24–28 × 10 \( \mu \). Smell pleasant, of “musk” Quél, of “strawberry” Vitt., sometimes “powerfully foetid” Berk. Woods. Sept.—March. Not uncommon.


Pe. 2.5–5 cm., *dirty white, becoming yellowish in places*, roundish. Gleba *lilac brown, then blackish*, sterile base almost obsolete. Spores ochraceous, then brown, rugulose, broadly elliptical, obtuse, or obtusely apiculate, 24–28 × 13–15 \( \mu \); basidia long, slender, sometimes flexuose, monosporous rarely bisporous. Wood and tan pits. Oct.—Nov. Rare.


Pe. 2–5 cm., *white, then brownish*, subglobose, somewhat deformed, plicate at the base, smooth, silky. Gleba *whitish, then fuliginous*, cells large, irregular. Spores “brownish yellow, oblong or elliptical, somewhat uneven, 19–23 × 9–11 \( \mu \)” Rabenh. Smell strong, of onion. Gregarious. In earth, and clay. Nov. Rare. (v.v.)


Pe. 2–3 cm., *whitish, becoming discoloured*, subglobose, regular, or variously lobed, or sulcate, soft. Gleba *dirty white, then dark brown*, cells rather large, irregular, sterile base minute. Spores blackish brown, rugulose, oblong, or oblong-lanceolate, acute, attenuated at the base, 34–40 × 12–14 \( \mu \). Gregarious, sometimes subcaespitose. Underground. July—Oct. Rare.


Pe. 6–12 mm., *then dirty tan colour*, round, depressed, nearly smooth. Gleba *white, then yellow* and finally *pale brown*, sterile base obsolete. Spores brown, rather rough, lanceolate, acute, shortly pedicellate, 30–36 × 12–14 \( \mu \). Underground, under firs. Oct. Rare.


Pe. 2–4 cm., *lemon, or golden yellow, then rufous black*, rotundato-gibbous, shining as if silky. Gleba *lemon yellow, then brown*, cells small, tramal plates yellow. Spores reddish brown, rugulose, lanceolate, apiculate, 40 × 17–20 \( \mu \). Smell cheesy. Underground. May—Dec. Uncommon.
18. **H. olivaceus** Vitt. (= *Hymenogaster populetorum* Berk. sec. Massee.)


var. **modestus** B. & Br.

Modestus, decent. Differs from the type in its somewhat cheesy smell and in the pale amber, narrowly fusiform, smooth spores, 25–26 × 8–10 µ. Parks. Rare.

19. **H. tener** Berk. (= *Hymenogaster lilacinus* Berk. sec. Massee.)

Tul. Fung. Hypog. t. 1, fig. 4; t. 10, fig. 1. **Tener**, soft.

Pe. 1–3 cm., white, at length dingy, globose, soft, silky, peridium thin. Gleba white, then tinged with pink and finally greyish umber; sterile base white, well developed. Spores ochraceous, verruculose, or rugulose, broadly elliptical, apex papillate, 30 × 14–16 µ. Smell like that of *Lactarius theiogalus*. Underground in woods. Sept.—Jan. Not uncommon. (v.v.)


Pe. 1–1.5 cm., dirty white, here and there stained, globose, firm. Gleba brown. Spores brown, rather rough, globose, apex minutely papillate, 11–13 µ. Underground. Rare.


Pe. 6–12 mm., pale brown, at first covered with whitish down, globose, or irregular. Gleba grey, becoming blackish, cells minute. Spores dark umber brown, irregularly tuberculose, fusiform, 25–32 × 20 µ. Smell very pleasant, resembling that of *Convallaria majalis*. Amongst leaf soil. Woods. Rare.

22. **H. pusillus** B. & Br.

**Pusillus**, very small.

Pe. 3–4 mm., white, yellowish brown when dry, and then like *Sclerotium complanatum*, obovate, or subdepressed, nearly smooth. Gleba dirty white, cells large, sterile base large. Spores pallid rubiginous, at length rough, broadly elliptic, apex papillate, 14–16 × 10 µ; basidia with two long sterigmata. Smell very slight. Mossy ground. Oct. Rare.

**Octaviania** Vitt.

(Dr Vincent Ottaviani.)

Peridium globose, oblong, or irregular, soft, fibrous. Gleba cells arising from the peridium, empty at first, *tromal plates splitting*,
becoming mucilaginous, with a distinct sterile base. Spores coloured, globose, or broadly elliptical, echinulate, or verrucose. Subterranean, or superficial.


δστήρ, a star; σπέρμα, seed.

Pe. 1–3 cm., whitish, then greyish fuliginous, becoming greenish blue when rubbed, or exposed to the air, subglobose or irregular, covered with aomentum that breaks up into floccose, flattened warts. Walls of the rounded cavities of the gleba white, becoming greenish blue when rubbed. Spores brownish purple in the mass, echinulate, globose, 15–18μ. Smell pleasant. Branches and leaves underground, or partially exposed. Oct. Rare.


H. O. Stephens.

Pe. 2–3 cm., rufous, irregular, oblong; base rugoso-plicate, cribrous, furnished with a branched, fibrous root. Gleba white, yielding when cut a white milky fluid, which becomes red when exposed to the air then yellowish, cells minute. Spores pale brown, echinulate, globose, 11–14μ. Smell unpleasant, "like that of *Lactarius theiogalus*" Berk. Underground, or half buried. Aug.—Dec. Rare.


Compacta, dense.

Pe. 6–20 mm., white, globose, or irregular, minutely cottony, furnished with a dense mass of white mycelium. Gleba pinkish, or yellowish, cells minute, globose, or irregularly oblong. Spores pale yellow, becoming brighter, very minutely verruculose, globose, 5—6μ. Gregarious. Underground, or half buried. Oct.—Nov. Rare.

**Hydnangium** Wallr.

(ὢδνων, truffle; ἀγγείων, a vessel.)

Peridium oblong, or roundish, not separable from the gleba. Gleba cells arising from the peridium, empty at first, *tramal plates not splitting*; sterile base absent. Basidia with 1–4-sterigmata, cystidia present. Spores ochraceous, globose, or elliptic-oblong, echinulate. Subterranean, or superficial.


Carota, carrot; color, colour.

Pe. 1.5–3 cm., pale orange red, or carrot colour, staining paper lemon colour, oblong, or roundish, rootless, rugulose, slightly tomentose. Gleba orange, cells minute, irregular. Spores pale ochraceous, coarsely
Hydnangiun. Rhizopogon 29


Pe. 1.5–3 cm., flesh colour, subglobose, or irregular, slightly tomentose, then smooth, and somewhat marbled, attached at the base to the soil. Gleba concolorous, cells small, irregular. Spores yellowish in the mass, hyaline under the microscope, with long acute spines, globose, 13–18 μ. Subterranean, or somewhat superficial. About the roots of Eucalyptus. Oct.—Dec. Rare.

**Rhizopogon** Fr.

(ριζα, root; πώγων, beard.)


28. **R. rubescens** Tul. Tul. Fung. Hypog. t. 11, fig. 4; t. 2, fig. 1. 

Rubescens, becoming red.

Pe. 2–6 cm., white, becoming reddish when exposed to the air, then yellow or olive, ovate, or globose, silky, covered with numerous strands of the mycelium which become reddish when touched. Gleba yellowish then brownish, cells small, irregular. Spores pale ochraceous, oblong elliptical, 7–8 × 3 μ, 1–3-guttulate; basidia with 2–8-sterigmata. Smell somewhat acid, then unpleasant. Somewhat superficial. Sandy fir woods. Sept.—Dec. Uncommon. (v.v.)

29. **R. luteolus** Fr. Tul. Fung. Hypog. t. 1, fig. 5; t. 11, fig. 5. 

Luteolus, yellowish.

Pe. 2–5 cm., whitish, becoming dirty yellow, then olive brown, globose, or oblong ovate, clothed with numerous free, or adnate, mycelial strands, peridium thick, subcoriaceous. Gleba olivaceous, tramal plates whitish, cells minute, rounded. Spores olivaceous, oblong elliptical, 6–7 × 3 μ, 2-guttulate. Smell slight, then strong. Somewhat superficial. Sandy fir woods. Sept.—Nov. Not uncommon. (v.v.)

Lycoperdineae.

Peridium globose, or variously shaped, consisting of two or more layers; dehiscing by an apical aperture, or by the gradual falling away of the upper peridial walls. Gleba consisting of cells lined by the hymenium, finally breaking down into a powdery mass, consisting of spores, and capillitium threads, attached to the endoperidial walls or springing from a central columella, or entirely free with, or without, a sterile base. Basidia bearing 4–8 sessile, or stipitate spores. Spores
LYCOPERDON

coloured, smooth, verrucose, or echinulate, globose, subglobose, or elliptical, sometimes with the sterigma remaining attached. Superficial.

LYCOPERDACEAE.

Same characters as the suborder.

LYCOPERDON (Tournef.) Pers.

(λύκος, a wolf; πέρδομα, I break wind.)

Peridium globose, or variously shaped; exoperidium pseudo-parenchymatous, fleshy, or membranaceous, spinulose, warted, granular, or smooth, fuggacious; endoperidium membranaceous, or papyraceous, thin, dehiscing by an apical aperture, or by the gradual falling away of the upper portion. Gleba with, or without, a sterile base. Capillitium threads long, branched, not consisting of a distinct stem and branches, attached to the peridium or to a central columella. Spores coloured, echinulate, verrucose, or smooth, globose, or elliptical. Superficial.

I. Peridium dehiscing by the upper portion gradually falling away in pieces. Capillitium very long, and much branched. Sterile base persistent.

30. L. giganteum (Batsch) Pers. (= Lycoperdon Bovista (Linn.) Fr.) Boud. Icon. t. 188–189, as Lycoperdon Bovista Linn.

γίγας, giant.

Pe. 15–16 cm., white, then yellowish, or olivaceous, globose, or depressed, oval, pumpkin-shaped, often more or less plicate at the base, sessile, attached by a cord-like mycelium; exoperidium at first sub-tomentose, then becoming smooth like a kid glove, fragile, ultimately splitting up and falling away in pieces from the endoperidium, which is also very thin, brittle and evanescent above. Gleba white, then yellowish and finally olivaceous, compact. Sterile base very thin, or almost absent. Spores olivaceous, or brownish, verrucose, globose, sometimes pedicellate, 4–5 μ. Capillitium brown, very long, branched, septate, 3–5 μ in diam., persistent. Edible. Pastures, gardens and roadsides. May—Nov. Common. (v.v.)


Pe. 7–12 cm., white, then ochraceous, and finally tinged brownish, subglobose, oval or depressed, contracted below into a more or less stem-like base with thick mycelium; exoperidium floccose, covered with large, distant warts, and cracking into net-like areolae; warts evanescent above, and separating in patches from the endoperidium; endoperidium thick, fragile, thinner in the upper half and finally falling away in pieces, leaving only the cup-like sterile base with its
Lyco. 

Gleba white, then yellowish, and finally olivaceous, compact. Sterile base, thick, persistent, forming nearly half the peridium, separated from the fertile portion by a distinct, membranaceous diaphragm. Spores dark olivaceous, globose, rarely very shortly pedicellate, 4-5μ. Capillitium yellowish, very long, flexuose, branched, brittle, 6-7μ in diam. Edible. Woods, heaths and pastures. May—Nov. Common. (v.v.)

32. L. saccatum (Vahl.) Fr. Krombh. Icon. t. 30, figs. 11-12.

Odyces, a bag.

Pe. 7-18 cm. high, 3-12 cm. wide, whitish, or greyish, becoming tinged brownish with age, clavate, or pestle-like, rounded above, obtuse, plicato-lacunose below and continued into a long stem-like base, 2-5-6 cm. wide, cylindrical, or subventricose, often scrobiculate, exoperidium consisting of small fugacious, spinulose warts, and granules which soon disappear from the upper portion—the warts split at the base and coalesce in a fine point at the apex; endoperidium concolorous, very thin, fragile, falling away in patches. Gleba white, then yellow, and finally olivaceous, compact. Sterile base reaching to the apex of the stem-like portion of the peridium, convex, cellular, firm. Spores olivaceous, verrucose, globose, 4-5μ. Capillitium pale yellowish, very long, branched, 3-5μ in diam. Edible. Woods, heaths and pastures. Aug.—Nov. Not uncommon. (v.v.)

33. L. excipuliforme (Scop.) Pers. Fr. Sverig. Svamp. t. 73.

Excipula, a vessel; forma, shape.

Pe. 5-13 cm. high, 4-11 cm. wide, greyish, becoming tinged with yellow or brown, globose, often compressed, plicate on the underside and continued into a short, or fairly long, stout, broad, stem-like base; exoperidium consisting of long, delicate, floccose spines, separate at their base but confluent at their apices, becoming smaller downwards, wearing away with age and weathering; endoperidium floccose, thick, firm, only gradually wearing away and disappearing in the upper portion. Gleba white, then yellowish, and finally brownish olivaceous. Sterile base whitish, becoming yellowish or greenish, cellular, concave, extending to the apex of the stem-like base of the peridium. Spores fuscous olivaceous, echinulate, globose, 3-5μ. Capillitium olivaceous, becoming hyaline, flexuose, rarely branched, 3-5μ in diam. Edible. Woods and pastures. April—Nov. Not uncommon. (v.v.)

var. flavescens Quél. Flavescens, becoming yellowish.

Differs from the type in its smaller size, its club-shaped peridium and its brighter yellow colour. Heaths and pastures. Sept.—Oct. Uncommon. (v.v.)
II. Peridium dehiscing by an apical mouth, followed by the upper portion falling away in pieces. Sterile base persistent, separated from the gleba by a distinct diaphragm.


Pe. 2–5 cm., yellowish white, then greyish yellow, and finally brownish, obconic, at first rounded at both ends, then flattened on the top, often compressed at the sides, more or less contracted at the base and plicate; exoperidium consisting of whitish spines united at the apex, intermixed with minute, simple spines and furfuraceous granules, all of which disappear with age and weathering; endoperidium concolorous, thin above, dehiscing by a well-defined apical mouth which soon extends until the whole of the upper portion of the peridium disappears. Gleba white, then yellowish, and finally fuscous olivaceous, separated from the sterile base by a distinct membranaceous diaphragm. Sterile base with large cells, often forming one half of the peridium. Spores olivaceous, globose, 4 μ. Capillitium colourless, branched, flexose, rough, 4–6 μ in diam. Heaths, pastures and hill-sides. Aug.—March. Common. (v.v.)


Pe. 2–5 cm., white, then yellowish, and finally pale darkish brown, globose, or usually depressed, often plicate beneath and continued into a stem-like base attached to the white cord-like mycelium; exoperidium consisting of white, blunt cruciate spines which adhere together and peel off in patches; endoperidium yellowish, then pale darkish brown, minutely furfuraceous, thin. Gleba olive, then dark brown, with a distinct diaphragm separating it from the sterile base. Sterile base with large cells, about a quarter to a third of the peridium, rarely very small. Spores dark brown, globose, often pedicellate, 3–5–4 μ. Capillitium coloured, sparingly branched, 5–7 μ in diam. Pastures and heaths. Sept.—Oct. Uncommon. (v.v.)

III. Peridium dehiscing by an apical mouth. Sterile base not separated from the gleba by a diaphragm.

A. Spores strongly echinulate or verrucose.


έκινος, a hedgehog.

Pe. 2–6 cm., white, then ochraceous and finally brown, obovate, or subglobose, often compressed, sometimes rather attenuated at the base, attached by a long, white, cord-like mycelium; exoperidium
consisting of long, conical warts, separate at the base and often coalescent at their apices, white, then ochraceous, and finally brownish, surrounded at the base of the warts by a ring of minute, mealy warts; the warts on the upper portion of the peridium disappear with age and weathering and then the pale brown inner peridium presents a net-like appearance from the persistent rings of darker brown, mealy warts. Mouth simple, apical, torn. Gleba olivaceous, then violet, or brownish purple, compact. Sterile base about one-third of the peridium, sometimes very small, cellular. Spores purple umber, echinulate, globose, 4–6 μ. Capillitium purplish, much branched, branches pointed, 3–4 μ in diam. Woods and plantations, especially beech. March—Nov. Uncommon. (v.v.)

37. L. Hoylei Berk.

Pe. 3–4 cm., brownish, subglobose, ovate, or subpyriform; exoperidium consisting of long, pyramidal warts, separate at the base, coalescent at the apices, ochraceous at first, then brownish, at the base of the larger warts surrounded by a ring of minute, dark brown warts, that give a net-like appearance to the paler inner peridium when the larger warts fall away. Mouth small, irregularly torn. Gleba olivaceous, then purplish, compact. Sterile base, bright olive, compact. Spores purple, verrucose, globose, 5 μ. Capillitium yellowish, sparingly branched, flexuose, uneven, 4–5 μ in diam. Amongst leaves in woods. Oct.—Dec. Rare. (v.v.)


Ater, black; purpureum, purple.

Pe. 2.5–6 cm., greyish, or brownish, yellowish towards the base, subglobose, or pyriform, sessile, or attenuated into a stem-like base, often plicate below, thin, soft, flexible; exoperidium consisting of long, thin, brownish spines, often coalescent at their apices, becoming shorter towards the base, brittle, falling away and exposing the smooth, somewhat shining, light brown, or purplish endoperidium. Mouth small, irregular. Gleba olivaceous, then brownish and finally dark purple. Sterile base cellular, shallow, rarely reaching a third of the peridium. Spores dark purple, strongly verrucose, globose, sometimes pedicellate, 5–7 μ. Columella globose. Capillitium branched, 4–6 μ in diam. Oak woods and heaths. Sept.—Nov. Uncommon. (v.v.)


Umbrinum, umber colour.

Pe. 2.5–5 cm., umber, obovate, or pear-shaped; exoperidium densely covered with long, brown, slender spines, that are generally con­nivent by twos at their acute apices, simple at the base and arising
from the *pale brown* endoperidium, somewhat brittle and deciduous. Mouth small, round, or toothed, apical. Gleba dark umber in the centre, paler towards the periphery and more lax. Sterile base olivaceous, about one-third of the peridium. Spores reddish brown, verrucose, globose, 4 \( \mu \). Capillitium pale yellowish, branched, flexuose, uneven, forming a small pseudo-columella. Woods and heaths. July—Dec. Common. (v.v.)


Pe. 3–6 cm., *snow white*, then *flesh colour*, and finally *greyish*, or *yellowish*, subglobose, or pyriform, often slightly umbonate, attached by a white cord-like mycelium at the base; exoperidium *white*, *then slightly yellowish*, tomentose, breaking up into evanescent, *star-shaped rosettes* and often forming a ring-like zone at the apex of the sterile basal stratum, finally disappearing almost completely; endoperidium *concolorous*, furfuraceous, minutely spinulose. Mouth small, apical, irregular. Gleba white, then fulvous, and finally ash colour, or purplish. Sterile base whitish, cellular, reaching to the apex of the stem-like portion of the peridium. Spores yellow, obtusely verrucose, globose, 4–5 \( \mu \). Capillitium *yellow*, with darker walls, 3–4 \( \mu \) in diam. Woods and heaths. Sept.—Oct. Uncommon. (v.v.)

B. Spores smooth or only minutely verrucose, or punctate.

*Sterile base with large cells.

41. *L. perlatum* Pers. (= *Lycoperdon gemmatum* Auct. pl.) Rolland, Champ. t. 109, no. 247, as *Lycoperdon gemmatum*.

*Perlatum*, very wide-spread.

Pe. 2·5–5 cm., *snow white*, *then yellowish*, and finally *brownish*, especially above, turbinate, or subglobose with an elongated, cylindrical stem-like base, rarely subglobose, or depressed and nearly sessile, *always umbonate*, generally plicate and lacunose below, and attached, often in pairs, to a white, cord-like mycelium; exoperidium consisting of acute, or obtuse spines, each surrounded by a ring of smaller, obtuse warts, which give a net-like appearance to the endoperidium when the large spines are rubbed off or fall away. Mouth small, at the apex of the umbo. Gleba *white*, *then greenish yellow*, and finally *olivaceous*. Sterile base convex, cellular, reaching to the apex of the stem-like base. Spores olivaceous, smooth, or minutely punctate, globose, 4 \( \mu \). Columella *prominent*, elliptical, loose. Capillitium olivaceous, simple, sparingly branched, 3–6 \( \mu \) in diam. Woods and pastures. July—Nov. Common. (v.v.)


*Lacunosum*, full of hollows.

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42. L. molle Pers.  
*Molle*, soft.

Pe. 1–3 cm., *white, then yellowish, or tan colour*, turbinate, or globose, depressed above, and abruptly attenuated into a short, thick, stem-like base, and attached by a white, fibrous mycelium; exoperidium consisting of fugacious, furfuraceous spines and granules; endoperidium *olive brown*, thin, papyraceous, collapsing, shining. Mouth small, irregular. Gleba greenish yellow, then brownish olivaceous. Sterile base paler, cellular, one-third of the peridium. Spores ochraceous olive, very minutely warted, globose, often shortly pedicellate, 3–4 μ. Capillitium yellow, branched, 4–6 μ in diam. Woods, especially oak. Sept.—Oct. Uncommon. (v.v.)

43. L. nigrescens Pers.  
*Nigrescens*, becoming black.

Pe. 3–5 cm. high and wide, *brown*, subglobose, depressed above, attenuated downwards into a stem-like base; exoperidium consisting of long, *stiff, brown spines*, connivent at their apices and surrounded by a circle of minute, brown warts, or granules, which, when the larger spines fall away, give a net-like appearance to the endoperidium; endoperidium *paler*, thin, smooth. Gleba olive umber, somewhat lax. Sterile base of large cells, filling the stem-like portion of the peridium. Spores olivaceous umber, globose, very minutely verrucose, with caducous pedicels 4–5 μ. Capillitium olivaceous, rarely branched, 4–6 μ in diam. Woods. Sept.—Nov. Uncommon. (v.v.)

44. L. pyriforme (Schaeff.) Pers.  
*Pyrus, pear; forma, shape.*

Pe. 2.5–10 cm. high, 1–3 cm. wide, *white, grey, or brownish*, pyriform, or subglobose, subumbonate, attached at the base by long, white, cord-like mycelial strands, thin, flaccid; exoperidium consisting of minute, fugacious, pointed spines and granules; endoperidium *concolorous*, smooth. Mouth small, apical, torn. Gleba white, then greenish yellow, and finally brownish. Sterile base white, becoming discoloured, of rather small cells, forming the stem-like portion of the peridium. Spores olivaceous, globose, 4 μ. Columella *distinct*, subglobose. Capillitium olivaceous, branched, long, 4–5 μ in diam. Generally caespitose. Stumps, logs and buried *débris* of wood. May—Feb. Common. (v.v.)

*var. serotinum* (Bon.) Hollós.  
*Lloyd, The Genus Lycop. in Eur. t. 50,*  
*figs. 1–2, as Lycoperdon serotinum.*  
*Serotinum*, late.

Differs from the type in the peridium becoming *broken up into areolae*. Stumps and logs. Oct.—Dec. Not uncommon. (v.v.)

3—2
var. excipuliforme Desmaz. Lloyd, The Genus Lycop. in Eur. t. 49, as Lycoperdon Desmazieres. Excipula, a vessel; forma, shape.

Differs from the type in the peridium being contracted abruptly into a long, slender stem. Stumps and logs. Sept.—Nov. Not uncommon. (v.v.)

var. tessellatum Pers. Lloyd, The Lycop. Unit. St. t. 50, figs. 3-6.

Tessellatum, checkered.

Differs from the type in the reddish brown exoperidium becoming broken up into indurated areolae. Stumps. Oct.—Nov. Uncommon. (v.v.)


Spadiceum, date brown.

Pe. 1–2 cm., bluish grey, soon yellowish, and finally light brown, obovate and flattened below, or globose, abruptly contracted into a stem-like base, and somewhat pear-shaped, whitish, becoming yellowish towards the base; exoperidium consisting of minute, nodular, granular or subfurfuraceous spines; endoperidium concolorous, thin, often covered with lime granules. Mouth apical, small, irregular. Gleba olive, then brown. Sterile base whitish, then yellowish, and finallyumber brown, fairly large celled, convex, reaching to a third of the peridium. Spores yellow, then olivaceous, globose, sometimes pedicellate, 4–6μ in diam. Capillitium yellowish, simple, rarely branched, 4–6μ in diam. Gregarious. Sandy soil on heaths and lawns. Sept.—Oct. Uncommon. (v.v.)

**Sterile base with minute cells.

46. L. polymorphum Vitt. (= Lycoperdon furfuraceum (Schaeff.) Sacc.) Lloyd, The Genus Lycop. in Eur. t. 34 and 52.

πολύς, many; μορφή, shape.

Pe. 5–3 cm., white, then dirty yellow, or greyish brown, and finally yellowish brown, somewhat reddish at the base when quite mature, round, often depressed, sometimes pear-shaped, or attenuated into a stem-like short base, thin, membranaceous; exoperidium consisting of minute, fugacious, furfuraceous spines and granules; endoperidium thin, smooth and shining. Mouth apical, small, becoming torn. Gleba yellowish, then olivaceous brown. Sterile base, very compact, consisting of cells only perceptible under a lens, concolorous, reaching to the apex of the stem-like base of the peridium. Spores yellowish, very minutely warded, globose, sometimes with a wart-like basal apiculus the remains of the stergima, 3-4μ. Capillitium yellowish, or yellowish brown, branched, 4–6μ in diam. Sandy pastures and heaths. Aug.—Nov. Not uncommon. (v.v.)
LYCOPERDON. BOVISTELLA


Cepa, onion; forma, shape.

Differs from the type in its constant subglobose shape, and in the very scanty sterile base. Sandy soil on heaths. Sept.—Oct. Uncommon. (v.v.)

***Sterile base absent.


Pe. 9–20 mm., white, then yellowish, globose, attenuated at the base into a tapering root ending in the white mycelial strands, membranaceous, flaccid; exoperidium consisting of minute, adpressed, fugacious, mealy squamules; endoperidium smooth, shining, thin. Mouth apical, small, irregular. Gleba white, then yellowish, or greenish yellow, and finally brownish olivaceous. Sterile base absent. Spores olivaceous ochre, very minutely warted, globose, sometimes pedicellate, 3.5–4 μ. Capillitium yellow, much branched, tapering at the ends, 3.5–4 μ in diam. Sandy soil on heaths. Sept.—Nov. Not uncommon. (v.v.)

Bovistella Morgan.

(Diminutive of Bovista, a puff-ball.)

Peridium subglobose; exoperidium thick, or thin, floccose, or smooth, fugacious; endoperidium membranaceous, thin, dehiscing by an apical aperture. Gleba with a well-developed sterile base. Capillitium threads free, consisting of a thick stem, and dichotomous, pointed branches. Spores coloured, globose, or oval, smooth, pedicellate. Superficial.


Pe. 3 cm. high and wide, pale yellow, tinged with reddish brown, subglobose, plicate below and abruptly attenuated into a well-developed stem-like base; exoperidium pale ochraceous (like a coat of whitewash), gradually disappearing, very thin; endoperidium concolorous, becoming somewhat brownish with age, thin, flexible. Mouth apical, minute. Gleba dark olive. Sterile base well developed, reaching to the apex of the stem-like portion of the peridium. Spores olive, globose, 4–5 μ, with long, hyaline, slender pedicels 9–10 μ long. Capillitium yellowish, thick walls deeper coloured, consisting of separate, branched threads tapering to a point; branches 3–4 μ in diam., main stem 9–12 μ in diam. Moors. Aug. Rare. (v.v.)
49. **B. ammophila** (Lév.) Lloyd. (= *Bovista ammophila* Lév.) Lloyd, Myc. Writings, ii, t. 87, figs. 5–6.  

3 cm., *whitish, then pallid*, broadly obovate, plicate below and attenuated into a long, slender, taproot-like base, thin, brittle, rigid, hard; exoperidium *whitish* broken up into tomentose warts; endoperidium *pallid*, thin. Mouth small, apical, irregularly torn. Gleba dark brown. Sterile base of large cells, very firm, rigid, about one-third of the peridium. Spores olive in the mass, pale under the microscope, oval, 4–5 μ, with slender, tapering pedicels. Capillitium olive, thick walled, consisting of separate, short, branched threads. Sandy places. Sept. Rare.

**Bovista** (Dill.) Morgan.

(Bost, a puff-ball.)

Peridium subglobose; exoperidium fleshy, smooth, fugacious, sometimes persistent at the base; endoperidium membranaceous, becoming papyraceous, thin, soft, dehiscing by an apical aperture, or opening irregularly. Gleba *without a sterile base*. Capillitium threads *free*, *consisting of a thick stem*, and dichotomous, *long pointed branches*. Spores coloured, globose, oval, or elliptical, smooth, pedicellate. Superficial.


*Nigrescens*, becoming black.

Pe. 2–5–6 cm., *whitish, then pale dark brown, or umber brown*, and finally blackish umber, globose; exoperidium *whitish*, papyraceous, soon breaking away; endoperidium *concolorous*, thin, tough, *shining*, smooth. Mouth apical, irregular, torn. Gleba white, then ochraceous, or olivaceous, and finally purple, soft, loose. Spores umber purple, globose, or slightly oval, 5–6 μ, with long, hyaline pedicels. Capillitium dark brown, thick walled, bent, branched, branches pointed at the ends, 12–18 μ in diam. Pastures and heaths. Jan.—Dec. Common. (v.v.)


*Plumbea*, lead colour.

Pe. 1–3 cm., *whitish, then lead colour*, globose, or depressed; exoperidium *white*, thin, smooth, soon peeling off, sometimes leaving a persistent portion near the base; endoperidium *lead colour*, thin, tough, *opaque*. Mouth apical, round, oval, or irregular. Gleba white, then ochraceous, or olive, and finally purplish brown, soft, loose.

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1 Lloyd states, l.c. ii, 262, that the British record rests on an erroneous determination.
Spores brown, subglobose, or oval, 6–7 × 5–6 μ, with long, hyaline pedicels. Capillitium brown, thick walled, branched, branches pointed at the ends, 12–16 μ in diam. Pastures and heaths. Jan.—Dec. Common. (v.v.)

52. **B. olivacea** Cke. & Massee.  
*Olivacea*, olive colour. 
Pe. 3–5 cm., white, or ochraceous, globose; exoperidium very thin, fugacious; endoperidium *concolorous*, thick, soft, becoming brittle and breaking away in patches upwards. Gleba citron, then olive, dense. Spores pale yellow, globose, 5 μ, sometimes pedicellate. Capillitium pale, thin, flaccid. Pastures. Sept. Rare.

53. **B. ovalispora** Cke. & Massee.  
*Ovalis*, oval; στορά, seed. 
Pe. 5–6 cm., whitish, or ochraceous, subglobose; exoperidium breaking away in patches above, subpersistent towards the base; endoperidium *dull lead colour*, thin, flaccid, smooth. Mouth apical, irregular. Gleba umber. Spores brownish umber, *with a narrow hyaline border*, elliptical, 6 × 4–5 μ, with long, stout, hyaline pedicels. Capillitium umber, thick walled, much and vaguely branched, tapering to long slender tips, 12–16 μ in diam. Lawns. Rare.

**Myriostoma** Desv.

(μυρίος, countless; στόμα, mouth.)

Peridium subglobose; exoperidium consisting of two layers, a fibrous, or mycelial layer, and a pseudo-parenchymatous layer, thick, fleshy-coriaceous, *splitting at maturity from the apex downwards into several star-like lobes which become reflexed*; endoperidium membranaceous, then papyraceous, thin, *supported on several short stems, dehiscing by many apertures, or mouths*. Capillitium threads simple, rarely branched, tapering at the end. Spores coloured, minutely verrucose, globose. Superficial.

54. **M. coliforme** (Dicks.) Cda. (= *Geastrum coliforme* (Dicks.) Pers.)

Dicks. Pl. Crypt. Brit. t. 3, fig. 4, as *Lycoperdon coliforme*. 
*Colum*, a strainer; *forma*, shape. 

Exoperidium 7–10 cm., ochraceous, round, covered with large, angular dark brown scales, splitting into 4–7 sharp pointed lobes, divided almost up to the middle, reflexed, seldom inflexed; endoperidia *lead colour*, or brownish, round, compressed, with a silvery sheen, minutely warted, supported on numerous, slender, angular, or cylindrical, sometimes branched pedicels, mouths numerous, ciliated. Spores umber brown, verrucose, globose, 4–6 μ. Columellas numerous, filamentous, branched, or unbranched. Capillitium pale brown, simple, flexuose, thick walled, pointed at the ends, rarely branched, 3–4 μ in diam. Sandy soil. Oct. Rare. (v.v.)
Geaster (Micheli) Fr.
(γῆ, earth; ἀστήρ, star.)

Peridium subglobose, rarely ovate acuminate; exoperidium consisting of two layers, a fibrous, or mycelial layer, and a pseudo-parenchymatous layer, thick, fleshy-coriaceous, at first closely investing the endoperidium but distinct splitting at maturity from the apex downwards into several, star-like lobes, which often become reflexed; endoperidium membranaceous, then papyraceous, thin, shortly stipitate, or sessile, dehiscing by a single aperture or mouth. Capillitium threads simple, long, slender, tapering at each end, attached to the peridium, or a central columella, the other end free. Basidia bearing 4–8 spores. Spores coloured, minutely verrucose, globose. Half buried at first, then superficial.

I. Exoperidium not splitting up into two portions when expanded.

*Peristome sulcate.
†Endoperidium stipitate.


Charles Bryant.

Exoperidium 2–6 cm., snow white, then pale ochraceous, and brownish, globose, coriaceous, splitting up into 8–10 unequal, acute lobes, divided almost to the middle, expanded, then recurved, brownish inside, fleshy, then cracked, the collenchyma layer finally disappearing with the exception of a circular ring at the base of the stem; endoperidium 5–2 cm., snow white, then ochraceous, becoming blackish blue when weathered, mealy, then smooth, subglobose, or pear-shaped, compressed above, pedicellate, with a distinct, permanent groove round the apex of the stem. Peristome long, conical, deeply furrowed, striate. Stem 5–10 × 2 mm., whitish, or brownish, cylindrical, or compressed, slightly enlarged at the apex. Spores fuscous, obtusely warded, globose, 4–5 μ. Columella globose, broad at the base. Capillitium brownish, sub fusiform, or subcylindrical, rarely slightly branched towards the ends, 4–6 μ in diam. Amongst leaves in woods and hedges. Jan.—Dec. Not uncommon. (v.v.)

var. minor Berk.

Minor, smaller.

Differs from the type in its smaller size.


Exoperidium 3–6 cm., white, then ochraceous, globose, splitting up into 5–10, subequal, acute lobes, divided up to about the middle, revolute, whitish, or ochraceous inside, fleshy, the flesh cracking and
falling away; endoperidium 1-2.5 cm., brown, or lead colour, sub-globose, mealy, attenuated into the stem and striate at the base. Peristome prominent, long, conical, deeply sulcate, apex fimbriate. Stem 6-8 × 2-3 mm., whitish, or concolorous, cylindrical. Spores blackish umber, verrucose, globose, 4-6μ. Columella thick, half as high as the endoperidium. Capillitium brown, fusiform, simple, 4-7μ in diam. Pine woods and under conifers. Rare.


Rev. Miles Joseph Berkeley, the father of British mycology.

Exoperidium 6-9 cm., ochraceous, then brownish, globose, splitting up into 7-9, unequal, acute lobes, divided to the middle, expanded, then slightly recurved, hard, firm, brown inside, becoming slightly cracked, even; endoperidium 2-3 cm., brown, becoming paler, broadly ovate, coarsely papillose, or granular, pedicellate. Peristome long, prominent, conical, sulcato-striate, surrounded by a smooth, depressed, silky zone. Stem 3-5 × 6-8 mm., pale, compressed. Spores umber, acutely warted, globose, 5-6μ. Columella globose, short. Capillitium brown, cylindrical, 9-10μ in diam. Under trees and amongst fir leaves. Oct. Rare. (v.v.)

††Endoperidium sessile.

58. G. umbilicatus Fr. (= Geaster striatus DC. ex W. G. Smith, Grevillea, ii, t. 16, fig. 1, sec. Hollós, Geaster Smithii Lloyd.)

Umbilicatus, having a navel.

Exoperidium 2-4 cm., whitish, or tan colour, then brown, globose, splitting into 4-12, unequal lobes, divided almost to the middle, convex at the base and reflexed, the tips incurred when dry, the outer mycelial layer thin, usually adnate with adhering sand, the inner fleshy layer brownish, adnate, thin when dry; endoperidium 5-15 mm., whitish grey, opaque, roundish, or oval, sessile, appearing slightly pedicellate when dried. Peristome flattened (or when old conical), seated on a depressed area, regularly sulcato-striate. Spores blackish fuscous, slightly verrucose, apiculate, globose, 4-6μ. Capillitium 4-6μ in diam. Sandy places and coniferous woods. Nov. Rare.

**Peristome not sulcate.

†Endoperidium stipitate.


Limbatus, fringed.

Exoperidium 3.5-9 cm., blackish, or dark brown, globose, splitting into 7-10, unequal, acute lobes, divided nearly to the middle, expanded, or recurved, leathery, flexible, fibrillose, dark brown, or grey
inside, fleshy, smooth or cracked; endoperidium 1–3 cm., grey, sometimes light or dark brown, globose, or subpyriform, compressed, sometimes swollen at the base near the apex of the stem. Peristome depressed, conical, subacute, fimbriato-ciliate, often surrounded by a pale silky circle. Stem 3–5 × 4–10 mm., concolorous, or paler, compressed. Spores blackish purple, acutely warted, globose, 4–5μ. Columella almost wanting. Capillitium brownish, fusiform, 5–7μ in diam. Woods, hedgebanks, amongst firs and leaves. Sept.—Nov. Uncommon. (v.v.)

††Endoperidium sessile.
(a) Exoperidium strongly incurved when dry.

60. **G. mammosus** Chev. Sow. Eng. Fung. t. 401, as Lycoperdon recolligens. Mammosus, full-breasted.

Exoperidium 2-5–5 cm., ochraceous, variegated with white, or silvery white, globose, splitting into 7–10, acute, somewhat narrow lobes, divided nearly to the base, very hygroscopic, strongly inrolled when dry, often umbilicate at the base; chestnut brown inside, smooth; endoperidium 8–15 mm., yellowish, or light brown, globose, sessile, smooth. Peristome conical, acute, fimbriato-ciliate, surrounded by a pale narrow silky circle. Spores dark brown, verrucose, globose, 3–6μ. Columella dark brown with a purplish tinge, short, cylindrical, conical, broad at the base. Capillitium hyaline, simple, cylindrical, blunt at the ends, 4–6μ in diam. Sandy woods and fields. Feb.—Dec. Uncommon. (v.v.)

**G. hygrometricus** Pers. = **Astraeus hygrometricus** (Pers.) Morgan.

(b) Exoperidium not incurved when dry.

a. Unexpanded plants globose.


Exoperidium 2-5–6 cm., yellowish, globose, splitting into 5–15, unequal, pointed lobes, divided to the middle or a little deeper, and strongly recurved below forming a convex cushion at the base of the sessile endoperidium, outer layer membranaceous, deep ochraceous inside, fleshy, soon cracked, and often peeling off; endoperidium 1–2 cm., concolorous, globose, sessile, smooth. Mouth indeterminate, piloso-fimbriate. Spores blackish umber, minutely verrucose, globose, 3–4μ. Columella obovate, slender. Capillitium yellowish brown, simple, cylindrical, 3–6μ. in diam. Coniferous and beech woods, and on heaths. May—Dec. Common. (v.v.)

62. **G. saccatus** Fr. Grevillea, ii, t. 20. σάκκος, a bag.

Exoperidium 2–5 cm., yellowish, globose, splitting into 6–9, thin, equal, acute lobes, divided to the middle, deeply saccate at the base,
recurred, becoming incurved when dry, soft, flaccid, densely floccose outside, becoming smooth; inside fleshy layer thin, adnate; endoperidium 1-1.5 cm., yellowish, globose, sessile, smooth. Mouth acute, silky, surrounded by a broad, depressed zone. Spores minutely verrucose, globose, 3-4 µ. Capillitium light brown, 4-5 µ in diam. Sandy ground in hedgerows. Aug. Rare.

β. Unexpanded plants ovate acuminate.


Exoperidium 4-8 cm., yellowish, ovate acuminate, splitting into 6-9, very long, pointed, nearly equal lobes, divided beyond the middle, usually saccate but also recurved, with whitish mycelial strands at the base, the mycelial layer closely adnate, often separating and splitting into parallel lines; ochraceous inside, becoming brown, fleshy layer soft, disappearing; endoperidium 1-2.5 cm., ochraceous, or brownish, subglobose, sessile, soft, membranaceous. Mouth planonconic, silky, striate, surrounded by an orbicular silky zone. Spores yellowish brown, minutely verrucose, globose, 3-4 µ. Columella small, clavate. Capillitium pale brownish, fusiform, simple, or slightly branched towards the ends, 6-8 µ in diam. Sandy soil. Woods and hedgerows. April—Nov. Rare. (v.v.)


Exoperidium 5-10 cm., brownish olivaceous, ovate-acuminate, splitting into 4-7, subequal, broad, acute lobes, divided to the middle, often much cracked up into areolae on the outside; brownish inside, fleshy layer very thick, cracking and peeling off with the exception of a disc-like portion which forms a cup at the base of the endoperidium; endoperidium 1.5-3.5 cm., pale brownish, subglobose, compressed, sessile, membranaceous. Mouth paler, broadly conical, fibrillose. Spores brown, verrucose, globose, 4-5 µ. Columella pale brown, clavate, long. Capillitium light brown, simple, fusiform, 6-7 µ in diam. Woods and pastures. Sept.—Oct. Uncommon. (v.v.)

†††Endoperidium sessile, or substipitate.


Exoperidium 4-8 cm., yellowish, globose, splitting into 6-10, broad, acute lobes, divided to the middle or beyond, expanded, then recurved, rigid, thick, firm; ochraceous inside, becoming rufescent, fleshy layer thick, soon cracking, and often peeling off; endoperidium 1.5-3 cm., yellowish, or pale brownish, globose, or subovate, sessile or substipitate. Mouth fibrillose, indefinite, frequently torn. Spores

var. minor Pers.

Minor, smaller.

Diffs from the type in its smaller size. Woods. Sept.—Oct. Uncommon. (v.v.)

II. Exoperidium splitting up into two portions, the lower portion forming a hollow sphere at the base.


Coronatus, crowned.

Exoperidium 2·5–5 cm., yellowish, then brown, globose, splitting up into four rarely more, equal, pointed lobes, divided nearly to the middle, lobes attached by their apex nearly perpendicularly to the mycelial layer which remains in the ground and forms a hollow cup, brown inside, fleshy layer becoming cracked and finally peeling off; endoperidium 4–10 mm., bluish grey, sometimes whitish, or brownish, oval, oblong, or pear-shaped, with an apophysis above its attachment to the stem, apex pale yellow with a sharply defined zone bordering the base of the fibrous, projecting peristome, surface often rough with white crystals. Stem 2–3 × 2–6 mm., whitish, often compressed. Spores brown, verrucose, globose, 4–5μ. Columella brown with a purplish tinge, slender, elliptical. Capillitium brown, cylindrical, 5–7μ in diam. Densely gregarious. Amongst coniferous needles. Sept.—Oct. Locally common. (v.v.)


Fornicatus, arched.

Exoperidium 4–9 cm., yellowish, globose, both the outer and the inner layers splitting up into 4–5 lobes, the outer layer remaining sunk in the ground and forming a hollow cup, whilst the inner lobes, divided beyond the middle, stand perpendicularly (erect) on the end of the lobes attached to the tips of the outer layer, hard, leathery, thick, dark brown inside, the fleshy layer cracking and peeling off in places; endoperidium 1·5–3·5 cm., rust colour, or dark brown, globose, depressed, or urn-shaped, with a ring-like apophysis above its attachment to the stem, somewhat downy. Peristome conical, then tubular, scarcely furrowed, ciliate. Stem 2–5 × 4–15 mm., whitish, cylindrical, often compressed. Spores purplish, echinulate, globose, 3–4μ. Columella brown tinged with purple, slender, clavate. Capillitium brown, fusiform, 10–12μ in diam. Meadows, pastures, heaths and amongst firs. March—Nov. Uncommon. (v.v.)
NIDULARIINAE.

Peridium campanulate, cylindrical, or cup-shaped, consisting of one to three layers, **enclosing several peridiola**, and sometimes covered at the apex by a membranaceous epiphragm. Peridiola lenticular, attached, or not, to the peridium by a funiculus, consisting of two layers and lined on the inside with the basidia and paraphyses. Basidia bearing 2–4 stipitate, or sessile spores. Spores white, elliptical, oval, or subglobose, smooth. Growing on dead wood and twigs, more rarely on the ground.

**Nidularia** (Fr.) Tul.

(Nidulus, a little nest.)

Peridium subglobose, sessile, consisting of a single layer, **without an epiphragm**, dehiscing irregularly, or in a circumscissile manner, by the rupture of the upper portion. Peridiola brown, 2 mm. across, subrotund, biconvex, shining. Spores white, broadly elliptical, or subglobose, 7–8 × 6–7 μ. Cystidia "large, fusiform" Massee. Gregarious, or solitary. Dead branches. May—Oct. Uncommon. (v.v.)

var. **Broomei** Massee. C. E. Broome, the eminent mycologist.

Differs from the type in the **narrowly elliptical spores, with a thick hyaline epispore**. Pine wood. Rare.


Pisum, pea; **forma**, shape.

Pe. 4–10 mm., whitish, then cinnamon, or brownish, subglobose, seated on a broad base, sessile, minutely tomentose, dehiscing in a circumscissile manner. Peridiola brown, 2 mm. across, subrotund, biconvex, shining. Spores white, broadly elliptical, or subglobose, 7–8 × 6–7 μ. Cystidia "large, fusiform" Massee. Gregarious, or solitary. Dead branches. May—Oct. Uncommon. (v.v.)


Rev. Miles Joseph Berkeley, the father of British mycology.

Pe. 5–7 mm. broad and high, **bright cinnamon**, subglobose, becoming broadly open, thick, felt-like, hirto-tomentose; **bright cinnamon** inside, velvety. Peridiola **bright brown**, about 2 mm. in diam., numerous (40–50), circular, biconvex, smooth, shining, much wrinkled when dry, firmly agglutinated together by mucus. Spores colourless, then **becoming pale brownish olive**, elliptical, 9–10 × 5–6 μ. Solitary, or two or three together. On wood, twigs, etc. Sept. Rare.
70. **N. confluens** Fr. (= *Nidularia pisiformis* (Roth) Tul. sec. Lloyd.) _Confluens_, crowded together.

Pe. 4–11 mm., _whitish_, subglobose, compressed, villose, dehiscing irregularly, peridium thin. _Peridiola deep chestnut colour_, orbicular, compressed, 1.5–2 mm. across, shining. Spores white, elliptical, 6–7 × 4–5 μ. Crowded. On the ground, twigs and amongst leaves. Aug.—Oct. Uncommon. (v.v.)

*N. dentata* With. = *Sphaerobolus dentatus* (With.) W. G. Sm.

**Crucibulum** Tul.

(_Crucibulum_, a crucible.)

Peridium globose, then campanulate, or shortly cylindrical, sessile, _consisting of two layers_, and _closed by a membranaceous epiphragm_ at the apex, which is finally ruptured. _Peridiola lenticular_, compressed, biconvex, numerous, _attached by a papilla to the funiculus_. Spores white, oblong-elliptical, smooth. Growing on wood, twigs, and dead herbaceous stems.


_Vulgare_, common.

Pe. 5–8 mm. high, 6 mm. across, _greyish_, or _dirty cinnamon_, globose, then bell-shaped, or shortly cylindrical, at first closed by a fugacious epiphragm, then broadly open, minutely tomentose on the outside, soon becoming smooth, inside _whitish_, smooth, and shining. _Peridiola pale_, 1.5–2 mm. across, circular, biconvex, attached by a nipple-like tubercle to the funiculus. Spores white, oblong-elliptical, smooth. Growing on wood, twigs and dead fern stems. Sept.—March. Common. (v.v.)

**Cyathus** Haller.

(_κύαθος_, a cup.)

Peridium cylindrical, then broadly campanulate, sessile, _consisting of three layers_, and _closed at the apex by a membranaceous epiphragm_ which finally becomes ruptured and disappears. _Peridiola lenticular_, compressed, _umbilicate_, numerous, _attached by a funiculus_. Spores white, elliptical, smooth. Growing on wood, more rarely on the ground.

72. **C. striatus** (Huds.) Pers. Rolland, Champ. t. 109, no. 246.

_Striatus_, furrowed.

Pe. 10–15 mm. high, 8–10 mm. across, _reddish brown_, or _ferruginous_ and _strigosely hairy_ on the outside, obconic, or bell-shaped, truncate at the base, apex at first incurved, and the interior closed with a pale, fugacious epiphragm, then opening out and disclosing the _lead coloured_,
shining, fluted inner surface of the peridium. Peridiola whitish, sub-circular, compressed, umbilicate, and attached to the funiculus, 2 mm. thick. Spores white, oblong elliptical, 18–22 × 10μ. Fasciculate. On stumps, wood, twigs, and fir-cones. Jan.—Dec. Common. (v.v.)

73. C. olla (Batsch) Pers. (= Cyathus vernicosus (Bull.) DC.) Berk.

Outl. Brit. Fung. t. 21, fig. 1, as Cyathus vernicosus.

Olla, a pot.

Pe. 10–15 mm. high, 8–15 mm. across, greyish, or ochraceous on the outside, and minutely silky, then smooth, broadly bell-shaped, mouth broadly open, undulate, tapering downwards to a narrow base, lead coloured, or brownish inside, smooth. Peridiola blackish, or greyish, shining, circular, biconvex, 3–4 mm. across, umbilicate, and attached to the white funiculus. Spores white, broadly elliptical, 10–14 × 8μ. On bare soil, rotten wood, sticks, and in flower-pots. Feb.—Nov. Common. (v.v.)

var. agrestis Pers. Agrestis, pertaining to the fields.

Differs from the type in its smaller size, subhemispherical shape, and erect margin. Stubble fields. Aug.—Sept. Common. (v.v.)

PLECTOBASIDIINAE.

(SCLERODERMINEAE.)

Peridium subglobose, obovate, clavate, or variously shaped, sessile, stipitate, or prolonged into a stem-like base, consisting of one or more layers, dehiscing by the gradual falling away of portions of the peridial walls, by the rupture of the exoperidium or endoperidium in an irregular, or circumscissile manner, or by a well-defined apical aperture. Gleba not divided up into cells, with, or without, a sterile base, and traversed, or not, by sterile veins, which rarely break up into peridiola, finally breaking down into a powdery mass, rarely becoming slimy. Basidia clavate to pear-shaped, bearing 2–12, pedicellate, or sessile, apical, or lateral spores, irregularly arranged, rarely tufted, and not forming a distinct hymenium, intermixed, or not, with capillitium threads. Spores white, or coloured, subglobose, or elliptical, echinulate, verrucose, reticulate, or smooth. Subterranean, or superficial.

SCLERODERMATACEAE.

Peridium subglobose, turbinate, or irregularly pear-shaped, sessile, or prolonged into a stem-like base, consisting of one or more layers, fleshy, leathery, or membranaceous, dehiscing in an irregular manner. Gleba traversed by sterile veins. Capillitium rudimentary. Spores coloured, globose, or elliptical, echinulate, verrucose, reticulate, or smooth. Subterranean, or superficial.
Melanogaster Cda.

(μέλας, black; γαστήρ, belly.)

Peridium subglobose, or elliptical, with branched mycelial strands springing from every part of the surface, fleshy, firm, not sharply separated from the gleba. Basidia pear-shaped, or elliptical to club-shaped, bearing 3–4, apical, or sublateral, sessile spores. Spores coloured, elliptical, or obovate, smooth, or papillate. Subterranean, or half buried.

74. M. variegatus (Vitt.) Tul. Tul. Fung. Hypog. t. 11, fig. 4, and t. 12, fig. 6.

Variegatus, of different colours.

Pe. 2–3 cm., ochraceous, or clear yellow, then reddish ferruginous, irregularly globose, adpressedly tomentose, and ornamented with the brown, fibrous, cord-like anastomosing mycelium. Gleba fuliginous, then black, tramal plates whitish, then bright orange. Spores brown, elliptic oblong, 10 × 5 μ. Smell pleasant, aromatic. Amongst leaves, and twigs. June—Nov. Uncommon.


C. E. Broome, the eminent mycologist.

Differs from the type in the tramal plates never being bright yellow, or orange. In tufts of five or six, under beech, and Lombardy poplars. June—Nov. Not uncommon.

75. M. ambiguus (Vitt.) Tul. Tul. Fung. Hypog. t. 2, fig. 5, and t. 11, fig. 5.

Ambiguus, changeable.

Pe. 2.5–3.5 cm., pale olive, becoming brownish when exposed to the air, globose, or elliptical. Gleba jet black, tramal plates white, unchangeable, “becoming reddish” Berk. Spores brown, obovate, or elliptical, apex acute, or obtuse and papillate, 13–15 × 7–8 μ. Smell very foetid. Under fir, deodar, beech, poplar, and oak. April—Oct. Rare. (v.v.)

var. intermedius Tul.

Intermedius, lying between.

Differs from the type in the obovate, obtuse, very rarely slightly papillate spores, and in the yellowish tramal plates becoming red when dried. Rare.

Scleroderma Pers.

(σκληρός, tough; δέρμα, skin.)

Peridium subglobose, obovate, or turbinate, sessile, or prolonged into a stem-like base, consisting of one, or two layers, firm, leathery or corky, warted, scaly, granular, or smooth, dehiscing irregularly, or by the exoperidium splitting at the apex in a star-like manner,
sharply separated from the gleba. Gleba at length becoming pulverulent. Basidia pear-shaped, to clavate, bearing 2–5, shortly pedicellate spores. Capillitium rudimentary, the remains of the sterile veins. Spores coloured, globose, echinulate, verrucose, or reticulate. Superficial.

*Spores reticulate.

76. **S. aurantium** Pers. (= Scleroderma vulgare (Hornem.) Fr.) Berk. Outl. Brit. Fung. t. 15, fig. 4, as Sclerodermà vulgare Fr. in text. **Aurantium**, golden.

Pe. 5–15 cm., whitish, or yellowish, often becoming pink when cut, globose, subsessile, or substipitate, often depressed, verrucose, or broken up into minute, rigid scales; peridium thick, tough, often attached by a dense mass of cord-like mycelium at the base. Gleba greyish white, then blackish with a purple tinge, tramal plates white. Dehiscing by an irregular mouth. Spores blackish with a purple tinge, reticulate with small meshes, verrucose, globose, 8–12μ. Smell often somewhat unpleasant. Woods, heaths, and under trees. July—Jan. Common. (v.v.)

var. **laevigatum** (Fuck.) W. G. Sm. *Laevigatum*, made smooth.

Differs from the type in the even, smooth peridium. Woods and heaths. Sept.—Oct. Not uncommon. (v.v.)

var. **aurantiacum** (Bull.) W. G. Sm. *Aurantiacum*, golden.

Differs from the type in its brassy yellow colour. Woods. Sept.—Oct. Not uncommon. (v.v.)

var. **spadiceum** (Pers.) W. G. Sm. *Spadiceum*, date brown.

Differs from the type in its smooth, date brown peridium. Beech woods. Sept. Uncommon. (v.v.)

var. **cervinum** (Pers.) W. G. Sm. *Cervinum*, fawn colour.

Differs from the type in its small size, and granular surface. Coniferous woods. Uncommon.


Pe. 2–5 cm., yellowish, subsessile, obovate, often irregular, thin, pliant, smooth, or slightly scaly, sometimes breaking away in patches, rarely substipitate, springing from a dense mass of cord-like mycelium at the base. Gleba olive brown; tramal plates yellow, floccose, the flocci with clamp connections. Dehiscing by an irregular mouth. Spores olive brown, reticulate with large meshes, verrucose, surrounded by an irregular, transparent border, globose, 10–13μ. Sandy soil in woods, and on heaths. Sept.—Nov. Uncommon. (v.v.)
78. **S. Geaster** Fr. Boud. Icon. t. 186. Geaster, the genus Geaster.

Pe. 5–15 cm., greyish ochraceous, or yellow, globose, or turbinate, sessile, minutely tomentose, granular, exoperidium very thick, splitting at the apex in a stellate manner into recurved subequal lobes. Gleba purple umber, floccose. Spores purple umber, reticulate, obtusely verrucose, globose, 12–15 μ, 1-pluri-guttulate. Sandy soil. Aug.—Nov. Uncommon. (v.v.)

**Spores echinulate.**


Verrucosum, warted.

Pe. 2–5–8 cm. wide, 2–10 cm. high, ochraceous, or dingy brown, sub-globose, continued below into a more or less elongated stem-like base, sometimes almost sessile, covered with minute, darker warts, rarely almost smooth; peridium thin above, fragile. Gleba umber brown, tramal plates whitish. Dehiscing by an irregular mouth. Spores dark brown, acutely echinulate, globose, 10–14 μ. Sandy soil in woods and on heaths. July—Nov. Common. (v.v.)


Cepa, onion.

Pe. 1–5 cm., reddish brown, or bay, globose, or bulbous, compressed, sessile, or with a very short stem, smooth, or rough with very small warts on the upper part; peridium very thick when fresh, thinner and somewhat leathery and wrinkled when dry. Gleba white, becoming sooty black tinged with lilac, tramal plates whitish, then greyish tinged darker or lilac. Dehiscing by an irregular mouth. Spores blackish, acutely echinulate, globose, 9–10 μ. Woods. Aug.—Oct. Uncommon. (v.v.)

**Pisolithus A. & S.**

*(Polysaccum DC.)*

*(πίσος, peas; λίθος, stone.)*

Peridium irregularly globose, attenuated downwards into a stem-like base, thin, membranaceous, dehiscing by the falling away of the upper portion. Gleba forming round, or polygonal peridiola, that finally become free and separate from each other. Basidia pear-shaped, bearing 2–6, almost sessile spores. Spores coloured, globose, verrucose. Capillitium rudimentary. Half buried in the ground.


Arenarius, pertaining to sand.

Pe. 2–5–8 cm., ochraceous, then olivaceous brown, irregularly globose, or pear-shaped, attenuated downwards into a stem-like base which is
sunk in the ground, smooth, or rough; very fragile. Gleba consisting of many peridiola; peridiola sulphur yellow, then brown, irregularly angular. Spores reddish brown, warted, globose, 9–10 µ. Sandy soil. May—Oct. Rare. (v.v.)

**Calostomataceae.**

Peridium globose, consisting of several layers. Gleba traversed by sterile veins. Basidia pear-shaped or clavate, bearing sessile, lateral spores. Capillitium well developed, springing from the inside of the endoperidium. Spores coloured, globose or elliptical, verrucose, or smooth. Superficial or half buried in the ground.

**Astraeus Morgan.**

(αστρον, a star.)

Peridium globose; exoperidium consisting of three layers, the outer composed of thin, irregularly interwoven hyphae, the middle layer of a corky consistency and the inner cartilaginous and collenchymatous, at first concrete with the endoperidium, then at maturity splitting at the apex in a star-like manner into several lobes and separating from the endoperidium; endoperidium thin, membranaceous or papyraceous, sessile, dehiscing by an apical aperture. Capillitium well developed, springing from the inner surface of the endoperidium, threads long, much branched and interwoven. Basidia pear-shaped, bearing 4, sessile, lateral spores. Spores coloured, globose, minutely verrucose. Half buried in the ground.


υγρός, wet; μέτρον, a measure.

Exoperidium 4–8 cm., grey, or greyish brown outside, brownish inside and becoming deeply cracked, globose, tough, leathery, cartilaginous, splitting up into 7–20, acute lobes, divided up almost to the base, strongly incurved and depressed over the apex of the endoperidium when dry, reflexed and standing up on the apices of the lobes when moist; endoperidium 1·5–2·5 cm., grey, or brown, sessile, globose, depressed, smooth, or subreticulate, dehiscing by an irregular, small apical mouth. Spores brown, minutely verrucose, globose, 8–11 µ. Capillitium hyaline, thick walled, branched, 6–7 µ in diam. Woods, and under trees. Feb.—Dec. Uncommon. (v.v.)

**Tulostomataceae.**

Peridium subglobose, stipitate, or prolonged into a stem-like base, consisting of a thin, fugacious exoperidium, and a thin, membranaceous endoperidium, which is raised upwards by the firm, fibrous
basal portion. Gleba without cells. Basidia club-shaped, irregularly scattered on the hyphae, bearing the spores laterally at various levels. Capillitium well developed, attached to the endoperidium. Spores coloured, globose, verrucose. Subterranean, or half buried in the ground, then superficial.

**Tulostoma** Pers.

(*τυλος, a knob; στόμα, mouth.)

Peridium depressed globose; exoperidium, thin, fugacious; endoperidium membranaceous, thin, *dehiscing by an apical aperture*; stem elongate, inserted into a socket at the base of the peridium. Capillitium well developed, threads hyaline, very long, much branched, attached to the endoperidium, interwoven. Spores coloured, globose, verrucose. At first subterranean, then superficial.


*Brumale*, pertaining to the winter.

Pe. 5–10 mm., *whitish, then yellowish*, globose, or somewhat depressed; outer peridium friable, inner peridium smooth, thin, membranaceous, papyraceous; mouth small, slightly prominent, scarcely toothed, entire. Stem 2–5 cm. × 2–3 mm., *reddish brown*, equal, slightly attenuated upwards to the base of the peridium, and surrounded by a ball of mycelium at the base, smooth, or more or less fibrillose, concolorous inside, stuffed. Spores pinkish, acutely warted, globose, 4–5μ. Capillitium threads hyaline, branched, thick walled, *nodose septate*, 4–6μ in diam. Amongst sand, and on old walls. May—Feb. Uncommon. (v.v.)

**Queletia** Fr.

(Dr Lucien Quélet, the eminent French mycologist.)

Peridium subglobose, then prolonged into a stem-like basal portion; exoperidium thin, fugacious; endoperidium firm, hard, breaking away from the stem-like base and *dehiscing by the gradual falling away of the peridial walls from the base upwards*. Capillitium sparse. Basidia with one to three, apical, or lateral, shortly pedicellate spores. Spores coloured, globose, verrucose. Subterranean, then superficial.


*Mirabilis*, wonderful.

Pe. 3–7 cm., *whitish*, subglobose, at first rounded above and slightly conical at the base, which subsequently develops in a stem-like
manner; exoperidium thin, brittle, breaking up into fugacious granules; endoperidium yellowish, becoming brownish, firm, hard, and finally breaking away from the stem-like base, dehiscing by the falling away of portions from the base upwards. Stem-like base 4–15 × 1.5–5 cm., whitish, then concolorous, torn up into revolute, squarrose fibrils, and finally breaking away from the peridium at maturity and exposing the rusty brown gleba. Spores rusty brown, coarsely warted, globose, often shortly pedicellate, 6–8μ; basidia 1–3-spored. Capillitium almost colourless, rarely branched or septate, 8–10μ in diam. Amongst rotten leaves, and spent tan. Sept. Rare. (v.v.)

Battarrea Pers.

(J. A. Battarra, author of Fungorum Agri Ariminensis Historia.)

Peridium globose, exoperidium becoming irregularly torn at the apex, leaving a volva-like basal portion; stem elongated, hollow, becoming torn into fibrous scales; endoperidium hemispherical, plane, or concave underneath, dehiscent by a circular fissure beneath the margin, the upper part coming off like a lid. Capillitium of simple, or branched threads, with spiral, or annular thickenings. Spores coloured, globose, verrucose. Subterranean, then superficial.

85. B. phalloides (Dicks.) Pers. Sow. Eng. Fung. t. 390, as Lycoperdon phalloides Dicks. φαλλός, penis; εἶδος, like.

Volva 2–4 cm., white outside, parchment-like, pitted, filled when young with colourless mucus, globose, splitting above into four or five more or less pointed lobes, rust colour inside, fibrous, woody, often fringed. Stem 10–30 × 3–5 cm., rusty brown, attenuated at both ends, slightly ventricose in the middle, woody, firm, covered with long, twisted fibres, whitish inside, and stuffed with long, transparent threads. Inner peridium rusty brown, campanulate, somewhat flattened, fibrous, splitting horizontally and filled with the yellowish brown capillitium and spores. Spores rust colour, obtusely verrucose, globose, often with a hyaline apiculus, 6μ. Capillitium threads pale rust colour, 63–80 × 8μ, with spiral thickenings. Sandy places, and in hollow trees. Sept.—Dec. Rare. (v.v.)

Glischrodermataceae.

Peridium globose, consisting of a single layer, seated on a ring-like mass of mycelium surrounding the sessile base, dehiscing by a well-defined apical aperture. Capillitium attached to the inner wall of the peridium. Spores coloured, globose, minutely warted. Superficial.
GLISCHRODERMA. SPHAEROBOLUS

Glischroderma (Fuck.) Rea.

(γλισχρόδερμα, clammy; δέρμα, skin.)

With the same characters as the family.


Cinctum, girdled.

Pe. 5–15 mm., pale grey, becoming darker with age, globose, slightly sticky, then scurfy, dehiscing by a well-defined apical pore which becomes larger, seated on a ring-like mass of white mycelium 5–2 mm. wide at the base. Spores pale pink, minutely warted, showing 4–5 warts in a row across the hemisphere, globose, 4 μ. Capillitium hyaline, thick walled, septate, 5–10 μ in diam., attached to the inner wall of the peridium. Charcoal heaps in woods. Sept.—Oct. Uncommon. (v.v.)

SPHAEROBOLACEAE.

Peridium subglobose, sessile; exoperidium consisting of three layers, an outer gelatinous layer, a middle pseudo-parenchymatous layer, and an inner fibrous layer, splitting in a star-like manner into pointed lobes when mature. Gleba consisting of a peripheral layer of upright palisade cells and a central fertile portion, finally becoming slimy and ejecting the whole mass. Basidia pear-shaped bearing 5–8, sessile spores. Spores white, elliptical, or oblong elliptical, smooth. Growing on wood and leaves.

Sphaerobolus (Tode) Pers.

(σφαίρα, a ball; βόλος, a throw.)

With the same characters as the family.


Stellatus, set with stars.

Pe. 2 mm. high and broad, whitish, or pale yellow, globose, then oval, seated on an arachnoid mycelium, splitting above in a stellate manner into 6–8, acute teeth, tomentose, then smooth. Gleba at first whitish and transparent, then brown, broadly elliptical. Spores white, broadly elliptical, 10–11 × 5–6 μ. Crowded. On wood, twigs, sawdust, and leaves. Jan.—Dec. Common. (v.v.)

88. S. dentatus (With.) W. G. Sm. (= Sphaerobolus stellatus (Tode) Pers. sec. Lloyd.)

Dentatus, toothed.

Pe. 1.5 mm., pale livid buff, to vinous brownish, pale brown, or brown, springing from scanty brownish mycelium, finely pilose with erect hairs, opening above in a 4–7-stellate manner, the rays clad with long, white hairs, which at first converge over the opening, white, ivory, white-greyish, or faint olive ivory inside, ejecting a reddish brown gleba. Scattered. Dead elder. Aug. Rare.

Pe. 5–2 mm., *saffron yellow, or sienna*, at first hemispherical, urceolato-ventricose, seated on a dense tomentose subiculum of buff white, here and there brownish, mycelium. Gleba *concolorous*, solitary, spherical. Spores white, elliptic-oblong, 10–12 \( \times \) 5–6\( \mu \). Crowded, in troops. Rotten wood, and running over leaves. March—Nov. Rare. (v.v.)

*Thelebolus* Tode = A genus of the Ascobolaceae.

**AGARICALES.**

Hymenium strictly defined from the first, covering the exterior of gills, or lining the interior of fleshy tubes, or pores, or spreading over a smooth surface; at first protected by the universal, or partial veil (the volva, or ring), then finally, at maturity, fully exposed.

**AGARICINEAE.**

Hymenium inseparable from the pileus and spread over the surface of gills radiating from a stem, or central point. Receptacle fleshy, membranaceous, or coriaceous, fragile, firm, or tough, putrescent, or not putrescent, reviving with moisture or not, and sometimes containing lacticiferous vessels; consisting of a pileus with, or without, a central or lateral stem, and sometimes with a volva or a ring, and broad gills acute at the margin. Growing on the ground, or on wood.

**AGARICACEAE.**

Same characters as the suborder.

I. Receptacle fleshy, trama not vesiculose, nor traversed by lacticiferous vessels, not membranaceous, not rapidly putrescent, nor tough and woody.

A. Pileus distinct, and easily separable from the fleshy stem.

*Without a ring, or a volva.*

Spores white.

**Schulzeria** Bres.

(Stephan Schulzer.)

Pileus fleshy, regular; margin at first incurved. Stem central. Gills free from the stem. Spores white, oval, or clavate, wall continuous. Growing on the ground.


P. 3–4 cm., *tan coloured, beset with darker pyramidal warts resembling those of some species of Lycoperdon, and often splitting at the
base, convex, then expanded; margin appendiculate. St. 5 × 1 cm., whitish, equal, minutely fibrillose. Gills white, free, rather crowded. Flesh white, brownish under the cuticle. Spores white, oval, 5 × 4μ. Under cedars. Sept.—Oct. Rare.


Grange Park, Hants.

P. 2-5-4 cm., dark green, cracking into fibrous scales on a white ground, fleshy, convex, flatly umbonate. St. 5-6 cm. × 5-7 mm., brownish, squamose, squamules tipped with the same colour as the p., equal, base attenuated. Gills yellowish, free, broader in front, minutely denticulate. Flesh white, reddish in the stem. Spores white, club-shaped, 11-13 × 3-5μ, multi-guttulate. Caespitose. On soil among beech leaves. Nov. Uncommon. (v.v.)

*S. Eyrei* Massee = **Glaucospora Eyrei** (Massee) Rea.

Spores pink.

**Pluteus Fr.**

*(Pluteus, a movable pent-house.)*

Pileus fleshy, regular. Stem central. Gills free from the stem, rounded behind. Spores pink, rarely pale yellowish, globose, sub-globose, or elliptical, wall continuous. Cystidia on edge of gills pear-shaped, or inflated clavate; on the sides of the gill fusiform, or bottle-shaped, and hooked at the apex. Growing on wood, more rarely on the ground.

*Cuticle of the pileus separating into fibrils or flocci.*

92. **P. cervinus** (Schaeff.) Fr. **Cervinus,** pertaining to deer.

P. 4-10 cm., fuliginous, becoming paler, and broken up into fibrils, or squamules, and often streaked, fleshy, somewhat fragile, campanulate, then expanded, viscid. St. 7-10 cm. × 5-15 mm., white, covered with black fibrils, firm, equal, often bulbous at the base. Gills white, then flesh colour, free, rounded behind, crowded, ventricose, somewhat crenulated. Flesh white, soft. Spores pink, elliptical, 8-10 × 4-5μ. Cystidia on gill edge pear-shaped, 25 × 22μ, on gill surface fusiform, hooked at the apex, 55-75 × 15-18μ. On fallen trunks, stumps, sawdust heaps. Jan.—Dec. Common. (v.v.)

var. **Bullii** Berk. Cke. Illus. no. 304, t. 357.

Dr H. G. Bull of Hereford, the originator of the Woolhope Club fungus forays.

P. 10-16 cm., pallid, disc darker, convex, then expanded and gibbous. St. 8-16 × 2-3 cm., pale brown, darkest at the swollen base,
fibrillose. Gills white, then pink, free, rounded behind, very broad, crowded. Flesh white, thick. Spores elliptical, $7-8 \times 5\mu$. Stumps and rotten wood. Sept.—Oct. Uncommon. (v.v.)

var. rigens Pers. Rigens, stiff.

Differs from the type in the cinereous pileus, with black fibrils, or squamules, and the glabrous, somewhat shining stem.


Eximius, distinguished.

P. 6–20 cm., rufescent umber, when young darker, and tinged with carmine round the margin, campanulate, then convex and expanded, viscid pellicle separable. St. 10–14 × 4 cm., pallid, at length becoming blackish, nearly equal, sulcate upwards, fibrillose. Gills white, then pale rose, becoming rufous when bruised, very broad, crowded, free, but very close to the stem. Flesh yellowish, cartilaginous. Spores pink, spherical, but somewhat irregular, $7 \times 5\mu$. On sawdust. Nov. Rare.

94. P. patricius Schulz. (= Pluteus cervinus (Schaeff.) Fr. sec. Quél.) Boud. Icon. t. 87.
P. 6–15 cm., white, or greyish, disc covered with brown, hairy, pointed squamules, convex, then expanded, more or less silky; margin lobed, and often split. St. 5–15 × 1–3 cm., white, covered with small whitish squamules that become brownish at the base, equal. Gills white, then flesh colour, free, very broad. Flesh white, firm. Spores pink, elliptical, $5–8 \times 3–5\mu$. On dead logs, stumps. June—Sept. Uncommon. (v.v.)

95. P. petasatus (Fr.) Karst. Cke. Illus. no. 305, t. 303.

πέτασος, a travelling hat with a broad brim.

P. 8–15 cm., whitish cinereous, at length somewhat date brown, disc fleshy, campanulate, then expanded, umbinate, viscid pellicle separable, at length striate to the middle, margin membranaceous. St. 10–20 × 1–1.5 cm., pallid, at length becoming tawny, rigid, fibrillose-striate, attenuated upwards from the silky base. Gills white, then reddish, at length tawny at the edge, very broad, very crowded, drying up. Flesh white, soft. Spores pink, “broadly oval, $7.5–9 \times 4.5–5\mu$. Cystidia fusoid-bottle-shaped, 11–14\mu. broad, with a few hooks” Lange. On heaps of straw and dung, sawdust. Uncommon. (v.v.)

96. P. sororiata Karst. Soror, a sister.

P. 3–6 cm., yellow, somewhat fleshy, campanulate, then expanded, floccosely-squamulose; margin somewhat striate, often repand. St. 6 × 1 cm., pallid, becoming yellowish, squamulose at the enlarged base. Gills flesh colour, margin at first yellow, rounded behind, free, crowded,
PLUTEUS


P. 6–10 cm., umber, campanulate, then expanded, subumbonate, more or less rugulose, covered with adpressed fibrils, then squamulose; margin more or less lobed, ciliato-fimbriate. St. 5–10 × 5–3 cm., pale, covered with villose, brown squamules, base white, floccose. Gills white, then rosy, fuliginous-fimbriate at the margin, free, broad. Flesh white. Spores pink, elliptical, 6–7 × 4–5μ. “Cystidia on edge fusoid bladder-shaped, 15–25μ broad, content yellowish-brown” Lange. Smell of radish, taste slightly bitter. On stumps and fallen logs. Aug.—Oct. Uncommon. (v.v.)

98. P. ephebeus Fr. (= Pluteus villosus (Bull.) Quél.) εφήβος, arrived at man’s estate.

P. 5–7 cm., violaceous bistre, fleshy, convex, then plane, at first villose, finally floccose. St. 3–4 cm. × 5–8 mm., white, base swollen, violaceous bistre, rigid, striate. Gills white, then rosy, free, very ventricose, margin unequal. Flesh white, brownish under the cuticle. Spores pink, globose, 6–7μ, with a large central gutta. On rotten wood, and trunks. Sept. Uncommon. (v.v.)


P. 3–5–4–5 cm. wide, 2–5 cm. high, snow white, then becoming smoky grey, campanulate, obtusely umbonate, floccosely-silky, atomate; margin splitting, exceeding the gills. St. 6–7 cm. × 5–6 mm., concolorous, curved, striate, base bulbous. Gills white, then pink, 11–12 mm. broad, free, ventricose, crowded. Flesh white. Spores pink, globose, or elliptical, 6 × 6μ, or 7–8 × 6μ, 1–many-guttulate. Cystidia none. Dead wood. Sept. Uncommon. (v.v.)

100. P. violarius Massee. Cke. Illus. no. 311, t. 518, fig. B. Violarius, a dyer of violet colour.

P. 1–5–2–5 cm., dark purple, darkest at the disc, hemispherical, then nearly plane, minutely velvety; margin undulate. St. 2–3 cm. × 2–3 mm., pale umber, sprinkled with delicate, black fibrils below, whitish above, attenuated upwards, silky. Gills whitish, then bright flesh colour, free, crowded, margin serrulate. Flesh grey, thickish. Spores pink, subglobose and apiculate, 5–6μ. On stumps, and rotten wood. Rare.
101. **P. salicinus** (Pers.) Fr. Cke. Illus. no. 1157, t. 1169, fig. A.

Salicinus, pertaining to a willow.

P. 2–3 cm., bluish-grey, then cinereous, disc darker, slightly fleshy, convex, then plane, subumbonate, flocculoso-rugulose. St. 3–5 cm. × 2–6 mm., white-azure-blue, or sometimes becoming green, equal, often thicker at the base, fibrillose, fragile. Gills white, then rose-colour, free, ventricose. Flesh white, tinged with green. Spores pink, elliptical, 8–9 × 6–7 μ, with a large central gutta. “Cystidia on edge inflated clavate, 16–18 μ broad, on sides fusoid bottle-shaped, with hooks” Lange. On willow, and alder trunks and branches. Feb.—Dec. Not uncommon. (v.v.)

**var. beryllus** (Pers.) Fr. βηρυλλος, a jewel of sea-green colour.

Differs from the type in the pileus being streaked with green, the ash-coloured rugose disc, and the whitish stem with greenish fibrils. On alder. Sept.—Oct. Uncommon. (v.v.)

**var. floccosus** Karst. Floccus, a flock of wool.

Differs from the type in the floccosely squamulose pileus. Rare.

102. **P. hispidulus** Fr. Fr. Icon. t. 90, fig. 2.

Hispidulus, somewhat hairy.

P. 1–2 cm., grey, thin, convex, then plane, obtuse, silky, or slightly pilose; margin at length slightly striate. St. 3–4 cm. × 2–4 mm., silvery white, equal, fragile, curved-ascending. Gills white, then rose colour, free, broadest in front. Flesh white, grey under the pellicle of the pileus. Spores pink, globose, 6–7 μ. “Cystidia inflated-club-shaped, 13–16 μ broad” Lange. On beech stumps, and rotten wood. Sept.—Oct. Uncommon. (v.v.)

103. **P. pellitus** (Pers.) Fr. Quél. Jur. et Vosg. t. 5, fig. 4.

Pellitus, covered with skins.


**var. punctillifer** Quél. Punctillum, a little dot; fero, I bear.

Differs from the type in the disc of the pileus being tinged fuscous and covered with minute umber scales, and in the base of the stem being covered with minute umber scales. Spores pink, globose, 6 μ, 1–3-guttulate. On the ground. Oct. Uncommon. (v.v.)
**P. pruinatus, somewhat pulverulent.


P. 1–5 cm., umber, sprinkled with fuscous, pulverulent sootiness, disc often darker, covered with veined, radiating, umber wrinkles, thin, convex, then flattened. St. 3–4 cm. × 2–4 mm., whitish, rigid, equal, or attenuated downwards, slightly striate. Gills white, then flesh colour, free, ventricose. Flesh white. Spores pink, broadly elliptical, 5–6 × 4–5 μ, 1-guttulate. "Cystidia cylindric bladder-shaped" Lange. On fallen sticks, especially birch and beech, and on sawdust. May—Oct. Not uncommon. (v.v.)

var. **lutescens** Fr. Cke. Illus. no. 309, t. 305, fig. B. *Lutescens*, becoming yellow.

Differs from the type in the stem and often the gills and flesh being yellow. Spores pink, globose, 5–6 μ. On stumps. May—Oct. Not uncommon. (v.v.)


Differs from the type in being larger, with an even greyish pileus. Fallen sticks. Rare.

105. **P. melanodon** (Serr.) Fr. *μέλας*, black; ὑδός, a tooth.

P. 2–5 cm., dull yellow, thin, convex, then plane, conically umbo-nate, pulverulent; margin slightly striate. St. 6–7 cm. × 1–2 mm., yellowish brown, apex white, swollen base blackish, firm, polished. Gills whitish, tinged with rose colour, free, ventricose, margin black, denticu-late. Flesh white. Rotten wood in beech woods. Sept. Rare.


P. 2–4 cm., brown, or dark fawn colour, fleshy, convex, then expanded, subumbonate, often depressed round the umbo, radiately rugulose. St. 4–5 cm. × 4–8 mm., whitish, or faintly tinged with fawn colour, punctate with scattered black points, equal, incurved. Gills white, then pink, free. Flesh white. Spores pink, globose, 7–8 μ. On stumps. July—Oct. Uncommon. (v.v.)

107. **P. semibulbosus** (Lasch) Fr. Boud. Icon. t. 89. *Semi*, half; bulbosus, bulbous.

P. 1–4 cm., pale ashy ochraceous, becoming rosy and pale, sub-membranaceous, thin, somewhat diaphanous, convex, then plane, pulverulently pruinose, deeply striate. St. 3–6 cm. × 4–6 mm., white, delicately pubescent, and velvety, minutely striate; base bulbous, velvety.

***P. glabrous.

108. P. leoninus (Schaeff.) Fr. (= Pluteus leoninus var. coccineus Massee.) Cke. Illus. no. 313, t. 421, figs. A, B.

Leoninus, pertaining to a lion.

P. 3–7 cm., yellow, lemon yellow, crimson orange, or vermilion, thin, fragile, campanulate, then expanded, margin striate. St. 4–7 × 1 cm., whitish light yellow, often vermilion at the thickened base, fragile, striate, fibrillose. Gills white, then flesh colour, margin often light yellow, free. Flesh white, or yellowish, reddish under the cuticle in the vermilion specimens. Spores pink, elliptical, or globose, 5–7 × 5 μ, multi-guttulate. Cystidia “on gill surface flask-shaped to fusiform 60–110 × 24–33 μ apex rounded, un toothed, on edge of gill clavate to bottle-shaped, 60–75 × 15–27 μ” Rick. On old willows, and stumps. Sept.—Jan. Uncommon. (v.v.)

109. P. roseo-albus Fr. Roseus, rosy; albus, white.

P. 7–8 cm., rosy, thin, convex, then expanded. St. 4–6 × 1 cm., white, pruinose, curved. Gills white, then flesh colour, free. Spores pink. Poplar trunks. Sept. Rare.

110. P. chrysophaeus (Schaeff.) Fr. Boud. Icon. t. 91. Χρυσός, gold; φαιός, dusky.

P. 2–4 cm., dark cinnamon, or pale umber, often streaked with black, submembranaceous, convex, then expanded; margin striate. St. 4–6 cm. × 3–9 mm., yellow, equal, striate, fibrillose. Gills white, then flesh colour, free. Flesh yellowish, deeper coloured in the stem. Spores pink, subglobose, 6–7 μ, multi-guttulate. “Cystidia obtusely fusiform, subventricose, inflated” Lange. On twigs and stumps. May—Nov. Common. (v.v.)

111. P. phlebophorus (Ditm.) Fr. Cke. Illus. no. 315, t. 422, fig. A. φλέψ, a vein; φέρω, I bear.

var. _albo-farinosus_ Rea.  
*Albus, white; farinosus, mealy."

Differs from the type in the _white mealy apex of the stem._ On rotten wood in woods. Oct. Rare. (v.v.)

var. _reticulatus_ Cke. = _Pleurotus palmatus_ (Bull.) Quél.

var. _marginatus_ Quél. Quél. As. Fr. (1884), t. 8, fig. 4.  
*Marginatus, bordered.*

Differs from the type in the _chestnut brown peridium, and the bistre black, crenulate edge of the gills._

112. _P. umbrinellus_ (Sommerf.) Fr.  
*Umbrinellus, brownish._

P. 15 mm., bistre, convex, tough; margin paler, fimbriate. St. 5–7 cm. x 3–4 mm., white, shining, tough, rooting. Gills white, then _flesh colour_, free. Spores “subglobose or elliptical 8–9 x 6–7μ or 7–8 x 6μ; cystidia 60–90 x 18–30μ.” Sacc. In coppices, and gardens. June—Oct. Uncommon.

Spores _green._

_Glaucospora_ Rea.¹

(γλαυκός, green; σπόρα, seed.)

Pileus fleshy, regular; margin at first incurved. Gills free from the stem. Spores bluish green, elliptical, wall continuous. Growing on the ground.

113. _G. Eyrei_ (Massee) Rea. (= _Schulzeria Eyrei_ Massee.) _Grevillea_, xxii (1894), t. 185, fig. 1, as _Schulzeria Eyrei_ Massee.

Rev. W. L. W. Eyre, the ardent mycologist of Swarraton.

P. 2–4 cm., pallid, _disc ochraceous_, minutely granular, campanulate, then expanded and plane, _broadly umbonate_; margin incurved, and appendiculate with the membranaceous veil when young, often split, and revolute when old. St. 5 cm. x 2–3 mm., _pallid, becoming ochraceous_, flexuose, subequal, apex minutely mealy. Gills _pale green, then deep bluish green, free, narrowed, thin._ Flesh _white, yellowish in the stem._ Spores _bluish green_, elliptical, 4.5 x 2.5–3μ. Under spruce firs, and in pastures. Aug.—Oct. Uncommon. (v.v.)

Spores _ochraceous._

_Pluteolus_ Fr.

(_Pluteolus, a little pent-house._)

Pileus fleshy, very thin, viscid; margin at first straight, adpressed to the stem. Stem central, subcartilaginous. Gills free, rounded behind. Spores _ochraceous, ferruginous, or ochraceous brown, elliptical, smooth._ Cystidia obpyriform, or ventricose. Growing on wood.

¹ The name _Chlorospora_ proposed by Massee for this genus cannot stand, as Spegazzini had previously used it for a genus of the Peronosporaceae.
114. **P. reticulatus** (Pers.) Fr. (= *Pluteolus aleuriatus* Fr. sec. Quél.)
Cke. Illus. no. 516, t. 495.  
Reticulatus, netted.

*P. reticulatus* 4–5 cm., delicate bistre, becoming violaceous, fuscous, or livid grey, fleshy, campanulate, then expanded, umbonate when mature, subreparand, viscid at first, and covered with a network of anastomosing veins, becoming more even, or slightly pitted; margin slightly striate. St. 4–5 cm. × 4–6 mm., white, equal, fragile, fibrillose, the cuticle becoming polished, even, subcartilaginous, apex mealy. Gills dingy cinnamon, distinctly free, ventricose, crowded, arid. Flesh white, thin. Spores ochraceous ferruginous, broadly elliptical, often slightly depressed on one side, 9–10 × 5–6 μ, 2–4-guttulate. Cystidia obpyriform, or ventricose and apiculate, 15 × 8 μ. Dead wood. Sept.—Oct. Uncommon. (v.v.)

115. **P. aleuriatus** Fr. (= *Pluteolus reticulatus* (Pers.) Fr. sec. Quél.)
Fr. Icon. t. 126, fig. 5.  
*aleuriatus*, wheaten flour.

*P. aleuriatus* 1–2–5 cm., bluish grey, livid, or rose colour, submembranaceous, conical, then convexo-plane, viscid, striate to the disc. St. 2–5–4 cm. × 2–3 mm., white, slightly attenuated upwards, straight, or incurved, pulverulent. Gills saffron ochraceous, then cinnamon, free, ventricose, 2 mm. broad, thin. Flesh white, very thin. Spores ferruginous, oblong elliptical, 6–10 × 4 μ, 1-guttulate. Rotten sticks, and stumps. Sept.—Nov. Not uncommon. (v.v.)


*Mulgravensis*, belonging to the Mulgrave woods, near Whitby.

*P. Mulgravensis* 5–6 cm., grey, somewhat fleshy, convex, then expanded, umbonate, flocculose, becoming broken up into squamules, striate. St. 4 cm. × 3–4 mm., whitish, subequal, base subclavate, smooth. Gills white, then cinnamon, free, crowded, broad. Spores ochraceous brown, elliptical, 9–10 × 4–5 μ. On wood. Sept. Rare.

Spores purple, or fuscous.

**Pilosace** Fr.

(πιλος, a cap; σάκος, a shield.)


117. **P. Algeriensis** Fr. in Quél. (?= *Stropharia epimyces* (Peck) Atk. sec. Harper.)

*Algeriensis*, Algerian.

*P. Algeriensis* 10 cm., snow white, then reddish, or bistre, fleshy, convex, then plane, smooth, shining like a kid glove. St. 4–5 × 4–5 cm., white, incrassated at the base, silky. Gills rosy flesh colour, then bistre

**With a ring on the stem.**

Spores white.

**Lepiota** (Pers.) Fr.

(λεπίωτα, a scale; oδις, ear.)

Pileus fleshy, regular. Stem central. Ring membranaceous, free, or adnate, persistent, or fugacious, *always manifest in the adult stage*. Gills free, adnate, or sinuate-adnate, often attached to a collar. Spores white, rarely pinkish, or ochraceous, oval, elliptical, pipeshaped, fusiform, subreniform, deltoid, or projectile shaped; continuous, or with a germ-pore. Cystidia rare. Growing on the ground, rarely on wood.

A. EPIDERMIS DRY.

*P. squamulose, or becoming broken up into scales.

(a) Ring movable, distinct from the volva; apex of stem surrounded by a cartilaginous collar.

118. **L. procera** (Scop.) Fr. Rolland, Champ. t. 11, no. 15.

*Procera*, tall.

P. 10–25 cm., whitish, the brownish cuticle breaking up into thick, separable scales, ovato-acorn-shaped, then campanulate, and flattened, with a broad, obtuse, prominent umbo; margin fimbriate, fibrillose. St. 15–30 × 1·5–2 cm., brownish, breaking up into snake-like markings, due to the slower growth of the external hyphae, cylindrical, base bulbous. Ring white above, brownish on the exterior, thick, movable, persistent, cartilaginous near the stem, fibrillose at the margin. Gills whitish, often becoming fuscous at the edge, remote from the stem, and separated by a cartilaginous collar, ventricose, crowded, broader in front, soft, crowded. Flesh white, floccose. Spores white, elliptical, 15–18 × 10μ, multi-guttulate, with a germ-pore. Cystidia "on edge of gill bottle-shaped to clavate, 40–50 × 15–20μ" Rick. Taste and smell pleasant. Edible. Woods, heaths, and pastures. July—Nov. Common. (v.e.)


P. 5–10 cm., ochraceous, disc covered with brownish-ochre, imbricate scales, which are more sparse towards the fibrillose margin, hemispherical, then flattened, with a prominent, darker umbo. St. 7–18 × 1–2 cm., brownish, or ochraceous, with a few scattered adnate squamules, equal, base abruptly bulbous. Ring whitish, movable, fim-

120. *L. rhacodes* (Vitt.) Fr. Boud. Icon. t. 10. *pákos*, ragged.

P. 7–18 cm., greyish ochre, covered with large, thick, angular, ragged, yellowish scales, which become darker at their margin, disc flat, and deeper in colour, very fleshy, globose, then flattened, or depressed. St. 7–25 × 1.5–2 cm., white, bruising reddish, conical, then elongated, and attenuated upwards, base large, marginately bulbous, smooth. Ring white, or brownish, clothed on the outside with one or two zones of scales, fimbriate at the margin. Gills whitish, or reddish, free, separated by a cartilaginous collar, lanceolate or ventricose, crowded. Flesh white, reddening on exposure to the air, especially in the stem. Spores white, elliptical, $12-15 \times 6-8 \mu$, 1–2-guttulate, with a germ-pore. Cystidia “on edge of gill coloured, ventricose-bottle-shaped, 30–36 × 12–15 \mu” Rick. Smell and taste pleasant. Edible. Under trees in pastures, and in coniferous woods. July—Nov. Common. (v.v.)


P. 5–8 cm., white, disc gibbous and ochraceous, campanulate, then convex, surface breaking up into delicate, floccose scales. St. 9–12 × 1 cm., white, equal, slightly mealy above the ring, base subbulbous. Ring white, movable, narrow. Gills white, free, separated by a narrow, cartilaginous collar, narrowed behind, crowded. Flesh white, or faintly tinted reddish. Spores white, oblong-elliptical, 12–18 × 7–8 \mu, 1–3-guttulate. “Cystidia obovate-bottle-shaped, 16 \mu broad, occasionally with a somewhat protruding apex” Lange. Taste pleasant. Edible. In pastures, generally under oaks. Aug.—Oct. Uncommon. (v.v.)


P. 12–15 cm., disc brown cinnamon, the paler ground colour elsewhere covered with cinnamon brown patches of the cuticle, campanulato-convex, then expanded, subumbonate; margin whitish, torn. St. 12–15 × 1.5–2 cm., white, covered with small, irregular brownish scales, base bulbous. Ring tawny brown, membranaceous, large, margin fimbriate. Gills yellowish white, or flesh colour, remote from the stem, and separated by a cartilaginous collar, narrowed behind, crowded. Flesh white, becoming reddish, floccose. Spores “oval, elliptical or almond shape, 12–20 × 8–12 \mu, hyaline, surrounded by a golden ring” Sacc. Taste pleasant. Edible. Woods, and pastures. Sept.—Nov. Uncommon. (v.v.)
123. **L. excoriata** (Schaef.) Fr. Krombh. t. 24, figs. 27–28.

*Excoriata*, peeled.

P. 6–10 cm., *whitish*, disc *often* brown, *gibbous*, fleshy, globose, then expanded and plane, the *very thin cuticle* breaking up into large patches and appearing as if it had been drawn inwards from the fimbriate margin. St. 4–7.5 × 5–1 cm., *white*, or tinged greyish, *equal*, base bulbous. Ring concolorous, firm, movable. Gills *white*, remote from the stem, and separated by a cartilaginous collar, soft, crowded. Flesh *white*. Spores *white*, elliptical, 14–15 × 9–11μ, with an apical germ-pore. "*Cystidia obtusely fusiform, 50 × 10μ*" Lange. Taste and smell pleasant. Edible. Heaths, and pastures, rarely in woods. May—Nov. Common. (v.v.)

124. **L. gracilenta** (Krombh.) Fr. *Gracilenta*, slender.


*μαστός eiδος*, breast-like.

P. 3–6 cm., *whitish*, the *fuscous cuticle* becoming broken up into *adpressed scales*, campanulate, then convex, *acutely umbonate*. St. 7–10 cm. × 3–4 mm., *whitish*, or bistre, obsolesently squamulose, tough, flexible, *attenuated at the apex*, base bulbous. Ring *white*, *margin brownish*, entire, movable. Gills *white*, or cream colour, *very remote* from the stem, and separated by a cartilaginous collar, lanceolate, soft, very crowded. Flesh *white*. Spores *white*, elliptical, 15 × 9–10μ. Taste and smell pleasant. Edible. Heaths, pastures, and clearings in woods. Aug.—Oct. Uncommon. (v.v.)

126. **L. nympharum** Kalchbr. Kalchbr. Icon. t. 2, fig. 1.

*Nymph*, a bride.

P. 3–10 cm., *white*, covered with *white*, concentric, *squarrose*, *torn scales*, that become somewhat ochraceous at their margin with age, disc *ochraceous*, campanulate, then *conico-convex*. St. 7.5–10 × .5–1 cm., *white*, attenuated upwards, base bulbous, *apex mealy*. Ring
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white, distant. Gills white, remote from the stem, and separated by a cartilaginous collar, attenuated behind. Flesh white, becoming pinkish under the cuticle of the pileus and at the base of the st. Spores white, subglobose, or elliptical, $7 \times 6 \mu$, or $7-10 \times 6 \mu$, with a large central gutta. Taste pleasant. Edible. Heaths and hedgerows. Oct.—Dec. Uncommon. (v.v.)

(b) Ring fixed, homogeneous with the universal veil which clothes the st.; apex of st. without a cartilaginous collar; p. torn into scales, or flocii.

127. **L. acutesquamosa** (Weinm.) Fr. (= *Lepiota aspera* (Pers.) Quéél.)

Rolland, Champ. t. 13, no. 20. Acutus, sharp; squamosa, scaled.

P. 3–12 cm., pale ferruginous, covered with small, rigid, apiculate, fuscous, deciduous warts, which leave areolate scars, fleshy, hemispherical, then expanded, convex, very obtuse, tomentose. St. 7-5–10 × 1-2.5 cm., white, becoming ferruginous downwards with the fibrils and spirally arranged scales (the remains of the universal veil) attenuated upwards, base subbulbous. Ring white, becoming yellow, margin sprinkled with rust coloured warts on the underside, large, soft, pendulous from the apex of the stem. Gills white, free, very crowded, lanceolate, often branched. Flesh white, thick. Spores white, elliptical, or globose, $3-6 \times 3-4 \mu$. Cystidia "obovate-subrotund" Lange. Taste slightly bitter, smell strong. Woods, pastures, and bare soil. Sept.—Nov. Not uncommon. (v.v.)


Elias Fries, the prince of mycologists.

P. 9–10 cm., ferruginous fuscous, covered with adpressed, tomentose, reddish brown scales, very fleshy, campanulate, then convex, soft. St. 8–11 × 1.5–2 cm., concolorous, cylindrical, or subbulbous, scaly at the base. Ring white, superior, pendulous. Gills white, linear, free, often veined, branched. Flesh white, becoming yellowish, thick at the disc. Spores white, elliptical, $7 \times 3-4 \mu$, 1-guttulate. Cystidia "on edge of gill vesiculose, 15–18 × 10–13 \mu" Rick. Smell strong, taste unpleasant. On bare soil in gardens, and in oak and beech woods. Sept.—Oct. Uncommon. (v.v.)


P. 3–7 cm., fuscous umber, fleshy, soft, hemispherical, then expanded, umbonate, tomentose, then breaking up into thin, pointed, fugacious papillae, or scales. St. 7.5 × 5–1 cm., fuscous umber, attenuated upwards, densely floccosely scaly below the ring. Ring whitish, superior, membranaceous, reflexed, floccose. Gills white, remote from the stem, with a prominent collar encircling the stem, crowded,


Whole plant becoming saffron-red when touched or wounded, then finally blackish. P. 5–12 cm., greyish, campanulate, obtuse, at length expanded, often depressed and umbonate, hispid, with minute, velvety, fuliginous scales, but sometimes entirely fuliginous without any distinct scales. St. 5–18 cm. × 6–12 mm., white, silky, or floccoso-scaly, attenuated above, base bulbous. Ring white, firm, erect, and deflexed, more or less movable, often clothed with dingy granules on the outside. Gills white, remote from the stem. Flesh white, instantly becoming red when cut, and finally blackish. Spores white, elliptical, or pip-shaped, 6–7 × 3–4 μ, 1–2-guttulate. Smell rather disagreeable. Under oaks, Spanish chestnuts, yews, and in hedgerows. Sept.—Nov. Uncommon. (v.v.)


Meleagris, a guinea-fowl.

P. 2–5 cm., fawn colour, covered with minute blackish scales, fleshy, thin, ovate, or hemispherical, very obtuse, minutely tomentose and warty, then expanded, somewhat campanulate. St. 4–7·5 cm. × 5–8 mm., concolorous, here and there tinged with yellow, minutely squamulose below the ring, fusiform, or attenuated upwards from the bulbous base. Ring white, often covered with minute blackish scales on the outside, torn, very fugacious. Gills white, then rose colour, rarely lemon colour, becoming reddish by rubbing, remote from the stem and separated by a collar, rounded behind, sometimes connected, ventricose. Flesh turning red, as does the whole plant when dried. Spores “elliptical, 6–7 × 4 μ” Massee. Taste not disagreeable. Plantations, hedgerows, hot beds, and spent tan. May—Oct. Rare.


EMPLASTRON, a plaster.

P. 5–7·5 cm., pallid, covered with a smooth, membranaceous, dark brown cuticle, which becomes broken up into large, persistent patches, convex, then expanded, silky below the cuticle. St. 7·5 × 1–1·5 cm., pallid, equal, base slightly thickened, more or less striate. Ring whitish, externally brown at the margin, rather distant, erect. Gills whitish, remote from the stem, crowded, narrowed behind. Flesh white, becoming pink, or reddish when cut. Spores white, elliptical, obliquely apiculate, 18–20 × 10–12 μ. Under trees. Oct. Rare.

Bis ornata, doubly adorned.

P. 2.5–5 cm., white, or yellowish, sprinkled with scattered, minute, dark red scales, fleshy, convex, broadly campanulate. St. 10 cm. × 8 mm., whitish spotted with red, attenuated at the base, rooting. Ring white, spotted at the edge like the pileus, descending. Gills white, approximate, ventricose, 4 mm. broad. Flesh white, or yellow, reddish when dry. Melon, and cucumber frames. July. Rare.

134. L. clypeolaria (Bull.) Fr. (= Lepiota metulaespora B. & Br. of many British authors.) Cke. Illus. no. 28, t. 27, as Lepiota hispida Lasch.

Clypeus, a shield.

P. 3–7.5 cm., very variable in colour, at first covered with a yellow, or brownish, dense felt, which breaks up into floccose, torn patches, fleshy, campanulate, then convex, and flattened, disc gibbous; margin appendiculate with the remains of the ring. St. 6–8 cm. × 4–10 mm., concolorous, equal, or slightly thickened at the base, fragile, clothed with the same felt-like covering below the ring. Ring concolorous, floccose, fugacious. Gills white or becoming yellow, free, 6 mm. broad, soft, somewhat crowded. Flesh white, floccose. Spores white, fusiform, 14–15 × 6 μ, 1–many-guttulate. Smell and taste pleasant. Edible. Woods. Sept.—Oct. Not uncommon. (v.v.)

135. L. clypeolarioıdes Rea (= Lepiota clypeolaria Auct. plur. non Quël.) Cke. Illus. no. 29, t. 38, as Lepiota clypeolaria Bull.

Clypeolaria eîδος, resembling L. clypeolaria.

P. 3–5 cm., tan colour, covered with small, adpressed reddish brown scales and fibrils, fleshy, convex, obtusely umbonate, then plane and depressed. St. 7.5–10 cm. × 4–8 mm., concolorous, scaly below the ring, slightly attenuated upwards. Ring concolorous, narrow, distant. Gills white, becoming yellowish, free, crowded. Flesh white. Spores white, elliptical, 6–8 × 3–4 μ, or 8 × 5 μ, 1-guttulate. Woods, and hedgerows. Sept.—Nov. Uncommon. (v.v.)

136. L. pratensis (Fr.) Rea.

Pratensis, growing in meadows.

P. 2–5 cm., yellowish tawny, disc darker, margin paler, convex, then expanded, obtusely umbonate, almost smooth. St. 6–7 cm. × 6–10 mm., yellowish, densely clothed with erect, white flocci up to the ring. Ring white, floccose, somewhat fugacious. Gills white, free, attenuated at both ends, crowded. Flesh white, brownish under the epidermis and at the base of the stem. Spores white, fusiform, 12–14 × 4–5 μ, 1–2-guttulate. Smell and taste pleasant. Edible. Heaths, hillsides, and pastures. Aug.—Nov. Not uncommon. (v.v.)

P. 3–7 cm., whitish, becoming yellowish with age, fleshy, convex, then expanded, broadly umbonate, disc glabrous; margin fibrillosely flocculose, then squamulose. St. 4–6 cm. × 8–10 mm., white, somewhat fuscous at the base, equal, or attenuated downwards, white floccose and spotted below the ring, often forming a spurious second ring, finally becoming glabrous. Ring white, floccose and yellow on the outside, striate inside, distant, fugacious. Gills white, then ochraceous, free, crowded, 5–7 mm. broad. Flesh white, somewhat yellowish in the stem. Spores white, obovate-oblong, rounded at the one end, apiculate at the other, 11–14 × 6–7 μ, 1-guttulate. Edible. Heath, and hillsides. Sept.—Oct. Uncommon. (v.v.)


P. 2–3 cm., whitish, disc brown, becoming broken up into brownish or rufous squamules, convex, then plane, floccose; margin white, becoming torn. St. 3–4 cm. × 3–5 mm., whitish, becoming discoloured, equal, smooth. Ring white, with a few scattered brownish squamules, median, silky, floccose, fugacious. Gills white, free, crowded. Flesh white, thin, floccose. Spores white, pip-shaped, or elliptical with an oblique basal apiculus, 9–11 × 5–6 μ. Cystidia none. Under beeches. Sept.—Oct. Uncommon. (v.v.)


P. 3–5 cm., somewhat tawny, fleshy, convexo-campanulate, then expanded and subumbonate, covered with closely adpressed, darker squamules; margin thin. St. 3–6 cm. × 3–6 mm., concolorous, equal, or attenuated downwards, hollow, smooth. Ring whitish, inferior, fugacious. Gills pallid, then ochraceous, 4–6 mm. broad, free, rounded behind, crowded. Flesh whitish, watery. Spores white, oblong, angular, truncate at the base, acute, or acutely angular at the apex, 9–10 × 3·5–4 μ, 1–2-guttulate; basidia clavate, 4-sterigmata. Cystidia subglobose, or pyriform, 14–18 × 8–12 μ. Smell and taste none. Bare soil in woods. Sept.—Oct. Uncommon. (v.v.)

L. metulaespora B. & Br. The records of this as British are erroneous; they should be referred to Lepiota clypeolaria (Bull.) Fr. as defined above.


P. 1·5–3 cm., madder brown, somewhat fleshy, convex, then expanded, subumbonate, scaly. St. 2–4 cm. × 3–7 mm., concolorous, equal, fibrillosely-tomentose. Ring whitish, distant, fugacious. Gills
creamy white, free, crowded, 4–5 mm. wide, ventricose, edge fimbriate. Flesh white, becoming reddish when dry. Spores white, elliptical, or subreniform, 6–10 × 4–6μ, granular. Poisonous. Amongst short grass. Sept.—Oct. Rare. (v.v.)

141. **L. felina** (Pers.) Fr. Cke. Illus. no. 1108, t. 943, fig. A.

*Felina*, cat-like.

P. 2–3 cm., whitish, covered with concentric, small, blackish bistre scales, disc blackish, convex, subumbonate. St. 3–5 cm. × 4–5 mm., white, often sprinkled with blackish bistre scales near the base, equal, or subbulbous. Ring white, often sprinkled with blackish bistre scales, superior, membranaceous, fugacious. Gills white, or yellowish, free, ventricose. Flesh white, thin. Spores white, elliptical, 8–9 × 4μ, 1-guttulate. Cystidia “on edge of gill clavate-vesiculose, 33–36 × 8–10μ” Rick. Under conifers. Sept.—Oct. Not uncommon. (v.v.)

142. **L. micropholis** B. & Br. Cke. Illus. no. 1108, t. 943, fig. B.

*μυκρός*, small; *φολίς*, a scale.

P. 1–1·5 cm., white, covered with minute, concentric, dark grey, or blackish scales, conical, then plane; margin slightly striate. St. 2–2·5 cm. × 2 mm., white, curved, base minutely bulbous. Ring white, blackish on the under surface, distant, spreading. Gills white, free, 2 mm. broad, crowded, ventricose. Flesh white, very thin. Spores white, elliptical, 5–6 × 3–4μ, with a large central gutta. On coconut fibre in stoves, and on soil in pots. Aug. Rare. (v.v.)

143. **L. nigromarginata** Massee. *Niger*, black; *marginata*, margined.

P. 3–5 cm., pale sienna-ochre, covered with small, concentric, umber scales, campanulate, soon expanded, subumbonate. St. 5–6 cm. × 3 mm., buff, peronate below the ring, attenuated upwards. Ring white, membranaceous, distant, persistent. Gills whitish, edge bordered with dark umber, free, broader in front, narrow. Flesh whitish, thin. Spores white, elliptical, 6–7 × 4μ, 1-guttulate. Amongst grass. Rare.


*Cristata*, crested.

P. 2–7 cm., whitish, disc brown, covered with reddish brown scales, slightly fleshy, campanulate, then expanded, often umbonate, silky. St. 4–6 cm. × 3–8 mm., white, yellowish, or rufescent, equal, silky, fragile. Ring white, often tinged reddish, distant, membranaceous, narrow, fugacious. Gills white, free, very crowded, plane. Flesh white, often tinged reddish, thin. Spores white, elliptical, 6–8 × 3–4μ. Cystidia “on edge of gill bottle-shaped, 30–36 × 8–12μ” Rick. Smell strong, often of radish, taste unpleasant. Woods, pastures, and lawns. July—Nov. Common. (v.v.)
145. *L. castanea* Quél. Quél. As. Fr. (1880), t. 8, fig. 1.

κάστανος, the chestnut tree.

P. 1–3 cm., reddish brown, campanulate, often umbonate, tomentose, then shaggy. St. 3–4 cm. × 3–4 mm., white, becoming concolorous with the tawny fibrils, firm, base bulbous. Ring white, narrow, thin, membranaceous, silky, tawny on the outside, fugacious. Gills cream colour, often tinged reddish when old, free, ventricose. Flesh cream colour, becoming reddish in the stem and occasionally in the pileus. Spores white, oblong elliptical, or projectile-shaped, often with a spine-like appendage on the one side, 10–11 × 3.5–4.5 μ, 1–2-guttulate. Cystidia "hair-shaped, rather broad and obtuse" Lange. Smell pleasant. Poisonous. Woods, and roadsides. Sept. Uncommon. (v.v.)


Scobinella, fine sawdust.

P. 3–6 cm., mouse grey, disc darker, convex, then plane, umbonate, pellicle breaking up into minute, separable, bistre scales; margin whitish, smooth, silky. St. 4–6 cm. × 4–7 mm., white, stuffed, equal, slightly attenuated at the apex and base, covered with white squamules that become tinged with bistre below the ring, striate above. Ring whitish, becoming tinged with bistre at the edge, membranaceous, superior, often fugacious. Gills white, becoming yellowish, 3–4 mm. wide, ventricose, free, crowded. Flesh white, often tinged with fulvous at the base of the stem, thick at the disc, very thin at the margin of the pileus, floccose. Spores white, elliptical, 6–7 × 3–4 μ, contents granular. Cystidia hyaline, clavato-cylindrical, 28–30 × 6 μ, sparse. Woods and pastures. Sept.—Oct. Uncommon. (v.v.)


κίτρον, lemon; φύλλον, gill.

P. 1.5–2 cm., lemon yellow, covered with rufous scales, convex, then expanded, obtuse, or broadly umbonate, at length depressed. St. 2–4 cm. × 2–4 mm., lemon yellow, equal, squamulose. Ring fugacious. Gills lemon yellow, free, rounded behind, or attenuated, minutely serrate. Flesh white, thin. Spores white, elliptical, 7–8 × 4 μ. On the ground. Oct. Rare.

**P. not, or rarely squamulose, often granular, mealy or pruinose.**

(a) Ring superior, fixed, subpersistent; universal veil adnate to the p. Collar wanting, or similar in texture to the flesh of the p.

*L. Vittadinii* (Moretti) Fr. = *L. Amanita Vittadinii* (Moretti) Vitt.


P. 5–10 cm., white, often pinkish or yellowish, the thin cuticle breaking up into evanescent granules, fleshy, soft, globose, then ex-

var. leucotites (Vitt.) Fr. Vitt. Fung. Mang. t. 40. λευκός, white.

Differs from the type in the p. breaking up into squamules especially near the margin, and in the gills becoming pink with age. Spores white, elliptical, 7-8 × 5 μ, or 9 × 7 μ. Edible. Pastures and heaths. Sept.—Oct. Not uncommon. (v.v.)

149. L. holosericea Fr. Cke. Illus. no. 34, t. 41.

5Xος, wholly; σηρυκός, silky.

P. 5-10 cm., white, or yellowish, fleshy, soft, convex, then expanded, obtuse, fibrillose silky. St. 6-10 × 1-1.5 cm., whitish, soft, fragile, base bulbous, silky-fibrillose. Ring whitish, membranaceous, superior, large, soft, pendulous. Gills white, becoming cream colour, free, ventricose, broad, crowded. Flesh white, soft. Spores white, elliptical, 8-9 × 4-5 μ. Edible. Bare ground in arable fields, hopyards, and gardens. Sept.—Oct. Not uncommon. (v.v.)


Entirely white with the exception of the ochraceous disc of the p. P. 3-6 cm., campanulate, then flattened, slightly gibbous at the prominent disc, becoming fibrillose silky towards the margin. St. 5-7.5 cm. × 3-6 mm., equal, very fragile, silky. Ring membranaceous, distant, narrow, at length torn and fugacious. Gills sinuate, then free, somewhat crowded. Spores white, oblong elliptical, 9-11 × 3-4 μ. "Cystidia on edge of gill vesiculose-pyriform, 36-40 × 12-16 μ." Rick. Smell and taste of radish. Roadsides, and hilly pastures. Sept.—Nov. Uncommon. (v.v.)

151. L. constricta (Fr.) Quél. (= Armillaria constricta Fr.) Fr. Icon. t. 18. Constricta, compressed.

Entirely white, becoming ochraceous when bruised. P. 3-5 cm., fleshy, convex, then plane, obtuse, pruinose, then silky; margin at first involute, and villous. St. 4-5 cm. × 6-9 mm., equal, or thickened at the base, slightly rooting, fibrillose, or squamulose. Ring superior, narrow, adhering obliquely, at length fugacious. Gills emarginate, then free, very crowded, unequal. Flesh compact. Spores white, elliptical, granular, 7-8 × 4-5 μ. Smell of new meal. Pastures,
especially where the grass is scorched by urine, and amongst short grass under conifers. Aug.—Oct. Uncommon. (v.v.)

152. L. cepaeastipes (Sow.) Fr. (= Leucocephurus cepaeastipes (Sow.) Pat.) Gillet, Champ. Fr. t. 414. Cepa, onion; stipes, stem.

Caespitose. P. 2-5-6 cm., white, or yellowish, covered with floccose, fugacious, yellowish scales, disc deeper coloured, umbonate, membranaceous, obtusely conical, then campanulate; margin striate. St. 7-5-10 cm. × 5-8 mm., white, attenuated upwards from the bulbous base, covered with fugacious, delicate flocci. Ring white, narrow, membranaceous, separating-free, fugacious. Gills white, then flesh colour, free, at length remote, attenuated at both ends, 4 mm. broad, very crowded. Flesh white, then pinkish, thin. Spores white, elliptical, 6-7 × 4-5 μ, 1-guttulate, with an apical germ-pore. Taste bitter. On tan in hot-houses, greenhouses, and in frames. March—Oct. Not uncommon. (v.v.)


Cretacea, chalk-like.

Differs from the type in its chalk white colour and darker scales. Spores white, elliptical, 7-9 × 6-7 μ, 1-guttulate. Greenhouses, and on spent tan. May—Sept. Not uncommon. (v.v.)

153. L. lutea (Bolt.) Quél. (= Agaricus flos sulfuris Schnitz.) Boud. Icon. t. 19.

Lutea, yellow.

Entirely sulphur colour. P. 1-4 cm., campanulate, thin, deeply striate, covered with concolorous flocci. St. 5-12 cm. × 3-4 mm., covered with concolorous flocci, apex smooth, base bulbous. Ring membranaceous. Gills free, remote, narrow. Flesh concolorous. Spores white, oval, 8-10 × 5-7 μ, with a large central gutta. On coconut fibre in greenhouses. Jan.—Dec. Not uncommon. (v.v.)


Medius, middle; flava, yellow.

P. 2-3 cm., white, soon expanded, and depressed, umbo prominent, becoming light yellow, deeply striate, minutely tomentose. St. 4-7 cm. × 2-3 mm., white, minutely mealy above the ring, tomentose, often becoming light yellow at the bulbous base. Ring white, median, reflexed. Gills white, free, crowded, rounded behind. Flesh white. Spores white, ovate, obtuse, 5-6 × 3 μ, 1-guttulate. On decaying coconut fibre, and soil in greenhouses. June—Oct. Uncommon.

155. L. pseudo-licmophora Rea. (= Lepiota licmophora auct. non B. & Br. and Petch.)

ψευδός, false; λικμός, a winning fan; φέρω, I bear.

P. 2-5-5 cm., lemon-yellow, sometimes wholly sulphur-white, membranaceous, plane, depressed, deeply sulcate up to the central disc,
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glabrous; margin crenate. St. 7.5–10 cm. × 2–3 mm., lemon-yellow, attenuated upwards, base tomentose. Ring median. Gills lemon-yellow, remote, narrow, 2 mm. broad, slightly arched, distant, interstices veined. Spores white, elliptical, 9–10 × 5μ. In greenhouses. Aug.—Oct. Uncommon. (v.v.)

156. L. serena Fr. Cke. Illus. no. 57, t. 47, as Armillaria subcava Schum. fide Boudier. Serena, clear.

P. 2–4 cm., white, becoming yellowish with age, fragile, campanulate, thin, expanded, becoming silky, margin slightly striate. St. 4–7 cm. × 4–5 mm., white, becoming greyish, equal, base subulbous. Ring white, membranaceous, median, thin, narrow, erect, fugacious. Gills white, free, ventricose. Spores white, elliptical, 5–6 × 4μ, multiguttulate. Amongst grass, and larch needles. Sept.—Nov. Uncommon. (v.v.)

(b) Universal veil sheathing the st., at first extending continuously from the st. to the p., at length ruptured and forming an inferior ring. P. granular or warted, consisting chiefly of globose cells.

L. pyrenaea Quél. = Pholiota aurea (Mattusch) Fr. fide R. Maire.

157. L. granulosa (Batsch) Fr. Cke. Illus. no. 39, t. 18, upper figs. only.

Granulosa, granular.

P. 3–5 cm., ferruginous, or rusty-brown, becoming pale-hoary when dry, fleshy, convex then flattened, obtusely umbo nate, furfuraceo-granular, often wrinkled; margin appendiculate with the veil. St. 5–9 cm. × 4–9 mm., white at the apex, covered below with fine, brownish granules, equal. Ring concolorous, membranaceous, inferior, torn. Gills whitish, or cream colour, slightly adnexed, or sinuato-adnate. Flesh yellowish, becoming reddish in the lower portion of the st. Spores white, elliptical, 7–8 × 5μ. "Cystidia hair-shaped, acute, small, 2–3μ broad" Lange. Taste pleasant. Edible. Heaths, and hilly woods. July—Oct. Not uncommon. (v.v.)


Rufescens, becoming reddish.

Differs from the type in its smaller size, and the pure white p. and st. partially turning red with age or when bruised. Spores oval, 3–4 × 2μ. Amongst beech leaves. Sept.—Oct. Uncommon. (v.v.)

158. L. amianthina (Scop.) Fr. Cke. Illus. no. 40, t. 213, lower figs.

ἀμιάνθος, unsotted.

P. 3–5 cm., ochraceous, somewhat fleshy, convex, then plane, subumbonate, furfuraceo-granulose, often wrinkled. St. 3–5 cm. × 4–6 mm., whitish at the apex, covered with ochraceous granules below the ring, equal. Ring concolorous, granular on the outside, inferior,


Differs from the type in the delicately tomentose p., and inflexed margin. Woods. Rare.

var. alba René Maire. Alba, white.

Differs from the type in being entirely white. Woods. Oct. Rare. (v.v.)


P. 2.5–5 cm., bright tawny, somewhat hemispherical, pulverulent, roughened with minute warts. St. somewhat equal, often cylindrical, covered below the ring with furfuraceous scales of the same colour as the p. Ring at length torn into fragments. Gills white, remote, narrow, not branched. Spores white, elliptical, 5 × 4 μ. Sandy ground. Rare.

160. L. carcharias (Pers.) Fr. Cke. Illus. no. 37, t. 42. κάρχαρος, sharp-pointed.

P. 2–5 cm., flesh coloured, fleshy, convex, then plane, often umbonate, covered with minute granules. St. 3–6 cm. × 4–8 mm., concolorous, and covered with minute, pointed warts below the ring, apex white, subbulbous, or equal and attenuated upwards. Ring concolorous, covered on the outside with the same minute, pointed warts. Gills white, adnate. Flesh whitish, or ochraceous. Spores white, elliptical, obtuse, 4–5 × 2–3 μ, 1–3-guttulate. Taste disagreeable, smell unpleasant. Coniferous woods, and amongst short grass. May—Nov. Common. (v.v.)


P. 2–3.5 cm., bright rose colour, somewhat fleshy, convex, then expanded, densely granular, or mealy, consisting of globose cells, 45–50 μ in diam.; margin thin. St. 5–6 cm. × 3–5 mm., whitish, becoming

162. L. atrocreoa W. G. Sm.
Ater, black; crocea, saffron.

P. 3–4 cm., bright salmon orange, more or less covered with purple brown, almost black, granular floci, expanded, then slightly depressed. St. bright salmon orange, attenuated upwards, covered with salmon brown squamules. Ring fugacious. Gills salmon white, broadly adnate. Flesh salmon orange brown, thin. Oct. Rare.

163. L. haematosperma (Bull.) Boud. (= Leptiota echinata (Roth) Boud.) Boud. Icon. t. 12.

P. 2–3·5 cm., blackish grey, more or less olivaceous, convex, then plane, very thin, fragile, finely granular; margin paler, appendiculate with the veil. St. 3–6 cm. × 2–3 mm., dark, becoming vinous, equal, or slightly bulbous, base covered with pulverulent, fugacious granules. Ring reddish, floccose, granular on the outside, inferior, fugacious. Gills blood red, free, ventricose, rounded behind. Flesh whitish, becoming reddish under the epidermis and in the stem. Spores pale ochraceous in the mass, becoming reddish with age, elliptical, 4–5 × 3 μ. Cystidia none. Smell strong. Hedgerows, gardens, and occasionally in woods. July—Oct. Uncommon. (v.v.)


τολύς, many; στικτός, spotted.

P. 2–5 cm., ochraceous, covered on the obtusely unbonate disc with minute red brown scales from the breaking up of the cuticle, fleshy, firm, tough, convex, then expanded; margin often appendiculate with the veil. St. 3–5 cm. × 5–9 mm., white at the apex, densely clothed with reddish, ferruginous scales below the ring, equal, or attenuated downwards. Ring concolorous, very narrow, inferior, very fugacious. Gills white, then yellowish, free, rounded before and behind, broad, ventricose, crowded. Flesh, whitish, slightly reddish under the epidermis of the st. and p. Spores white, sub-globose, 4 × 3 μ, 1–4-guttulate. Open pastures, and amongst short grass in woods. Sept.—Nov. Uncommon. (v.v.)

(c) Smaller, slender. P. dry, cuticle entire, not scaly nor granular.

165. L. parvannulata (Lasch) Fr. Fr. Icon. t. 16, fig. 3.

Parvus, small; annulata, ringed.

P. 1–2 cm., white, becoming yellowish when dry, thin, ovato-campanulate, then plane, pruinose, then silky. St. 1–2 cm. × 2–3 mm.,

166. L. sistrata Fr. Cke. Illus. no. 42, t. 85, fig. A.
Sistrum, a rattle.

P. 1–2 cm., whitish, becoming light yellowish, or flesh colour, disc often darker, slightly fleshy, campanulate, then expanded and obsolescently umbonate, pruinose with shining atoms, margin often appendiculate with the veil. St. 2·5–5 cm. × 1–4 mm., white, or flesh colour, equal, fibrillose silky and pruinose below the ring. Ring concolorous, fibrillose, fugacious. Gills white, free, reaching the stem, crowded, 4 mm. broad, ventricose. Flesh white, often pinkish in the stem, fragile. Spores white, elliptical, 3–4 × 1·5–2μ. On bare ground in woods, and by roadsides. Sept.—Nov. Not uncommon. (v.v.)

167. L. seminuda (Lasch) Fr. Cke. Illus. no. 43, t. 19, fig. a.
Semi, half; nuda, naked.

P. 1–2 cm., whitish, or flesh colour, becoming yellowish, very thin, campanulato-expanded, umbonate, at first covered with fugacious, floccose meal, margin appendiculate with the veil. St. 2–3 cm. × 1–2 mm., whitish, or flesh colour, equal, mealy below the ring. Ring concolorous, mealy, torn, fugacious. Gills white, then cream colour, free, but reaching the st., thin, crowded, ventricose. Flesh white, often pinkish in the st. Spores white, elliptical, 4 × 2μ. Smell pleasant. Amongst moss in woods. Aug.—Oct. Uncommon. (v.v.)

Cedric Bucknell.

P. 1·5–3 cm., white, fleshy, campanulate, then convex, minutely mealy, and becoming tinged with lilac. St. 5–7 cm. × 3–5 mm., white, gradually attenuated upwards, densely mealy, and becoming deep lilac below the ring with age or bruising. Ring concolorous, mealy, fugacious. Gills yellowish, free, not crowded. Flesh white, becoming deep lilac in the lower two-thirds of the st. Spores white, boat-shaped, 7–8 × 3μ, 3-guttulate. Smell strong of gas-tar. Amongst grass. Oct. Rare. (v.v.)

169. L. mesomorpha (Bull.) Fr. μέσος, middle; μορφή, form.

P. 1·5–2·5 cm., whitish, or yellowish flesh colour, umbo deeper coloured, slightly fleshy, very thin, campanulate, then expanded, at first pubescent, then becoming smooth, or minutely granular. St. 5–7·5 cm.
79

× 2 mm., concolorous, slightly attenuated upwards, silky. Ring mem-
bbranaceous, floccose, superior, entire, spreading, fugacious. Gills
whitish, or cream colour, free, crowded, ventricose. Flesh white, thin.
Spores white, elliptical, 6–8 × 3–4 μ, guttulate. Woods. Sept.—Nov.
Uncommon.

170. L. ianthina Cke. Cke. Illus. no. 1112, t. 944, fig. A.

iānθīνα, coloured violet.

P. 2 cm., whitish, covered with violet, radiating, hair-like squamules,
umbonate disc dark violet, fibrillose, thin, campanulate, then expanded.
St. 2–3 cm. × 2–3 mm., whitish, subequal, somewhat flexuose. Ring
distant, narrow, fugacious. Gills whitish, free, 2 mm. broad, lanceo-
late, scarcely crowded. Flesh white, thin. Stoves. March. Rare.

171. L. martialis Cke. & Massee. Cke. Illus. no. 1112, t. 944, fig. B.

Martialis, belonging to Mars.

P. 2–3 cm., clear deep pink, disc darker, becoming yellowish with age,
thin, campanulate, then plane, minutely silky; margin striate. St.
2.5-4 cm. × 3 mm., pale ochraceous at the apex, pinkish red below the
ring, slightly attenuated upwards. Ring white, broad, pendulous,
rather distant, persistent. Gills whitish, free, 2 mm. broad, somewhat
lanceolate, rather crowded. Flesh white, thin. Spores white, elliptical,
8 × 4 μ. On the trunk of a tree fern. March. Rare.

172. L. submarasmioides Speg.

Sub, somewhat; Marasmius εἴδος, like a Marasmius.

P. 2–5 cm., pale buff, umbo tawny, convex, then expanded, floccosely
wrinkled towards the margin. St. 5 cm. × 3 mm., white, equal, slightly
striate. Ring whitish, superior, fugacious. Gills ochraceous, free,
3 mm. wide, rounded at both ends, crowded. Flesh white, reddish
under the epidermis of the p. and in the st., tough. Spores pale ochrace-
ous, deltoid, or pyramidal, 5–6 × 3 μ. On bare ground, Malvern Hills.
Sept. Rare. (v.v.)

B. EPIDERMIS VISCID.


P. 4–7 cm., white, often greyish at the disc, slightly fleshy, convexo-
plane, umbonate, viscid; margin appendiculate with the veil. St.
7.5 cm. × 6 mm., white, dry, equal, silky and squamulose below the
ring, apex striate, stuffed with a distinct separable pith. Ring white,
incomplete, torn. Gills white, free, broader in front, ventricose, crowded.
Flesh white, soft, watery. Smell strong of radish. Coniferous woods.
Aug.—Oct. Uncommon. (v.v.)
174. **L. arida** (Fr.) Gillet. (= *Amanita arida* Fr.) Fr. Icon. t. 12, as *Amanita arida* Fr.

P. 5–7 cm., greyish, thin, convex, then plane, obtuse, silky; margin whitish, sulcato-striate. St. 6–9 × 1 cm., white, glabrous, floccose at the incrassated base. Ring concolorous, distant. Gills white, then flesh colour, attenuato-adnate. Flesh white, soft. Spores white, elliptical, 9–10 × 7–7.5 μ. Birch and fir woods. Sept.—Oct. Uncommon.

175. **L. lenticularis** (Lasch) Cke. (= *Amanita lenticularis* (Lasch) Fr., *Lepiota guttata* (Pers.) Quél.) Fr. Icon. t. 13, as *Amanita lenticularis* Lasch.

**Lenticula**, a lentil.

P. 4–10 cm., pinkish tan colour, fleshy, globose, then campanulato-convex; margin paler, slightly glutinous. St. 8–10 × 1–2 cm., white, or cream colour, apex marked with dark green, watery drops in very wet weather, which on drying become dingy, equal, or subbulbous, floccose, or smooth below the ring. Ring concolorous, often spotted like the apex of the stem, large, superior. Gills whitish, sometimes inclining to olivaceous, free, approximate, ventricose, broader in front, very crowded, sometimes forked. Flesh white, reddish at the base of the st. Spores white, pip-shaped, or elliptical, 7–8 × 4–5 μ. Smell mouldy. Edible. Deciduous woods, and heaths. Sept.—Oct. Not uncommon. (v.v.)

var. **megaldactylus** (B. & Br.) Rea. Cke. Illus. no. 15, t. 11, as *Amanita megaldactylus* B. μέγας, large; δάκτυλος, finger.


**Irrorata**, bedewed.

P. 2.5–5 cm., yellowish, then straw colour, firm, convex, covered like the stem with dew-like transparent drops. St. 3–4 cm. × 7–10 mm., white, satiny above the ring, silky and variegated with small yellow, or brownish squamules below, equal. Ring concolorous, membranaceous, narrow. Gills white, then cream colour, free, emarginate, 4 mm. wide, ventricose. Flesh white. Spores white, ovoid, 4–5 × 4 μ, punctate. Pastures, and clearings in woods. June—Oct. Uncommon. (v.v.)

177. **L. illinita** Fr. Fr. Icon. t. 16.

**Illinitus**, besmeared.

P. 4–9 cm., white, or yellowish, fleshy, globose, then convex, umbo-nate, umbo often becoming fuscos, viscid; margin slightly striate, sometimes fimbriate. St. 5–8 × .5–1 cm., white, very viscid, equal, or subbulbous, fragile. Ring white, membranaceous, thin. Gills white, free, at length remote, crowded, soft, somewhat connected by veins. Flesh white, floccose, thin. Spores white, broadly elliptical, or sub-globose, 6 × 4–5 μ, 1–2-guttulate. Smell pleasant. Plantations. Aug.—Sept. Rare. (v.v.)
178. *L. glioderma* Fr. (= *Armillaria glioderma* (Fr.) Quél.) Fr. Icon. 

\[\gamma\lambdaοιόν, \ \text{viscid}; \ \delta\varepsilonρ\muα, \ \text{skin}.\]

P. 4 cm., brownish red, slightly fleshy, campanulate, then convex, broadly gibbous, or obtuse, glutinous. St. 7-5 cm. \(\times\) 4-6 mm., whitish, or rufescent, equal, fragile, dry, floccosely scaly up to the ring. Ring white above, rufescent squamulose on the outside, fibrillose, silky, torn. Gills white, or cream colour, free, approximate, ventricose, broad, crowded. Flesh white, then pinkish, soft, thin. Spores white, subglobose, 5\(\mu\). Fir woods. July—Oct. Uncommon. (v.v.)

*L. delicata* Fr. = *Armillaria delicata* (Fr.) Boud.


Miss Georgina E. Johnstone.

Entirely white, turning crimson everywhere when touched, and finally becoming brown when dry. P. 1–3 cm., slightly fleshy, fragile, campanulate, then expanded, covered with a minute, dense, viscid pruinosity; margin at length striate. St. 2-5–5 cm. \(\times\) 3-4 mm., slightly attenuated upwards, viscido-pruinose. Ring fugacious. Gills free, very thin, moderately distant, somewhat ventricose, 3 mm. broad. Spores pinkish in the mass, pip-shaped, 6–8 \(\times\) 4\(\mu\), 1- rarely 2-guttulate. Pine woods and amongst mosses in a cool fernery. May—Nov. Rare. (v.v.)

**Hiatula** Fr.

*(Hio, I gape.)*

Pileus slightly fleshy at the disc, campanulate. Stem central. Ring very fugacious, not manifest in the adult stage. Gills free, or adnate. Spores white, subglobose, smooth, with a germ-pore. Growing on wood.


Mrs Lloyd Wynne.

Entirely shining white. P. 3–4 cm., very thin, campanulate, then plane, with a trace of an umbo, striate, pulverulent, disc darker. St. 2-5 cm. \(\times\) 1–2 mm., equal, striate. Gills free, or very slightly adnexed at first, subdistant, 2 mm. broad, scarious. Spores white, subglobose, 5 \(\times\) 4\(\mu\), with a germ-pore. On wood in stoves. Phosphorescent. A native of Queensland.

Spores pink.

**Annularia** Schulz.

*(Annularia, pertaining to a signet-ring.)*

Pileus fleshy, regular. Stem central. Ring large, free, or adnate. Gills free. Spores pink, globose, or oval, smooth, continuous. Cystidia ventricose. Growing on the ground, or on wood.
181. *A. laevis* (Krombh.) Schulz. (= *Leiota pudica* (Bull.) Quél.)

Krombh. Icon. t. 26, figs. 16 and 17, as *Agaricus laevis* Krombh

*Laevis*, smooth.


182. *A. transilvanica* Schulz.

*Transilvanica*, belonging to Transylvania.

P. *whitish*, disc *darker*, campanulate, striate to the vertex; margin lobed. St. *paler than the p.*, flocculose, hollow. Ring membranaceous, complete. Gills crowded, unequal.

Spores purple, or fuscous.

**Psaliota Fr.**

(ψάλιων, a ring.)

Pileus more or less fleshy, regular. Stem central. Ring membranaceous, adnate, persistent, rarely fugacious. Gills free. Spores fuscous purple, reddish purple, blackish purple, or fuscous, elliptical, oval, globose, or obovate, with an apical germ-pore. Cystidia present, or absent. Growing on the ground.

*Large, fleshy.*


Fung. Trid. t. 60, as *Psalliota villatica* Brond.

*Augusta*, majestic.

P. 10–30 cm., *whitish*, *fuscous citron*, or *dark straw colour*, fleshy, globose-hemispherical, then expanded, very obtuse, silky, *soon breaking up into adpressed squamules*; margin exceeding the gills, tomentosely toothed. St. 6–20 × 1.5–5 cm., *white*, becoming *yellowish when bruised*, then *brownish*, very firm, attenuated upwards from the base which is sunk in the earth, smooth, flocculose just under the ring. Ring *white* and smooth above, *yellowish* and areolately floccose on the under side, very wide, adnate to the st. for 2–3 cm., then free and pendulous. Gills *pallid*, then *fuscous*, free, separated from the st. by a *broad collar*, narrow at first, becoming wider, simple, thin, crowded. Flesh *whitish*, becoming *yellowish* or *brownish* in the st. when broken, soft, floccose like that of *Leiota procera*. Spores brownish purple,

184. **P. peronata** Masssee non Roz. et Rich. (= *Psaliota augusta* Fr. sec. René Maire.)

P. 10–12.5 cm., pale dull ochraceous, densely covered with small, brown, silky scales, that become larger towards the margin, fleshy, hemispherical, then expanded. St. 12.5–15 × 1.5 cm., white, equal, marginately bulbous at the base, covered with large, white, upward pointing, squarrose scales below the ring, smooth above the ring. Ring yellowish, large, spreading. Gills pink, then pale purple brown, very distant from the st., 6–7 mm. broad, crowded. Flesh white, becoming brownish in the st. when cut. Spores purple-brown, obliquely elliptical, 6 × 4μ. Taste pleasant. Edible. Pine woods. Oct. Rare.


*Elvensis*, belonging to the river Elwy.

P. 8–15 cm., purplish brown, fleshy, subglobose, then hemispherical, at length often flattened and slightly depressed at the areolate disc, fibrillose, breaking up into large, persistent, floccose, pointed, somewhat revolute darker scales; margin very obtuse, thick, covered with pyramidal warts. St. 7–15 × 2.5–5 cm., concolorous and fibrillose below the ring, apex paler, equal, becoming swollen in the centre, and attenuated at the base. Ring concolorous, membranaceous, thick, deflexed, broken here and there, more or less floccose at the margin and on the underside which is often areolate. Gills brownish flesh colour, then brownish purple, free, 6–8 mm. broad. Flesh turning red when cut, then becoming brownish, thick, firm. Spores brownish purple, globose, or subglobose, 6 × 4–5μ, with a large central gutta. Smell and taste pleasant. Edible. Often caespitose. Under oaks, beeches, firs, and on roadsides. Aug.—Oct. Uncommon. (v.v.)


G. Bernard.

P. 10–20 cm., white, then becoming ferruginous at the apex of the warts, fleshy, convex, then expanded, firm, the tomentose surface soon breaking up into thick, angular warts. St. 6–7 × 4–5 cm., white, becoming reddish brown with age, attenuated upwards from the bulbous base, apex striate. Ring white, membranaceous, soon disappearing, striate on the upper surface. Gills greyish flesh colour, then blackish purple, free, attenuated at both ends, 8–12 mm. broad. Flesh white, then tinged with purple, and finally stained with reddish brown, firm. Spores blackish purple, ovoid elliptical, 9–11 × 6–7μ, 1-guttulate, with an apical germ-pore. Smell unpleasant. Taste disagreeable. Pastures near the sea. Sept.—Oct. Uncommon. (v.v.)
187. *P. arvensis* (Schaeff.) Fr. Rolland, Champ. t. 71, no. 159.

*Arvensis*, belonging to cultivated fields.

*P. arvensis* 7–20 cm., whitish, becoming stained with yellow, fleshy, globosocampanulate, then flattened, obtuse, flocculoso-mealy when young, then slightly silky even or squamulose, dry. St. 7–12 × 2.5–3 cm., white, often stained with yellow, thickened at the base, obsoletely marginato-bulbous when young, villose. Ring white, superior, large, pendulous, formed as if were of two growing together, the interior one membraneous, uniform, the exterior one thicker and shorter, somewhat free at the circumference, often appendiculate at the margin of the p., radiately split. Gills white, at length reddish fuscous, free, approximate, ventricose, broader in front, always arid. Flesh white, or tinged with yellow, compact, firm, juicy, at length softer. Spores brownish purple, elliptical, 8–10 × 5–6 μ. Smell pleasant, often like new meal. Taste mild. Edible. Often forming large rings. Pastures, and woods. May—Dec. Common. (v.v.)

var. **purpurascens** Cke. Cke. Illus. no. 541, t. 584.

*Purpurascens*, becoming purple.


var. **albosquamosa** W. G. Sm. Field and cultivated mushrooms, fig. 8.

*Albus*, white; *squamosa*, scaly.

Differs from the type in the snow-white patches on the fawn-coloured p.—the remains of the universal veil. Artificially made mushroom beds. Not uncommon.

var. **vaporaria** (Otto) W. G. Sm. (= *Psaliota campestris* (Linn.) Fr. var. **vaporaria** (Otto) Fr.) *Vaporaria*, of hothouses.

Differs from the type in the smooth, pilose brown p., and the white st., reddish at the apex, and brownish, or reddish at the base. A cultivated form in mushroom beds. Common. (v.v.)

var. **hortensis** (Cke.) W. G. Sm. (= *Psaliota campestris* (Linn.) Fr. var. **hortensis** Cke.) Cke. Illus. no. 545, t. 527, as *Psaliota campestris* Linn. var. **hortensis**. *Hortensis*, of gardens.

Differs from the type in the fibrillose, or squamulose brownish p. Artificially made mushroom beds. Common. (v.v.)

var. **Buchananii** (Berk.) W. G. Sm. (= *Psaliota campestris* (Linn.) Fr. var. **Buchananii** Berk.) Field and cultivated mushrooms, fig. 10. *Buchanan, a gardener.*

Differs from the type in the white, opaque, nearly smooth, depressed p. Artificially made mushroom beds.
var. *cryptarum* (Letell.) W. G. Sm. (= *Psaliota campestris* (Linn.) Fr. var. *cryptarum* (Letell.) Fr.)  

cryptarum, a cave.

Differs from the type in the greyish white, or brownish white p. A cultivated form in caves.

var. *intermedia* W. G. Sm.  
intermedia, intermediate.

Differs from the type in the pale, livid brassy-yellow p., with small rusty-yellowish spots at the middle, in the very short, obese, dull whitish, stained pale rusty st., and in the white flesh, becoming pale vinous-brown. Amongst rank grass in fields, often near trees.

var. *epileata* W. G. Sm.  
epileata, without; pileatus, having a cap.

Differs from the type in the almost or quite obsolete p. and in the white, ringless st. inflated below. It is really an aborted form and unworthy of a varietal name. Artificially prepared mushroom beds. Common. (v.v.)

var. *obesa* W. G. Sm.  
obesa, stout.

Differs from the type in the ventricose st. equalling, or exceeding the width of the p., in the very narrow gills, and in the white flesh sometimes changing to deep mahogany brown. This is a monstrous form and unworthy of a varietal name. Artificially prepared mushroom beds. Often common. (v.v.)

188. *P. xanthoderma* Genev. (= *Pratella cretacea* Quél. sec. Maire.)  

Roze et Richon, t. 17, figs. 5–8.  

canthos, yellow; dépou, skin.

P. 8–12 cm., white, then somewhat tawny, becoming stained with yellow, especially when touched or rubbed, fleshy, campanulate, then convex, at length expanded, silky. St. 8–12 × 2–3 cm., white, becoming yellow where touched or bruised, attenuated at the apex, more or less bulbous at the base, silky. Ring white, often stained with yellow at the margin. Gills white, then pink, cinereous, violet, or brownish, free, crowded. Flesh white, becoming yellow especially at the base of the st., and under the cuticle of the p. and st. Spores brownish purple, pip-shaped, 6 × 4 μ. Smell and taste unpleasant, almost foetid. Poisonous for some persons. Woods, pastures, and hedgerows. July—Nov. Not uncommon. (v.v.)

var. *lepiotoides* René Maire.  
lepiotoides, the genus Lepiota; ειδος, like.

Differs from the type in the p. greyish white at first, then covered with greyish brown squamules, larger and denser at the disc, separated by
whitish cracks, and finally becoming tinged with reddish purple. Pastures, and stoves. Feb.—Oct. Rare.


*Flavescens*, becoming yellow.

P. 5–12 cm., white, at once turning saffron colour, then finally light brown when touched or bruised, campanulate, then expanded, smooth, dry, shining with a satiny-like sheen, pellicle easily separable. St. 10–14 × 1.5–2 cm., white, with a satiny sheen, tinged reddish yellow at the base on one side, cylindrical. Ring dirty white, yellow on the outside, and more deeply coloured at the margin, membranaceous, soon disappearing. Gills pale pink, then darker, and finally brownish, free, crowded. Flesh white, turning instantly bright saffron yellow when fresh, and reddish yellow when drier, especially near the cuticle of the p. and at the base of the st. Spores reddish brown, oval, 5–6 × 4–5 μ, 1-guttulate, with an apical germ-pore. Smell none. Taste not disagreeable. Poisonous for some persons. Solitary, or in rings. Pastures, and fir woods. July—Nov. Not uncommon. (v.v.)

*P. cretacea* Fr. = *Leptota naucina* Fr.


P. 6–14 cm., yellow, covered with dense, imbricate, Leptota-like, fulvous scales, fleshy, campanulate, then expanded. St. 9–11 × 1.5–3 cm., whitish, covered below the ring with evanescent, fulvous scales, incrassated at the base. Ring white, becoming discoloured, squamosely floccose on the under side, large, superior, reflexed. Gills white, then rosy, and at length fuscous, free, often very remote, equally attenuated at both ends, 5 mm. broad, crowded. Flesh white, becoming yellowish in the st. when broken, soft. Spores purplish fuscous, obovate, 7–9 × 4–5 μ, 1-guttulate. Oak woods, and under oaks. Aug.—Oct. Uncommon. (v.v.)


192. **P. campestris** (Linn.) Fr. *Campestris*, belonging to a plain.  

P. 5–12 cm., *white*, or *rufescent*, fleshy, lens-shaped-convex, then flattened, obtuse, dry, *silky-even*, or *squamulose*. St. 4–8 × 2–4 cm., *white*, firm, bulbous when young, then somewhat equal, even, or squamulose. Ring *white*, membranaceous, rarely in the form of a cortina, median, or more strictly sheathed to the middle, spreading, or reflexed, torn, often fugacious. Gills *whitish*, then *soon flesh coloured*, and at length *umber-fuscous*, free, approximate, ventricose, *equally attenuated at both ends*, crowded, often deliquescent. Flesh *white*, becoming *reddish*, or sometimes *fuscous*, thick, soft. Spores brownish purple, *broadly elliptical*, 6–7 × 5–5.5 μ. Smell and taste pleasant. Edible. Pastures, and heaths, rarely in woods. May—Dec. Common. *(v.v.)*  

**var. alba** Viv. Berk. Outl. t. 10, fig. 2.  

*Alba*, white.  

Differs from the type in the *white, silky pileus and short st*. Hardly worthy of a varietal name. Generally found along with the type. *(v.v.)*  

**var. praticola** (Vitt.) Fr. Vitt. t. 7. *Praticola*, living in meadows.  

Differs from the type in the *rufous-scuty p.*, and in the *flesh becoming immediately rufescent*.  

**var. subvolvacea** W. G. Sm. Field and cultivated mushrooms, fig. 13.  

*Sub*, somewhat; *volvacea*, having a volva.  

Differs from the type in the *pale brown p. breaking up into dark umber scales*, and in the *long pale brownish st. furnished with a thin brown volva at the base*. Fields, and artificially made mushroom beds.  

**var. rufescens** Berk. Berk. Outl. t. 10, fig. 3.  

*Rufescens*, becoming reddish.  

Differs from the type in the *rufous, minutely squamulose p.*, the *elongated st.*, and in the *bright rose, sometimes crimson flesh when cut*.  

**var. umbrina** (Vitt.) Fr. Vitt. t. 8.  

*Umbrina*, umber.  

Differs from the type in the *umber p. becoming even*, and in the *stout, squamulose st.*  

**var. fulvaster** Viv. Viv. t. 45, upper fig.  

*Fulvaster*, yellowish.  

Differs from the type in the *ochraceous tawny p.*, and in the *rose coloured gills becoming blackish*.  

**var. costata** (Viv.) Fr. Cke. Illus. no. 546, t. 528, fig. A.  

*Costata*, ribbed.  

Differs from the type in the *sulcate, repand p*. Woods. Rare.
var. **elongata** Berk. Field and cultivated mushrooms, fig. 3.

_Elongata_, elongated.

Differs from the type in the even, shining white p., in the margin permanently appendiculate with the veil, and in the long, bulbous st. Scarcely worthy of a varietal name. Pastures under trees. Uncommon. (v.v.)

var. **exannulata** Cke. Cke. Illus. no. 546, t. 528, fig. B.

_Exannulata_, without a ring.

Differs from the type in the evanescent, or obsolete ring. Scarcely worthy of a varietal name. Pastures. Occasionally. (v.v.)

193. **P. sylvicola** (Vitt.) Fr. Cke. Illus. no. 547, t. 529, as _Psaliota campestris_ Linn. var. _sylvicola_ Vitt.

_Sylvicola_, inhabiting woods.

P. 7–11 cm., white, or yellowish, fleshy, globose, then convexo-expanded, silky, becoming even, shining; margin often appendiculate with the partial veil. St. 10–15 × 1–1.5 cm., concolorous, slightly attenuated upwards from the subbulbous base, smooth. Ring concolorous, membranaceous, large, reflexed. Gills whitish, then slowly becoming fuscous, free, acute behind. Flesh whitish, at length becoming brownish, thin at the margin. Smell and taste pleasant. Edible. Woods and shrubberies. Aug.—Nov. Common. (v.v.)


_Exserta_, thrust out.

P. 6–18 cm., white, becoming yellowish ochraceous and broken up into minute adpressed scales, fleshy, campanulate, then convexo-expanded. St. 10–15 × 3–6 cm., white, either slightly attenuated upwards from the base, or ventricose at the middle, bleeding when cut or wounded, almost smooth. Ring white, covered on the underside with yellowish, fugacious warts, membranaceous, large, thick, double, made up of two layers that split apart. Gills whitish, then pinkish, and finally fuscous, free, 5–10 mm. broad, somewhat crowded. Flesh white, immediately turning bright red when bruised, cut, or wounded, and exuding a bright red juice which finally stains the part affected deep brown. Spores deep ochre when deposited in the mass, subglobose, 5–6 × 4–5 μ, 1-guttulate, with an apical germ-pore. Smell and taste pleasant. Edible. Solitary, or in rings. Pastures. May—Nov. Uncommon. (v.v.)

195. **P. villatica** (Brond.) Magn. Cke. Illus. no. 538, t. 521, as _Psaliota augusta_ Fr.

_Villa_, a country house.

P. 10–40 cm., pale brown, sometimes with a yellowish tinge, fleshy, globose, then expanded, very obtuse, disc even, minutely fibrillose,
adpressedly silky, squamose towards the paler margin, the scales appearing as if they had been pressed down with a hot iron. St. 10–20 × 3–5 cm., white, becoming tinged with brown especially at the base, slightly attenuated upwards from the incrassated base, becoming smooth. Ring white above, yellowish and floccosely scaly on the under side, membranaceous, soft, median, thick, reflexed. Gills pallid, then fuscous cinereous, free, attenuated behind, 10–15 mm. broad, crowded. Flesh white, becoming reddish brown when cut, especially under the cuticle of the pileus and at the base of the st., compact, thick at the disc, thin at the margin. Spores rich brown, elliptical, 7–9 × 5–6μ, with an apical germ-pore. Smell unpleasant. Taste mild. Edible. Pastures and gardens. July—Oct. Uncommon. (v.v.)


Sylvatica, of woods.

P. 7-5–11 cm., subferruginous, scales rufescent, or becoming fuscous, fleshy, oval, then campanulate and flattened, often somewhat umbo- nate, the whole surface floccose, torn into squamules, disc often remaining continuous, and at length denuded of scales; margin often rimosely incised. St. 6–9 × 1–1.5 cm., dingy white, at first stuffed with a cylindrical, separate, white pith, equal, or bulbous at the base, the bulb sometimes marginate, fibrillose below the ring, smooth above. Ring white, distant, floccose on the underside, sometimes wide, thin and membranaceous, sometimes narrow, incomplete, fugacious. Gills white, then reddish, at length cinnamon fuscous, or umber fuscous, free, ventricose, equally attenuated at both ends, thin, arid, crowded. Flesh white, generally rufescent, often yellowish at the apex of the st., thin, fragile. Spores tawny flesh colour, elliptical, 6–7 × 3.5–4μ. Smell pleasant, or strong. Taste mild. Edible. Woods, and under cedars. July—Sept. Not uncommon.

197. P. haemorrhoidaria Kalchbr. (= Pratella sylvatica Schaeff. sec. Quél.) Kalchbr. Icon. t. 18, fig. 1. αιμορροΐδες, hemorrhoids.

P. 5–12.5 cm., rufous fuscous, or brownish, fleshy, ovate, then expanded, covered with broad, adpressed, darker scales; margin at first incurved. St. 8–12 × 2–3 cm., white, becoming blood red when bruised, equal, often more or less bulbous at the base, silky, fibrillose. Ring white, becoming discoloured, large, persistent, superior, membranaceous. Gills rosy flesh colour, then purple umber, free, approximate, 6–12 mm. broad, crowded. Flesh white, immediately turning blood red when broken, thick. Spores purple-brown, elliptical, 6–7 × 3.5–4μ. Smell and taste pleasant. Edible. Woods, especially coniferous woods, pastures, and under conifers. Aug.—Jan. Common. (v.v.)
198. *P. setigera* Fr.\(^1\) (= *Pratella sylvatica* Schaeff. sec. Quél.) Paul. t. 132, figs. 3–4.  
Setigera, having coarse hairs.  
P. pale umber, fleshy, convex, then plane, obtuse, smooth, silky. St. covered with pale umber, pilose squamules, equal. Ring thin, fugacious. Gills fuscous umber, free. Woods.  
199. *P. rubella* (Gillet) Rea (= *Pratella sylvatica* Schaeff. sec. Quél.) Gill. Hym. Fr. t. 102, as *Pratella rubella* Gillet.  
**Rubella**, reddish.  
P. 4–8 cm., entirely covered with red fibrils, or scales, disc red brown, paler towards the margin, convex, or obtusely umbonate. St. 5 cm., white, or whitish, becoming stained with blood red like the p., slightly subbulbous at the base, cartilaginous, fibrillose. Ring fugacious. Gills rosy flesh colour, then brownish purple, free, slightly ventricose, crowded. Flesh white, becoming blood red, firm. Spores “4·75–6 × 3–4, generally 5 × 3·5” Sacc. Under conifers. Sept.—Oct. Rare.  
**Smaller, p. thinly fleshy.**  
200. *P. comtula* Fr. Fr. Icon. t. 130, fig. 1.  
Comtula, adorned.  
P. 3–5 cm., yellowish white, disc often tawny, fleshy, convex, then plane, obtuse, adpressedly fibrillosely silky. St. 3–5 cm. × 4–6 mm., white, becoming somewhat light yellow, somewhat attenuated at the base, apex striate, satiny. Ring concolorous, membranaceous, median, torn, fugacious, very thin. Gills flesh colour, then rose, and finally fuscous flesh colour, free, rounded behind, broader in front, crowded. Flesh white, or slightly yellowish, thin, soft. Spores purple fuscous, elliptical, 5 × 3μ, 1-guttulate. Smell and taste strong of anise. Edible. Woods, heaths and pastures. May—Oct. Common. (v.v.)  
Amethystina, amethyst colour.  
P. 3–5 cm., white, becoming either rose, lilac, or amethyst coloured from the centre outwards, fleshy, convex, then expanded, umbonate, villose, or fibrillose. St. 3–6 cm. × 5–10 mm., white, subbulbous at the base, fragile, glabrous. Ring white, thin, satiny. Gills light grey, then bay brown, free, ventricose, 6–7 mm. broad, crowded. Flesh white, thin. Spores brownish purple, roundish oblong, 5–7 × 4μ, 1–2-guttulate. Smell like that of *Psaliota sylvicola*. Taste pleasant. Edible. Woods, and pastures. Aug.—Oct. Uncommon. (v.v.)  
202. *P. subgibbosa* Fr.  
Sub, somewhat; gibbosa, humpbacked.  
P. 2–2·5 cm., yellowish, fleshy, convexo-plane, subumbonate, smooth; margin silky fibrillose. St. 2·5 cm. × 2–4 mm., pallid. Ring cortinate, fugacious. Gills white, then cinereous fuscous, free, remote. Spores fuscous. Fir woods. Rare.  

\(^1\) This is listed as British by Massee in his Eur. Fung. Fl. Agar. 207.
203. **P. sagata** Fr. Cke. Illus. no. 1177, t. 968.

*Sagata*, clothed in a mantle.

P. 3–5 cm., yellowish tawny, or reddish brown, fleshy, convex, then plane, at length revolute, obtuse, smooth, subpelliculose, shining. St. 5 cm. × 5–6 mm., yellowish, equal, at length compressed, fragile, smooth. Ring white, distant, entire, persistent. Gills pinkish, then umber, free, ventricose, 6 mm. broad, crowded. Flesh white, thin. Spores purplish umber, elliptical, 6 × 3–4μ. Cystidia "on edge of gill basidia-like, 36–40 × 8–12μ" Rick. Grassy places, and under beeches. Oct. Rare.

204. **P. dulcidula** Schulz. Kalchbr. Icon. t. 17, fig. 1.

*Dulcidula*, sweetish.

P. 2.5–5 cm., lurid white, or ochraceous, disc subfuscous, or dirty violaceous, fleshy, convex, then plane, slightly gibbous, somewhat smooth, dry. St. 2.5–4 cm. × 4–6 mm., concolorous, fragile, base incurved, subbulbous, almost smooth. Ring concolorous, membranaceous, median, erect, persistent. Gills pallid greyish, then black, free, widest in front, 4 mm. broad, rather crowded. Flesh white, thin at the margin. Smell pleasant. Taste sweetish. Under oaks, and on heaths. Oct. Rare.

205. **P. rusiophylla** (Lasch) Fr. *Russus*, red; ἕφλακνος, a leaf.

P. 2–3.5 cm., flesh colour, or ruddy, becoming pale, fleshy, campanulate, then expanded, umbonate, fibrillose; margin somewhat appendiculate with the partial veil. St. 2.5–4 cm. × 2–3 mm., white, slightly attenuated from the thickened base, fibrillose. Ring superior, reflexed, persistent. Gills rosy, then fuscous, free, crowded. Flesh pallid, thin at the margin. Spores reddish, elliptical, 5 × 3μ. Frondose woods, and parks. Oct. Rare.

*P. haematosperma* (Bull.) Fr. = *Lepiota haematosperma* (Bull.) Boud.

*P. echinata* (Roth) Fr. = *Lepiota haematosperma* (Bull.) Boud.

Spores black, or blackish fuscos.

**Anellaria** Karst.

(*Anellus*, a little ring.)

Pileus fleshy, campanulate. Stem central. Ring membranaceous, persistent, or fugacious. Gills adnate, or often almost free. Spores black, or blackish fuscos, pip-shaped, or elliptical, smooth, with an apical germ-pore. Growing on dung, or on the ground.

206. **A. separata** (Linn.) Karst. (= *Panaeolus separatus* (Linn.) Fr.) Cke. Illus. no. 623, t. 623, as *Panaeolus separatus* Fr.

*Separata*, distinct.
ANELLARIA. AMANITOPSIS

P. 2–6 cm., clay whitish, or yellowish, fleshy, ovato-campanulate, 2.5–4.5 cm. high, not expanding, obtuse, viscid, smooth, often wrinkled, or cracked when old; margin often appendiculate with the veil. St. 5–20 cm. × 4–8 mm., whitish, tense and straight, rigid, gradually attenuated upwards from the thickened base, striate under a lens, smooth. Ring white, membranaceous, distant, entire, narrow, persistent, often striate. Gills whitish, then cinereous black, adnate, but almost separating, ascending, 4–8 mm. broad, edge often whitish. Flesh whitish, yellowish under the cuticle, and towards the base of the st., thick at the disc. Spores black, pip-shaped, 16–20 × 10–12 μ. Cystidia bottle-shaped, 30–40 × 8–14 μ × 5–8 μ at apex. On dung, especially that of horse. Woods, fields, and gardens. April—Dec. Common. (v.v.)

207. A. fimiputris (Bull.) Karst. (= Panaeolus fimiputris (Bull.) Fr.)
Cke. Illus. no. 626, t. 626, as Panaeolus phalenarum Bull.

Fimbus, dung; putris, rotten.

P. 2–3 cm., fuliginous-cinereous, or livid, fleshy, conical, then expanded, somewhat gibbous, viscid, smooth, generally beaded with the veil. St. 5–10 cm. × 2 mm., pallid, equal, smooth, girt with an annular zone above the middle. Gills livid blackish, adfixed. Flesh whitish, thin. Spores black, “elliptical, apiculate, 9–10 × 6 μ” Massee. On dung. Fields, roadsides, and gardens. April—Nov. Common. (v.v.)


Scitula, pretty.

P. 1–1.5 cm., dirty pale ochre, fleshy, campanulate, obtuse, smooth, viscid, margin exceeding the gills. St. 2–3 cm. × 1–2 mm., white, equal, shining, base peronate, sheath ending in a persistent ring below the middle of the st. Gills becoming ashy grey, speckled with the black spores, almost free, narrow, crowded. Flesh white, thin. Spores black, opaque, with a colourless hilum, elliptical, 12–13 × 4 μ. On soil in a flower-pot. Rare.

***With a volva at the base of the stem.

Spores white.

Amanitopsis Roze.

(Amanita, the genus; ἀμανίτος, like.)


209. A. vaginata (Bull.) Roze. Gonn. & Rabenh. t. 7, fig. 1.

Vagina, a sheath.

P. 3–10 cm., livid, or mouse grey, covered with large, white, or grey, fugacious patches of the fragments of the volva, slightly fleshy, cam-
panulate, then flattened, obtuse, slightly viscid at first; margin deeply striate. St. 12–15 × 1–1.5 cm., white, or grey, floccose, slightly attenuated upwards, surrounded at the base by a large, free, lax, often lobed, white, or grey membranaceous volva, often inclosing a ring-like mark around the stem. Gills white, or greyish, free, ventricose. Flesh white, thin. Spores globose, 10–12 μ, with a large central gutta. Taste pleasant. Edible. Woods, heaths, and pastures. June—Nov. Common. (v.v.)

210. **A. fulva** (Schaeff.) W. G. Sm. Boud. Icon. t. 7. *Fulvus*, tawny.

P. 4–10 cm., tawny, disc deeper coloured, campanulate, then flattened, umbonate, slightly viscid, covered with a few, fugacious patches of the yellowish volva; margin striate. St. 7–20 × 0.5–1 cm., paler tawny, squamulose, base surrounded by the upright, lax, free yellowish, membranaceous volva. Gills white, tinged with yellow, free. Flesh white, yellow under the epidermis. Spores globose, 9–14 μ, multi-guttulate. Taste pleasant. Edible. Woods, heaths, etc., especially under birch trees. May—Nov. Common. (v.v.)


**Nivalis**, snow coloured.

P. 5–9 cm., white, disc pale ochraceous, covered at first with the very fugacious, white fragments of the volva, campanulate, then convex and plane, or slightly umbonate; margin striate. St. 7–13 × 1 cm., white, the subbulbous base surrounded by a white, lax, free, membranaceous volva. Gills white, free, broader in front. Flesh white, thin. Spores oblong elliptic, 11–12 × 9 μ, with a large central gutta. Taste pleasant. Edible. Woods, and heaths. Aug.—Oct. Uncommon. (v.v.)

212. **A. strangulata** (Fr.) Roze. Boud. Icon. t. 9, as Amanitopsis inaurata (Secc.) Boud. *Strangulata*, choked.

P. 8–15 cm., bright tawny, or tawny brown, covered with numerous large, grey, patches of the fragments of the volva, convex, then plane, slightly viscid; margin deeply striate. St. 12–30 × 3–4 cm., greyish white, stout, attenuated upwards, encircled by one to three greyish rings on the lower half—the remnants of the friable volva which disintegrates at the base. Gills white, or tinged yellowish, adnate, crowded, ventricose. Flesh white, tinged slightly yellowish under the cuticle. Spores globose, 8–13 μ, multi-guttulate. Taste pleasant. Edible. Woods, and pastures, chiefly on the chalk and limestone. May—Oct. Not uncommon. (v.v.)

213. **A. adnata** (W. G. Sm.) Sacc. (= Amanita junquillea Quél.) *Adnata*, adnate.

P. 6–7 cm., pale yellowish buff, covered with white, woolly patches of the volva, fleshy, very firm, convex, then expanded; margin exceeding the gills. St. 5–10 × 1.5 cm., pale buff, fibrillose, base slightly swollen
and covered by the *adnate volva*, which has only a small, free, lax margin, sometimes almost obsolete. Ring generally absent. Gills white, truly adnate, crowded. Flesh *white, buff beneath the epidermis*. Spores subglobose, 7–9 × 6–7 μ, with a large central gutta. Woods, and heaths. July—Oct. Uncommon. (v.v.)

Spores pink.

**Volvaria** Fr.

(*Volvaria*, having a volva, or wrapper.)

Pileus fleshy, regular. Stem central. Volva membranaceous, free, sheathing. Gills free. Spores pink, elliptical, or subglobose, smooth, continuous. Growing on the ground, or on wood.

*P. dry, silky, or fibrillose.

214. **V. bombycina** (Schaeff.) Fr. (= *Volvaria Loveiana* Berk. sec. Barb.)  

*Bombycina*, silky.


215. **V. volvacea** (Bull.) Fr. (= *Volvaria Taylori* Berk. sec. Quél.)  


Rev. R. T. Lowe

P. 5–7 cm., *white, with a very slight shade of pink*, or *cinereous, subtruncato-globose*, then convex, or slightly expanded, *beautifully silky*;

1 At Sandringham, Norfolk, on the 30th October, 1899, specimens were found both with a well-defined membranaceous ring and without any trace of a ring. C. R.
margin involute. St. 5 \times 5-1 \text{ cm.}, pure white, bulbose, attenuated upwards, closely fibrillose, with a little matted down, very juicy. Volva pure white, with a little downy prominence within round the base of the stem. Gills white, becoming gradually pale pink, free, broad in front, subdeliquescent. Flesh white, becoming yellowish. Spores pink, elliptical, 5-6 \times 3-4 \mu, 1-guttulate. On Clitocybe nebularis (Batsch) Fr. Oct. Rare. (v.v.)


P. 2-5 cm., vivid, conico-campanulate, obtuse, striato-rimose from the apex, thin; margin lobed, sinuate. St. 3-6 cm. \times 3-5 mm., pallid, nearly equal, slightly bulbose at the base. Volva date-brown, lobed, somewhat lax, small. Gills rose colour, free, broad in front, very much attenuated behind, uneven, edge floccose, white. Spores pink, elliptical, 7-8 \times 5 \mu, 2-guttulate. Gardens. July—Oct. Uncommon. (v.v.)


P. 6 mm., whitish, disc tinged tawny, convex, then expanded, umbo-nate, pulvululent, striate. St. 1.5-2.5 cm. \times 1-2 mm., whitish, pel-lucid. Volva white, ample. Gills pinkish, free. Spores pink, elliptical, 4 \times 2.5 \mu. Greenhouses. Feb. Rare.

**P. more or less viscid, smooth.**

219. **V. speciosa** Fr. (= Volvaria gloiocephala DC. sec. Dumée.) Boud. Icon. t. 84. Speciosa, handsome.

P. 7-13 cm., whitish, subumbonate disc grey, or umber, fleshy, glo-bose, then campanulate, at length plane, viscid. St. 10-20 \times 1-2.5 cm., white, firm, slightly attenuated upwards, base white-villose when young. Volva white, membranaceous, bulbous, free, variously torn into loops, externally tomentose. Gills white, then flesh colour, free, ventricose. Flesh white, floccose. Spores pink, elliptical, 15-16 \times 8-10 \mu, 1-2-guttulate. Cystidia “vesiculose-pyriform, 60-70 \times 20-36 \mu, sometimes pointed” Rick. Smell none, or somewhat strong. Edible sec. Maire. Dunghills, roadsides, and occasionally in woods. June—Oct. Uncommon. (v.v.)

220. **V. gloiocephala** (DC.) Fr. (= Volvaria speciosa Fr. sec. Dumée.) Cke. Illus. no. 298, t. 298. ώδοιός, sticky; κεφαλή, head.

P. 7-11 cm., fuliginous, fleshy, campanulate, then expanded, umbo-nate, glutinous; margin striate. St. 8-18 \times 1-2 cm., white, becoming fuscous, or tawny, attenuated upwards, base subbulbose and villose. Volva whitish, grey, or fuscous, circularly split, lobed, villose, often adpressed to the stem. Gills white, then reddish, free, broad, especially in front, attenuated behind, margin slightly toothed. Flesh white,
fuscos under the cuticle of the pileus. Spores pink, elliptical, $12 \times 7 \mu$. Smell and taste unpleasant. Poisonous. On the ground. June—Nov. Uncommon. (v.v.)

221. **V. viperina** Fr.¹ (= *Volvaria conica* (Pico.) Quél.; *Volvaria speciosa* Fr. sec. Maire.) Viperina, of a snake.

P. 3–4 cm., grey, or cinereous, fleshy, persistently conical, acute, viscid, silky shining when dry. St. white, equal, subflexuose. Volva thin, entire, closely sheathing. Gills tinged yellowish then flesh colour. Spores pink, “6–8 x 4·5μ” Herpell.

222. **V. media** (Schum.) Fr. Cke. Illus. no. 299, t. 299.

Medius, middle.

P. 3–5 cm., white, disc brownish, or yellowish, slightly fleshy, convexo-plane, obtuse, viscid, silky when dry and shining. St. 4–7 cm. x 4–6 mm., white, subbulbose, equal. Volva white, membranaceous, sheathing, lobed. Gills white, then rosy flesh colour, free, broad in front, attenuated behind. Flesh white. Spores pink, elliptical, 5–6 x 4μ. Woods, and pastures. Aug.—Oct. Not uncommon. (v.v.)

223. **V. parvula** (Weinm.) Fr. (= *Volvaria pusilla* (Pers.) Quél.) Boud. Icon. t. 86. Parvulus, very small.

P. 1–3 cm., whitish, disc yellowish, slightly fleshy, conical, then campanulate, at length rather plane and umbinate, at first slightly viscid, soon dry silky. St. 2·5–4 cm. x 2–4 mm., white, equal, silky, base villose. Volva white, membranaceous, free, lobed, minutely tomentose on the outside. Gills white, then flesh colour, free, broad in front. Flesh white. Spores pink, elliptical, 5 x 3μ, 1–2-guttulate. Pastures, gardens, and woods. May—Oct. Common. (v.v.)

var. *biloba* Massee (= *Volvaria parvula*, forma B. Fries Monogr.). Bi, two; λoβός, the lobe of the ear.

Entirely white when young. P. conical, 6–8 mm. high, dry, sometimes floccosely squamulose. St. 2·5 cm. x 1–2 mm., equal, pubescent. Volva bilobed, sheathing, externally adpressedly silky. Pastures. July—Sept. Not uncommon. (v.v.)

Spores ochraceous.

**Locellina** Gill.

*(Acetabularia* Berk.)*

*(Locellus*, a casket.)*

Pileus fleshy, regular. Stem central, thin. Volva membranaceous, sheathing. Gills free, or adnate. Spores ochraceous, or somewhat fuscos, oval, or oblong, smooth, continuous. Cystidia ventricose, pointed. Growing on the ground.

¹ This is listed as British by Massee in his Eur. Fung. Fl. Agar. 120.
224. **L. Alexandri** Gillet.

P. 2-3 cm., *yellowish-tan*, disc darker, convex, umbonate, *viscid*, pellicle easily separable; margin *appendiculate* with the *cinnamon fibrils of the arachnoid veil*. St. *white*, or *whitish*, equal, or slightly thickened at the base, flexuose, striate, *covered with a fibrillose*, *cinnamon veil* up to 1–2 cm. of the apex. Volva *white*, or *whitish*, *becoming reddish when handled*, irregular, torn at the edge. Gills *reddish flesh colour, paler at the edge*, adnato-decurrent, crowded. *Flesh whitish*. Spores "becoming fuscous, oblong" Big. & Guill. Woods, at the base of beeches. Oct. Rare.


P. 2–3 cm., *tan colour*, convex; margin plicate, or deeply striate. St. 4–5 cm. × 3 mm., *white*, equal. Volva *discoid*, **socket-like**. Gills *tawny*, free, lanceolate, 3 mm. broad. *Flesh very thin*. River bank, near high-water mark. May. Rare.

Spores purple, or fuscous.

**Clarkeinda** O. Kuntz.

*(Chitonia Fr.)*

(C. B. Clarke, *ινδίος*, pertaining to India.)


226. **C. rubriceps** (Cke. & Massee) Rea. Cke. Illus. no. 1176, t. 967, as *Chitonia rubriceps* Cke. & Massee. Ruber, red; caput, head.

P. 1.5–2.5 cm., *testaceous*, fleshy, campanulate, then expanded, umbonate, often becoming depressed round the umbo, smooth; margin arched, faintly striate. St. 7.5 cm. × 3–4 mm., *paler than the p.*, equal, smooth, rooting. Volva *whitish*, sheathing, saccate, torn at the margin. Gills *purplish brown*, free, lanceolate, narrow, rather crowded. Flesh *white*, fairly thick at the disc. Spores brownish purple, elliptical, a little attenuated at both ends, 12 × 6 μ. On soil in Aroid house. Dec. Rare.

****With a ring on the stem, and a volva at the base of the stem.

Spores white.

**Amanita** (Pers.) Fr.

(Probably from Mount Amanus in Cilicia.)

Pileus fleshy, regular. Stem central, fleshy. Ring membranaceous, adnate, persistent, rarely fugacious. Volva membranaceous, free, or
adnate, persistent, or friable. Gills free, subadnate, or decurrent by a tooth, intermediate gills cut squarely behind. Spores white, rarely tinged greenish, globose, subglobose, oval, or elliptical, smooth, very rarely verrucose. Cystidia subglobose, or cylindrical ventricose. Growing on the ground.

(a) Margin of volva free, persistent. P. generally naked.

227. A. verna (Lam.) Fr. Syst. (= Amanita virosa Fr. Hym. Eur.) Cke. Illus. no. 1, t. 1, as Amanita virosa Fr. Ver, spring.

Entirely white. P. 5–8 cm., fleshy, conical, acute, then campanulate, expanded, and subumbonate, glutinous, shining when dry; margin often unequal, repand, inflexed. St. 8–12 × 1.5–2 cm., cylindrical from the bulbous base, often compressed at the apex, split up into longitudinal fibrils, floccosely squamulose. Ring apical, lax, silky, splitting up into floccose fragments. Volva thick, lax, wide. Gills free, thin, linear-lanceolate, a little broader in front, crowded, edge often floccose. Spores white, globose, 7–8 μ. Smell foetid. Taste unpleasant. Poisonous. Moist woods. Aug.—Oct. Uncommon. (v.v.)

var. grisea Massee.

Grissea, grey.

Differs from the type in the p. being shaded with grey. Woods. Rare.

228. A. phalloides (Vaill.) Fr. (= Amanita virosa (Vaill.) Quél.) Rolland, Champ. t. 3, no. 3. φαλλός, Phallus; εἶδος, like.

P. 7–10 cm., greenish, or yellowish olive, streaked with dark, innate fibrils, fleshy, ovato-campanulate, then expanded, obtuse, viscid, rarely covered with one or two fragments of the volva. St. 8–12 × 1.5–2 cm., white, rarely besprinkled with olive or pale yellowish olive, adpressed squamules, smooth, or floccose, attenuated upwards, base bulbous. Ring white, superior, reflexed, slightly striate, swollen, generally entire. Volva free for half its depth, generally splitting up into three or four, more or less acute segments. Gills white, free, ventricose, 8 mm. broad. Flesh white. Spores white, subglobose, 8–11 × 7–9 μ, with a large central gutta. Smell foetid when old. Taste unpleasant. Poisonous. Woods, and adjoining pastures. July—Nov. Common. (v.v.)

var. verna (Bull.) Fr.¹ Boud. Icon. t. 2, as Amanita verna (Bull.) Fr. Verna, occurring in spring.

Differs from the type in being entirely white. Spores white, globose, 7–8 μ, with a large central gutta. July—Aug. Uncommon. (v.v.)

var. umbrina (Ferry) Maire.

Differs from the type in the brownish umber p., and in the fuscous, adpressed squamules on the st. (v.v.)

¹ Boudier describes this as a distinct species with oval spores 10–14 × 7–9 μ.

\[\text{πορφύρα}\], purple.


230. **A. lutea** Otth.

**Lutea**, yellow

P. 4–7.5 cm., yellow, or yellowish ochre, conical, then expanded, viscid, disc papillose, usually with broad scattered scales; margin involute, striate. St. 7–8 cm., bulbous, rather narrowed upwards. Ring white, thin. Volva membranaceous. Gills white, crowded. Woods. Rare.

(b) Volva circumscissile, or fugacious. P. generally covered with fragments of the volva.

231. **A. recutita** Fr. Gonn. & Rabenh. I and II, t. 2, as *Amanita Secretanii* Rabenh.

**Recutita**, circumcised.


**A. junquillea** Quél. = **Amanitopsis adnata** (W. G. Sm.) Sacc.

232. **A. mappa** (Batsch) Fr. (= *Amanita citrina* (Schaeff.) Quél.)

Cke. Illus. no. 4, t. 4. **Mappa**, a napkin.

P. 6–9 cm., white, or becoming yellow, covered with patch-like fragments of the volva, slightly fleshy, dry, convexo-plane, obtuse, or depressed, orbicular. St. 5–8 × 1–1.5 cm., white, equal, base bulbous. Ring white, yellowish on the exterior, superior, soft, lax, minutely striate. Volva yellowish, or fuliginous, obtuse, the friable upper portion disappearing and leaving a distinct groove round the base of the st. Gills white, adnexed, crowded, narrow, edge often yellowish. Flesh white, yellowish under the cuticle. Spores white, subglobose, apiculate at the base, 8–10 × 7–9µ, with a large central gutta. Smell foetid. Poisonous. Woods, and heaths. July—Oct. Common. (v.v.)

7—2
var. **citrina** (Gonn. & Rabenh.) Rea. Gonn. & Rabenh. t. 1 and t. 11, t. 4. 

*Citrina*, lemon yellow.

P. 8–12 cm., bright yellow with white patches of the fragments of the volva, convex, obtuse. St. 10–12 × 2 cm., white, stout. Volva imperfect. Spores white, "globose, warted, 6–7 μ" Massee. Rare.


Differs from the type in being white, and then becoming discoloured.


(c) Volva floccose, or friable. P. floccose, or verrucose with the fragments of the volva, rarely naked.


P. 10–20 cm., scarlet, or orange, covered with white, or yellowish fragments of the volva, fleshy, viscid, globose, then convex, and at length flattened; margin slightly striate when mature. St. 10–22 × 2.5 cm., white, or yellowish, firm, often torn into scales, apex striate, base bulbous, encircled by several concentric rings formed from the fragments of the volva. Ring white, yellowish on the exterior, superior, very soft, torn, somewhat striate. Gills white, rarely becoming yellow, free, but reaching the stem, crowded, thick, broader in front, minutely denticulate. Flesh white, yellow under the epidermis. Spores white, elliptical, apiculate, 8–10 × 6–7 μ. Taste mild. Poisonous. Birch, and coniferous woods, and under birches and conifers. July—Dec. Common. (v.v.)

var. **regalis** Fr. *Regalis*, royal.

Differs from the type in the very glutinous, liver coloured p., and in the st. becoming light yellow internally. Beech woods. Uncommon. (v.v.)

var. **formosa** Fr. Gonn. & Rabenh. t. 10, fig. 2. *Formosa*, handsome.

Differs from the type in the lemon yellow p. covered with lax, mealy yellowish, fugacious fragments of the veil, and in the st. and ring often becoming yellow. Beech woods. Uncommon. (v.v.)

var. **umbrina** Fr. *Umbrina*, umber.

Differs from the type in being thinner, and more slender, and in the umber, or livid p., fuscous at the disc. Woods. Rare.

var. **puella** (Batsch) Cda. Gonn. & Rabenh. t. 7, fig. 2. *Puella*, a girl.

Differs from the type in its smaller size, and in the p. being destitute of any fragments of the volva. Woods. Rare. (v.v.)
AUREOLA var. aureola (Kalchbr.) Qué. Kalchbr. Icon. t. 1, fig. 1. 

Aureola, golden.

Differs from the type in the erect, membranaceous volva. Under birches. Uncommon. (v.v.)


Emile Boudier, the eminent French mycologist.

P. 13–17 cm., yellowish butter colour, becoming tawny purplish, disc finally dark fuscous, covered with cream coloured fragments of the volva, fleshy, viscid, convex, then hemispherical, and finally expanded, and depressed; margin paler, finally striate. St. 12–20 × 1.5–3 cm., white, bulbous. Ring white, thick, especially at the margin, and covered with the fragments of the cream coloured volva, crenulate, torn. Volva friable, forming three to four concentric rings round the apex of the globose, rarely fusiform base of the stem. Gills whitish, or pale rose colour, attenuated or rounded near the stem, broad, somewhat crowded, edge denticulate, floccose. Flesh white, pale rose red under the epidermis. Spores white, subglobose, 9–10 μ, 1-guttulate. Taste nutty. Poisonous. Deciduous woods. Sept.—Oct. Uncommon.

235. A. solitaria (Bull.) Fr. (= Amanita strobiliformis (Vitt.) sec. Qué.) Boud. Icon, t. 3. 

Solitaria, lonely.

P. 8–12 cm., white, then pearl grey, covered with moderately thick, angular, wart-like fragments of the volva, which are at first plate-like, floccose, white, and easily separable, then becoming greyish and hardened, very fleshy, moist, convex then expanded; margin appended with the veil. St. 10–20 × 3 cm., white, covered with thick, floccose, imbricate scales; base bulbous, prolonged into a root-like point. Ring cream colour, floccose, often torn, and finally disappearing, striate. Volva white, or greyish, very friable. Gills snow white, free, decurrent by a tooth, ventricose, minutely crenulate. Flesh white. Spores white, elliptical, 13–15 × 8–10 μ. Smell and taste pleasant. Edible. Clearings in woods, and adjacent pastures. July—Oct. Rare. (v.v.)

236. A. strobiliformis (Paul.) Qué. Cke. Illus. no. 9, t. 277. 

Strobilus, a pine cone.

P. 6–30 cm., grey, covered with very thick, somewhat separable, angular, pyramidal, wart-like, grey fragments of the volva, very fleshy, hemispherical, then plane. St. 15–22 × 3–5 cm., whitish, clothed with grey flocc; base bulbous, immersed in the soil and surrounded by two or three circles formed by the remains of the volva. Ring white, apical, torn, dependent, wide, striate. Volva greyish, friable. Gills white, free, decurrent by a tooth. Flesh white. Spores white, elliptical,


P. 5-10 cm., white, becoming greyish, fleshy, convex, then plane, densely covered with erect, slender, pointed, angular, firm, adnate, whitish or greyish warts, that become tinged with bistre with age; margin white, smooth. St. 5-12 cm. × 2-5 cm., whitish, solid, equal, floc- cousely scaly; base bulbous, often attenuated downwards, surrounded by several concentric crenulate zones, the remains of the volva. Ring white, superior, thin, torn, striate, often becoming fugacious. Gills white, becoming yellowish with age, 5-15 mm. wide, sinuate behind, crowded. Flesh white, then tinged with yellow, thick, soft. Spores white, broadly elliptical, or subglobose, with a basal apiculus, 10-11 × 8-9μ, contents granular. Smell and taste pleasant. Amongst beech leaves, in woods. Oct. Rare. (v.v.)

238. **A. Vittadini** (Moretti) Vitt. (= *Amanita umbella* (Paul.) Quél.) Krombh. t. 27.

Vittadini, an Italian mycologist.

P. 6-12 cm., white, densely covered with small, erect, wart-like fragments of the volva, convex, then plane, silky. St. 15-20 × 2-2-5 cm., white, becoming tinged with greenish, floccosely scaly, base often somewhat bulbous. Ring white, superior, large, flexuose, often double. Volva white, or grey, friable. Gills cream colour, finally becoming greenish, decurrent by a tooth, ventricose, thick. Flesh white, then tinged greenish. Spores white ("greenish" Quél.), elliptical, 6-9 × 6μ. Smell and taste unpleasant. Poisonous. Downs, and woods on the chalk and limestone. July—Oct. Rare. (v.v.)

239. **A. echinocephala** Vitt. Cke. Illus. no. 1102, t. 939, fide Boudier, as *Amanita solitaria* Bull. ἐχῖνος, hedgehog; κεφαλή, head.

P. 6-8 cm., white, or greyish, covered with thin, pointed, wart-like fragments of the volva, convex, then flattened and depressed at the disc; margin flocose. St. 8-14 × 2-4 cm., white, clothed with revolute squamules, base napiiform and rooting. Ring white, distant, persistent, slightly striate. Volva greyish, friable. Gills greenish yellow, free, broad. Flesh white, yellowish at the base of the stem. Spores "white, ovoid, 11-13 × 7-10μ" Boud. Smell and taste unpleasant. Poisonous. Limestone pastures, and woods. July—Sept. Rare.

240. **A. excelsa** Fr. (= *Amanita ampla* (Pers.) Quél.) Rolland, Champ. t. 6, no. 8, as *Amanita ampla*. Excelsa, tall.

P. 9-15 cm., reddish grey, or brownish grey, covered with mealy, fugacious patches of the volva, streaked with innate, blackish bistre...

241. A. pantherina (DC.) Fr. Rolland, Champ. t. 7, no. 10.

Pantherina, deceitful.

P. 6-10 cm., olivaceous umber, fuliginous, or greyish olive, rarely whitish, covered with numerous small, white, moderately persistent fragments of the volva, fleshy, convex, then flattened, or subdepressed, viscid, shining when dry; margin striate. St. 7-9 × 1 cm., white, equal, or attenuated upwards, base bulbous. Ring white, distant, thin, striate, adhering obliquely, somewhat fugacious. Volva white, forming one or two concentric rings at the apex of the globose base of the stem. Gills white, free, reaching the stem, broader in front, 6-8 mm. broad. Flesh white. Spores white, elliptical, 11-12 × 7-9 μ. Cystidia “mostly cylindric-vesiculose about 12 μ in diam.” Lange. Taste insipid, smell unpleasant. Poisonous. Woods, heaths, and pastures. July—Oct. Not uncommon. (v.v.)

242. A. cariosa Fr. Gonn. & Rabenh. t. 9, fig. 2, as Amanita aspera.

Cariosa, rotten.

P. 6-12 cm., umber, or dark cinereous, covered with white, mealy fragments of the volva, convex, then plane, often hemispherical, tender; margin often striate. St. 12-14 × 2-4 cm., white, fragile, attenuated upwards, not bulbous, villose, mealy. Ring white, superior, broad, fugacious. Volva white, friable. Gills white, adnate, becoming free. Flesh white, fragile. Spores white, ovoid, 11-13 × 7-10 μ. Taste acid. Poisonous. Woods. Sept. Rare.

243. A. spissa Fr. Rolland, Champ. t. 6, no. 9.

Spissa, thick.

244. A. rubescens (Pers.) Fr. (= Amanita rubens (Scop.) Quél.) Rubescens, becoming red.

P. 8–12 cm., reddish brown, or dingy reddish brown, sometimes pale, covered with large, grey (sometimes white, or yellowish) mealy patches of the volva, fleshy, convex then plane, obtuse, moist; margin slightly striate when old. St. 7–12 × 3–4 cm., reddish white, deeper in colour at the bulbous base, squamulose, attenuated upwards. Ring white, superior, large, membranaceous, soft, striate. Volva evanescent. Gills white, then spotted with red, decurrent by a tooth, attenuated behind, thin, crowded, soft. Flesh white, becoming reddish when broken. The whole plant becomes reddish with injury, or handling. Spores white, ovoid, or elliptical, 8–10 × 7 μ, 1–2-guttulate. Taste sweet, then acrid. Edible. Woods, heaths, pastures, etc. Common. (v.v.)

var. magnifica (Fl. Dan.) Rea. Cke. Illus. no. 14, t. 34, as Amanita magnifica Fr. Magnifica, splendid.

Differs from the type in the smooth pileus, equal stem, and fugacious ring. Woods. Uncommon. (v.v.)

var. alba W. G. Smith. Alba, white

Differs from the type in being entirely white. Woods. Rare.

var. annulo-sulphurea Gillet.

Annulus, a ring; sulphurea, sulphur-yellow.

Differs from the type in having a persistent, sulphur coloured ring. Woods, and heaths. Not uncommon. (v.v.)

var. gracilis Cat. de S. et L. Gracilis, thin.

Differs from the type in being thinner, and smaller in all its parts. Heaths. Uncommon. (v.v.)

245. A. nitida Fr. Nitida, shining.

P. 6–10 cm., white, or yellowish, shining, covered with large, angular, thick fragments of the volva, which become fuscous, convex, then plane, fleshy. St. 6–7 × 1–2.5 cm., white, firm, slightly attenuated upwards, squamulose below the ring, base bulbous. Ring white, superior, thin, torn, slightly striate, villous outside, at length fugacious. Volva whitish, becoming fuscous, evanescent. Gills white, free, crowded, very broad, 8–12 mm., ventricose. Flesh white. Spores white, elliptical, 6–9 × 4–5 μ. Taste sweet, or slightly acrid. Poisonous. Deciduous woods. Aug.—Sept. Uncommon. (v.v.)

246. A. aspera (Fr.) Quél. Asper, rough.

P. 5–8 cm., straw colour, grey, olive, or bistre, covered with small, pointed, floccose, sulphur coloured, persistent fragments of the volva,
which become whitish or brownish in dry weather, convex, then plane. St. 5–8 × 1 cm., white, attenuated upwards, slightly floccose, base bulbous, surmounted by sulphur coloured flocci that become brownish. Ring white, distant, margin sprinkled with sulphur coloured flocci. Volva sulphur coloured, friable. Gills white, or tinged sulphur colour, rounded-free, ventricose. Flesh white, yellowish, or brownish under the epidermis. Spores white, ovoid, 7–8 × 6–7 μ, 1-guttulate. Cystidia sparse, vesiculose, 20–40 × 18–25 μ. Smell and taste pleasant. Poisonous. Beech woods. July—Oct. Uncommon. (v.v.)

A. magnifica (Fl. Dan.) Fr. = Amanita rubescens (Pers.) Fr. var. magnifica (Fl. Dan.) Rea.

A. arida Fr. = Lepiota arida (Fr.) Gillet.

A. lenticularis (Lasch) Fr. = Lepiota lenticularis (Lasch) Cke.


B. Pileus confluent, and homogeneous with the fleshy stem.

*With a membranaceous ring on the stem.

Spores white.

Armillaria Fr.

(Armilla, a ring.)

Pileus fleshy, regular. Stem central, fleshy. Ring membranaceous, or subarachnoid, adnate, persistent, or fugacious. Gills sinuato-adnexed, decurrent, or adnate. Spores white, elliptical, oval, or globose, smooth. Growing on the ground, and on wood, sometimes caespitose.

(a) Gills sinuato-adnexed.


P. 7.5–10 cm., pale yellowish brick colour, fleshy, not compact, convexo-flattened, obtuse, moist; margin paler, squamuloso-fibrillose from the fragments of the veil. St. 5–7.5 × 1.5–2 cm., white, equal, floccose with the remains of the arachnoid veil up to the ring,—sometimes the separable cuticle is marked longitudinally with blackish fibrils, base marginately bulbous. Ring white, arachnoid, silky, fugacious. Gills white, then cream colour, or reddish, broadly emarginate, ventricose, broad. Flesh white, reddish under the cuticle, and above the base of the gills. Spores white, elliptical, 6–7 × 4–5 μ. In pine woods. Sept.—Nov. Uncommon. (v.v.)

Exactly like a white-spored Cortinarius.

P. 8–12 cm., chestnut, or brownish tawny, convex, then plane; margin fibrillose, torn. St. 6–9 × 3 cm., white, covered with reddish tawny squamules up to the ring, apex glabrous, equal, attenuated and rooting at the base. Ring reddish, squamulose. Gills greenish white, sinuate. Flesh white, compact. Spores white, globose, 3–4 μ, punctate. Taste pleasant. Edible. Sandy coniferous woods. Sept.—Oct. Uncommon.

249. A. focalis Fr. (= Armillaria rufa (Batt.) Quél.)

Focale, a neck-cloth.

P. 10–12.5 cm., reddish tawny, fleshy, convex, then flattened, obtuse, slightly shining, silky-fibrillose. St. 7.5–9 × 2.5 cm., whitish, becoming tawny, equal, fibrillose. Ring concolorous, median, oblique. Gills white, then pale, emarginato-free, crowded. Flesh pale tawny. Spores white, "4–5 × 3 μ." Rick. Pine woods, and under old laurel trees. Aug.—Oct. Rare.

var. Goliath Fr.

The giant Goliath.

Differs from the type in its larger size, in the revolute torn margin of the p., in the st. becoming tawny fibrillose downwards, in the fugacious ring, and in the thinner flesh at the margin of the p.

250. A. robusta (A. & S.) Fr. (= Agaricus caligatus Viv. sec. Quél.)

Boud. Icon. t. 22. Robusta, strong.

P. 5–15 cm., bay brown rufescent, margin paler, very fleshy, convex, then expanded, obtuse; margin scaly-fibrillose. St. 4–7 × 2–3 cm., white, covered with rufescent squamules up to the ring, fusiform, apex mealy. Ring white, streaked with rufescent fibrils, large, subpersistent. Gills whitish, or cream colour, broadly emarginate, almost free, 10–12 mm. broad, crowded, often transversely veined. Flesh white, reddish under the cuticle of the p. Spores white, globose, 4–5 μ. Taste and smell pleasant. Edible. Coniferous woods. Sept.—Oct. Common. (v.v.)


251. A. caligata (Viv.) Fr. (= Armillaria robusta A. & S. sec. Quél.)

Boud. Icon. t. 21. Caliga, a soldier's shoe.

P. 6–12 cm., brownish chestnut, somewhat purplish, covered with adpressed, denticulate, darker squamules on the disc, firm, convex, de-
pressed at the centre; margin white, incurved, appendiculate with the veil. St. 5–8 × 1–2.5 cm., white, and mealy at the apex, covered with large, denticulate, dark chestnut squamules below the ring, attenuated at the base. Ring white inside, torn, covered on the outside with similar squamules, ascending. Gills white, adnate, slightly decurrent, broad. Flesh white, firm. Spores white, elliptical, 5–6 × 4 μ. Smell of pear. Taste bitter. Edible. Pine woods. Sept.—Oct. Uncommon. (v.v.)

*A. aurantia* (Schaeff.) Fr. = *Tricholoma aurantium* (Schaeff.) Fr. Syst.

252. **A. colossa** (Fr.) Boud. (= *Tricholoma colossum* Fr.) Boud. Icon. t. 20. *κολοσσός*, a gigantic statue.

P. 10–22 cm., reddish tawny, darker at the centre, globose, then expanded, plano-convex, then depressed, always very obtuse, repand, becoming broken up into scales; margin whitish, incurved, slightly viscid, cottony. St. 7.5–10 × 6–10 cm., concolorous, or more deeply coloured than the p. below the ring, apex white, floccose, base bulbous. Ring white, then becoming reddish, membranaceous, soon fugacious. Gills white, then pale brick red, rounded, sinuate, very wide, 12 mm. broad, fragile, torn. Flesh white, then pale brick-red, very hard, thick. Spores white, globose, 6–7 × 5–7 μ, with a large central gutta. Taste nutty, then slightly bitter. Edible. Pine woods. June—Oct. Rare. (v.v.)


P. 5–7.5 cm., whitish, or greyish, covered with adpressed, floccose, dark grey, or bistre scales, convex, then plane, obtuse, or gibbous, at length depressed, and revolute. St. 2.5–5 cm. × 6–12 mm., white, covered with adpressed, fuscos, or bistre squamules below the ring, firm, unequal, often thickened at the base. Ring white above, greyish and scaly on the outside, often stained yellowish, membranaceous, fugacious. Gills white, often stained with yellow, marginato-adnexed, separating free, 6–8 mm., broad, crowded, then subdistant, thin. Flesh white, yellowish under the epidermis. Spores white, elliptical, 5–6 × 4 μ, with a large central gutta. Taste sweet. Smell unpleasant. Under pines. Sept.—Oct. Uncommon. (v.v.)

*A. constricta* Fr. = *Lepiota constricta* (Fr.) Quéél.

*A. glioderma* (Fr.) Quéél. = *Lepiota glioderma* Fr.


P. 1–3 cm., rufescent, pale rose, yellowish, or brownish, convex, then plane, depressed at the centre, often slightly umbonate, viscid; margin faintly sulcate. St. 2.5–5 cm. × 4–6 mm., whitish, tinted with the colour of the p., and floccoso-scaly or tomentose below the ring, equal. Ring
concolorous, membranaceous, densely floccoso-scaly. Gills white, becoming tinted with the colour of the p. when old, almost free, crowded, thin, ventricose. Flesh white, or yellowish, thin. Spores white, globose, 5–6μ. Coniferous woods, hothouses, and about old stumps. June—Sept. Rare in woods.


\(\text{αιματίτης}\), bloody.

P. 2–4 cm., red liver colour, hemispherical, then somewhat flattened, or depressed at the centre, thin, slightly hispid, becoming smooth. St. 4–6 cm. × 3–5 mm., concolorous below the ring, whitish above, equal; base thickened, white floccose. Ring whitish, then concolorous, submembranaceous, narrow, inferior, scaly beneath, torn, often fugacious. Gills white, then whitish tinged with rose, and becoming rose colour when rubbed, sinuato-adenate, or shortly decurrent, scarcely crowded, narrow, 3 mm. broad. Flesh pale liver colour, slightly yellowish in the st. Spores white, ovoid-ellipsoid, 4 × 3μ. Among fir leaves. Nov. Rare.


Jason and the golden fleece.

P. 2.5–7.5 cm., golden yellow, disc tawny, fleshy, campanulate, then expanded, with a distinct rounded umbo, granularly papillate, granules innate; margin appendiculate with the fibrous veil. St. 5–7.5 cm. × 6–9 mm., concolorous, equal, or slightly thickened at the base, squamulose below the ring. Ring concolorous, distant, squarrose, torn. Gills white, then pallid, adnate, scarcely crowded, thin. Flesh reddish. Spores white, elliptical, 8 × 5μ. Smell strong. Caespitose. On stumps. Sept. Rare.

(b) Gills more or less decurrent.


*Mel*, honey.

P. 5–15 cm., ochraceous yellow, tawny, or bistre, covered with olivaceous, or brownish hairy squamules, fleshy, convex, then flattened, and depressed in the centre; margin paler, striate. St. 7.5–15 × 5–1 cm., yellow, tawny, or bistre, often covered with olivaceous down below the ring, becoming blackish with age, equal, or subbulbous at the base, elastic, fibrillose, apex striate. Ring white, becoming discoloured, apical, silky, membranaceous, thick, swollen at the margin. Gills whitish flesh colour, then rufescent, adnate, decurrent by a tooth, subdistant. Flesh white, becoming discoloured, floccose. Spores white, elliptical, 8–9 × 5–6μ. Cystidia “on edge of gill basidia-like, 40–60 × 8–12μ” Rick. Taste acrid. Edible. Caespitose. On old stumps, and buried fragments of wood. July—Dec. Very common. (v.v.)
var. **sulphurea** (Weinm.) Fr. *Sulphurea*, sulphur colour.

Differs from the type in the yellow, or yellowish flesh coloured p., and the sulphur coloured gills. Woods. Uncommon. (v.v.)


*Minor*, smaller.

Differs from the type in its smaller size, and thinner flesh. Woods (v.v.)


*Maxima*, very large.

Differs from the type in the very large p. 20 cm. or more, st. 15×4 cm., ventricose, attenuated at the base, and very wide ring, tawny on the outside. Woods. Uncommon. (v.v.)

var. **obscura** Gillet. *Obscura*, dark.

Differs from the type in the brownish p., covered with numerous black scales. Woods. Uncommon. (v.v.)


Differs from the type in the smooth pileus. Woods. Common. (v.v.)


*Bulbosa*, bulbous.

Differs from the type in the reddish, bulbous stem, and ochraceous, or bright bistre ring. Woods. Not uncommon. (v.v.)


*Viridis*, green; *flava*, yellow

Differs from the type in the greenish p., covered with yellow scales, or fibrils, in the bright yellow, or sulphur coloured st., the citron yellow ring, and the yellowish gills. Stumps in hedgerows. Uncommon. (v.v.)

var. **laricina** (Bolt.) Fr. Barla, Champ. Alp. Marit. t. 21, figs. 5–6.

*Larix*, larch.

Differs from the type in the flesh coloured, glabrous, not striate p., and the white, narrow gills. Woods. Uncommon. (v.v.)

var. **versicolor** W. G. Sm.¹ *Verto*, I turn; color, colour.

Differs from the type in the bulbous, white, then brown st., and the yellow white, then deep red brown gills.

¹ W. G. Smith probably referred this wrongly to *Agaricus versicolor* With.
var. *Armillaria tabescens* (Scop.) Rea. (= *Clitocybe tabescens* (Scop.) Fr.; *Agaricus gymnopodius* Bull. sec. Quél.) Boud. Icon. t. 51, cited in text under t. 61, as *Clitocybe tabescens* (Scop.) Fr.

Tabesco, I waste away.

Differs from the type in the complete absence of the ring. Woods, and hedgerows. Uncommon. (v.v.)

258. *A. denigrata* Fr. (= *Pholiota erebia* Fr. sec. Lange). Fr. Icon. t. 20.

Denigro, I colour very black.

P. 3–6 cm., dark brown, convex, then plane, obtuse, slightly viscid, looking as if covered with minute drops of water, owing to the presence of elevated warts. St. 5–6 × 1–1.5 cm., pallid fuscous, brown at the base, equal, or ventricose and attenuated, elastic, fibrillosely striate. Ring paler, superior, membranaceous, narrow, entire, fugacious. Gills pale brown, then darker, sinuato-decurrent, narrow. Flesh bistre, firm. Solitary, or caespitose. At the base of old trees, and in garden humus. Sept.—Oct. Uncommon.

259. *A. citri* (Inzenga) Fr.

Citrus, orange.

P. 5 cm., sulphur yellow, convex, then plane, subumbonate, fleshy; margin becoming white, crenulate. St. 5–7.5 cm. × 1–2 mm., whitish, base rufescent, equal, apex white floccose. Gills whitish, adnate, crowded. Spores white, "subglobose, 5 × 4 μ" Massee. Smell of new meal. Caespitose. On stumps. Rare.

(c) Gills equal behind, st. externally subcartilaginous.

260. *A. subcava* (Schum.) Fr.

Sub, somewhat; cava, hollow.

P. 2–5 cm., white, umbo umber, submembranaceous, convexo-plane, viscid, striate to the middle. St. 7–9 cm. × 6 mm., white, fistulose upwards, equal, slightly dotted below the ring. Ring white, inferior, torn. Gills white, decurrent, plane. Flesh white, thick. Fir woods. July—Nov. Rare.

261. *A. mucida* (Schrad.) Fr. Cke. Illus. no. 58, t. 16.

Mucida, slimy.

P. 3–8 cm., white, or grey, thin, almost diaphanous, hemispherical, then expanded, obtuse, more or less radiato-wrinkled, glutinous; margin striate when thinner. St. 4–7.5 cm. × 4–15 mm., white, base thickened and fuliginously scaly, rigid, striate above the ring. Ring white, becoming fuscous from the dried gluten, superior, dependent, often sulcate. Gills white, then yellowish, rounded behind, decurrent by a tooth, distant, broad, lax. Flesh white, mucilaginous. Spores white, globose, 15–17 μ, multi-guttulate. Cystidia none. Taste mild. Edible. On beeches, rarely on oaks and birches. Aug.—Nov. Common. (v.v.)
Spores ferruginous, rough; general veil persistent.

**Rozites Karst.**

(E. Roze, a French mycologist.)


262. **R. caperatus** (Pers.) Karst. (= *Pholiota caperata* (Pers.) Fr.)

Rolland, Champ. t. 59, no. 132, as *Pholiota caperata*.

Caperatus, wrinkled.

P. 4–13 cm., more or less intensely yellow, campanulate, then expanded, obtuse, viscid only when moist and not truly so, incrusted with the floccose-mealy universal veil, which is crowded on the even disc, and squamulose and fugacious towards the thin, lacunoso-wrinkled, sulcate, splitting margin. St. 8–17 × 2.5–3.5 cm., white, becoming tinged with yellow, stout, fibrillose, striate, equal, base often tuberous, and the universal veil often cohering in the form of a volva, squamulose above the ring. Ring white, becoming yellowish, membranaceous, striate, distant, often oblique and torn. Gills clay-cinnamon, adnate, crowded, thin, denticulate. Flesh whitish, becoming yellowish. Spores ferruginous, pip-shaped, 11–12 × 8 μ, rough, 1-guttulate. Cystidia "on edge of gill clavate, 45–50 × 8–10 μ." Rick. Smell and taste pleasant. Edible. Woods. Aug.—Dec. Not uncommon. (v.v.)

Spores ochraceous, or ferruginous, generally smooth; general veil none, or fugacious.

**Pholiota Fr.**

(φολία, a scale; ὀβης, the ear.)

Pileus fleshy, regular. Stem central. Ring membranaceous, persistent, or fugacious, superior, or inferior. Gills adnate, or decurrent by a tooth. Spores ochraceous, or ferruginous, rarely fuscous, elliptical, oval, obovate, subreniform or oblong elliptical, generally smooth, continuous, or with a germ-pore. Cystidia variable. Growing on the ground, or on wood, often caespitose.

I. Growing on the ground, not adnate to mosses, rarely caespitose.

263. **P. aurea** (Mattusch) Fr. (= *Lepiota pyrenaea* Quél. sec. Maire; *Pholiota spectabilis* Fr. sec. Quél.) Fr. Icon. t. 101.

Aurea, golden.

Entirely golden-tawny. P. 4–25 cm., fleshy, convex, obtuse, soft, at first velvety, then torn into innate, hairy squamules. St. 6–28 × 1–3.5 cm., somewhat equal, becoming pale, sprinkled below the ring with
a separating, ferruginous scarf, apex flocculose. Ring membranaceous, externally flocculose and ferruginous-furfuraceous, internally golden-tawny, about 2-5 cm. distant from the p., properly inferior, but appearing to be medial, at first erect, then spreading, sometimes small, often however wide, laciniate. Gills pallid ferruginous, adnexed, then free, attenuated at both ends, ventricose, crowded, connected by veins. Flesh white, becoming yellow. Spores fuscous, elliptical, 9-10 × 4-5μ, 1-guttulate. Cystidia none. Subcaespite. On the ground, and on sawdust heaps. Aug.—Nov. Uncommon. (v.v.)


Differs from the type in the smooth pileus, and somewhat free gills.


Herefordiensis, belonging to Hereford.

Differs from the type in the granulate, tuberculate stem.

264. P. terrigena Fr. (= Pholiota Cookei Fr. sec. Massee.) Fr. Icon. t. 103, fig. 1.

Terra, earth; γεγυμαι, to be born.

P. 3-8 cm., dingy yellow, fleshy, convex, or lens-shaped, then flattened, obtuse, adpressedly silky with fibrils, fibrillosely scaly towards the margin. St. 4-5 cm. × 4-12 mm., concolorous, equal, fleshy-fibrous, covered with floccose, squarrose squamules that become ferruginous. Ring thin, torn. Gills pallid light yellow, then olivaceous-ferruginous, adnate, decurrent with a tooth, scarcely crowded, 4 mm. broad. Flesh yellow. Spores ferruginous, “elliptical, 5-8 × 2-3μ” Karst. Woods, hedges, and old earthy stumps. Aug.—Nov. Uncommon. (v.v.)


επεβος, a place of nether darkness.

P. 2-5 cm., lurid, or becoming ferruginous-lurid when moist, becoming pale (ochraceous clay) when dry, slightly fleshy, convex, then flattened, almost viscid, rugulose; margin striate when dry. St. 2-5-5 cm. × 3-6 mm., fuliginous, becoming pale, equal, often cohering at the base, fibrillose, striate. Ring membranaceous, white, becoming discoloured, sulcate, superior. Gills pallid, then dingy cinnamon, adnate, subdistant. Flesh pale brownish. Spores ferruginous, pip-shaped, 10-12 × 5-6μ, 1-2-guttulate. Woods, pastures, and heaths. Aug.—Oct. Not uncommon. (v.v.)

266. P. ombrophila Fr. δμβρος, a storm of rain; φίλος, loving.

P. 4-8 cm., pale ferruginous when moist, clay colour when dry, convex, then plane, gibbous, here and there repand, almost viscid, very hygrophanous; margin striate when moist. St. 5-8 cm. × 4-8 mm., pallid, fragile, equal, obsoletely fibrillose, or slightly striate. Ring

var. brunneola Fr. Fr. Icon. t. 103, fig. 2. Brunneola, brownish.

Differs from the type in its smaller size, its obtuse, brown pileus, and its narrower gills.


Mollis, soft; χόριον, skin.

P. 5–7.5 cm., tawny yellow, disc darker, margin paler, fleshy, convex, then plane, obtuse, at length depressed, soft like kid leather, shining; margin acute, thin. St. 7.5 cm. × 6–10 mm., pale yellow, equal, erect, silky, apex punctately squamulose. Ring yellow, distant, broad, deciduous. Gills ferruginous, narrowly adnate, crowded, thin, ventricose, 4 mm. broad. Flesh yellow, thin. Spores ferruginous, elliptical, 12 × 5–6 μ. Gregarious. On the ground. June. Rare.

268. P. togularis (Bull.) Fr. Boud. Icon. t. 101.

Togula, a little cloak.


var. filaris Fr. Fr. Icon. t. 104, fig. 4. Filum, a thread.

Differs from the type in being two to three times smaller with a yellowish stem. Lawns, and pastures. July. Uncommon. (v.v.)

269. P. blattaria Fr. Blattarius, like a cockroach.

P. 1.5–2.5 cm., ferruginous, becoming pale, hygrophanous, thin, convex, or umbonate, soon flattened; margin paler, striate. St. 2.5–5 cm. × 2 mm., white, equal, silky, straight. Ring white, membranaceous, distant, silky, entire. Gills watery-cinnamon, rounded behind, free, ventricose. Flesh concolorous, very thin. Spores ferruginous,
elliptical, 8–10 × 4–5μ, 1–3-guttulate. Cystidia "on edge of gill fusiform-subulate, 30–36 × 7–9μ" Rick. Lawns, arable fields, and gardens. Aug.—Sept. Rare. (v.v.)

270. **P. dura** (Bol.) Fr.  

*Durus*, hard.

P. 5–9 cm., tawny tan colour, becoming fuscous, fleshy, somewhat compact, convexo-plane, obtuse, becoming cracked into patches. St. 5–8 cm. × 10–15 mm., *yellowish*, hard, becoming silky-even, then longitudinally cracked when dry, apex thickened, mealy, sometimes ventricose and irregularly shaped, furnished with fibrillose rootlets at the base. Ring white, membranaceous, thin, apical, often torn, fugacious. Gills white, then livid, or fuscous ferruginous, adnate, striato-decurrent with a tooth, ventricose, 7–12 mm. broad. Flesh whitish. Spores ferruginous, elliptical, 9–12 × 6–8μ, with a germ-pore. Cystidia "vesiculose-clavate, on edge of gill almost flask-shaped, 36–50 × 12–18μ" Rick. Smell strong. Fields, and gardens. May—Oct. Not uncommon. (v.v.)


\varepsilon\alpha\nu\theta\omicron\omicron\sigma, yellow; \phi\upsilon\lambda\lambda\omicron\upsilon, a leaf.

Differs from the type in the bright sulphur yellow gills.


*Praecox*, early.


var. *minor* (Batt.) Fr.  

Minor, smaller.

Differs from the type in its smaller size (scarcely 2·5 cm. broad), and in the torn, appendiculate ring. Pastures. Uncommon. (v.v.)

272. **P. sphaleromorpha** (Bull.) Fr.  

\sigma\phi\alpha\lambda\epsilon\rho\omicron\omicron\sigma, deceptive; \mu\omicron\rho\omicron\phi\upsilon, form.

P. 2–5 cm., *light yellow*, fleshy, thin, convexo-plane, obtuse. St. 7–10 cm. × 4–8 mm., *yellowish*, attenuated upwards, silky, base incrassated, villose. Ring whitish, membranaceous, very thin, median, ample, spreading, lax, entire. Gills yellowish, then ferruginous-tan,

II. Growing on wood, or epiphytal, most frequently caespitose.

*P. naked not scaly, but here and there rimoso-rivulose.

Gills pallid, then rufescent, or becoming fuscous.


*Radicus*, having a root.

P. 5–13 cm., clay-coloured, then spotted rufous, fleshy, convexo-plane, viscid, becoming dry. St. 7.5–2.1 × 1–2.5 cm., white, firm, thickened at the base and fusiform rooted, concentrically scaly below the ring, the floccose, erect scales becoming rufous, apex mealy, pruinose. Ring white, membranaceous, distant, rather erect, entire, scaly. Gills pallid, then rufescent ferruginous, rounded behind, somewhat free, very crowded, 6 mm. broad. Flesh whitish, moderately thick. Spores ochraceous, elliptical, 8–9 × 5 μ, “rough. Cystidia on edge of gill filamentous-clavate, 36–40 × 6–8 μ, thin walled” Rick. Smell pleasant, like cherry laurel, or bitter almonds. Taste pleasant. Solitary or gregarious. Woods about stumps. Aug.—Nov. Not uncommon. (v.v.)

274. P. pudica (Bull.) Fr.

*Pudica*, modest.

P. 5–10 cm., whitish, or slightly tawny, disc darker, globose, or oval, then convex, and expanded, obtuse, umbonate, dry. St. 3–6 cm. × 8–10 mm., whitish, straight, or curved at the base, equal, or attenuated upwards, sometimes excentric, fibrous. Ring white, membranaceous, large, spreading, persistent. Gills whitish, then tawny, adnato-decurrent, wide, ventricose. Spores “ferruginous 8 × 5–6 μ” Sacc. Often solitary. In woods on old trunks, at the base of trees, and on elder trunks. May—Nov. Uncommon.


*λέον*, a lion; χρυσα, colour.

P. 5–10 cm., bright tawny, whitish at the margin, fleshy, convexo-plane, at length depressed, soft, generally rivulose from the cracking of the cuticle. St. 7–12 cm. × 8–13 mm., paler than the pileus, white above, nearly equal, fibrous. Ring tawny, persistent, membranaceous. Gills pallid, then cinnamon, rounded, adnate, slightly ventricose. Flesh yellowish, somewhat tawny under the cuticle of the p., and at the base of the st. Spores ferruginous, elliptical, 7–8 × 5 μ, 1–2-guttulate. Smell and taste pleasant. Edible. Caespitose. Elm stumps. July—Oct. Not uncommon. (v.v.)
276. **P. aegerita** (Porta) Fr. (= *Pholiota capistrata* Cke., *Pholiota luxurians* (Batt.) Fr.) Cke. Illus. nos. 385, 386, t. 364, as *Pholiota capistrata* Cke. and t. 453. *av'geios*, the black poplar.

P. 3–12 cm., tawny, becoming pale white towards the margin, fleshy, convex then plane, *rivuloso-wrinkled*, slightly viscid when moist, silky when dry, disc often areolately cracked; margin incurved, scalloped. St. 8–15 × 1.5–3 cm., white, becoming stained with yellow, attenuated downwards, fibrillose, often striate. Ring white, membranaceous, large, superior, reflexed. Gills pallid, then fuscous, adnate, decurrent with a small tooth, crowded. Flesh white, brownish under the cuticle of the p. and at the base of the st. Spores ferruginous, elliptical, 9–10 × 5–7 μ. Cystidia broadly clavate or pear-shaped, 30–36 × 12–15 μ. Smell and taste pleasant. Edible. Caespitose. Stumps, especially elm. May—Nov. Common. (v.v.)

277. **P. Junonia** Fr. Cke. Illus. no. 397, t. 369.

*Junonia*, belonging to Juno.

P. 4–8 cm., rich yellow, or tawny yellow, fleshy, firm, convexo-plane, obtuse. St. 4–9 cm. × 6–14 mm., tawny, yellow and mealy above the ring, equal, firm, incurved, often excentric. Ring concolorous, membranaceous, inferior, reflexed. Gills yellow, then tawny, adnate, crowded, broad. Flesh pale yellow, compact. Spores ferruginous, elliptical, 8–10 × 6–7 μ. Usually solitary. Trunks. Oct. Uncommon. (v.v.)

**P. scaly, gills changing colour. P. not hygrophanous.**

a. Gills pallid, then becoming fuscous, olivaceous, clay coloured, not truly ferruginous.

278. **P. destruens** (Brond.) Fr. (= *Pholiota comosa* Fr. sec. Quél., *Pholiota heteroclita* Fr. sec. Bres.) Bres. Fung. Trid. t. 84.

*Destruens*, destructive.

P. 6–20 cm., yellowish white, disc becoming tawny, covered with white, woolly, fugacious scales, fleshy, somewhat viscid, convex, then flattened, sometimes gibbose, or broadly umbonate; margin at first involute, fibrillose. St. 5–17 × 2–3 cm., concolorous, covered with white, fugacious squamules, becoming smooth, attenuated at the apex, base bulbous and rooting. Ring white, floccose, fugacious. Gills white, then becoming umber cinnamon, rounded behind, adnerved, or plano-adnate and striato-decurrent, crowded. Flesh white, fulvous cinnamon in the base of the st. Spores fuscos ferruginous, elliptical, 8 × 5 μ. Cystidia “on edge of gill cylindrical, or clavate-capitate, 40–60 × 8–12 μ” Rick. Smell unpleasant, taste bitter, then sweet. Poplar, birch, beech, and willow trunks. Sept.—Nov. Uncommon. (v.v.)
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279. P. heteroclit a Fr. (= Pholiota destruens (Brond.) Fr. sec. Bres.) Cke. Illus. no. 389, t. 366. ἐτερός, one side; κλίω, I lean.

P. 5–15 cm., whitish, or yellowish, tawny when old, generally broken up into broad, scattered, innate, adpressed, spot-like (darker) scales, fleshy, compact, hemispherical, then flattened, very obtuse, sometimes viscid when old and wet; margin often appendiculate with the remains of the ring. St. 5 × 1–2.5 cm., white, commonly curved-ascending, base bulbous and bluntly rooting, hard, fibrillose. Ring floccoso, fugacious, cortinate, encircling the stem with an annular zone. Gills pallid, at length dirty ferruginous, rounded behind, slightly adnexed, very broad, crowded. Flesh white, rhubarb coloured at the base of the stem. Spores ferruginous, “8–10 × 5–6 μ” Karst. Smell strong, pungent, almost that of horse-radish. Solitary. Trunks of poplar, birch, and willow. Sept.—Nov. Uncommon.

280. P. aurivella (Batsch) Fr. Aurum, gold; vellus, fleece.

P. 5–17 cm., yellow, or ferruginous yellow, fleshy, campanulate, then convex, compact at the disc, gibbous when expanded, moist, with darker adpressed spot-like scales; margin involute, sprinkled with floccose scales. St. 7–10 × 1–1.5 cm., yellowish, clothed with adpressed, floccoso-fibrillose, fuscous ferruginous scales up to the ring, at length naked, fibrillose, equal, somewhat rooting. Ring floccoso-fibrillose, superior. Gills whitish, then straw coloured, at length ferruginous date-brown, or somewhat fuscous, sinuato-adnexed, broad, crowded. Flesh white, becoming yellowish. Spores ferruginous, elliptical, 6–7 × 4–5 μ, 1–2-guttulate. Cystidia “on edge of gill clavate-fusiform, 30–45 × 6–9 μ, contents becoming yellow” Rick. Caespitose, or solitary. On old trunks, and stumps. Sept.—Nov. Uncommon. (v.v.)

var. filamentos a (Schaeff.) Fr. Filum, a thread.

Differs from the type in the smaller, fulvous pileus, with subconcentric, adnate scales, in the filamentous stem, and the floccoso-radiate ring. Pine woods.


P. 3–10 cm., saffron ferruginous, or ochraceous, fleshy, campanulato-convex, then flattened, obtusely umbonate, or gibbose, squarrose with innate, crowded, revolute, darker (becoming fuscous) persistent scales. St. 6–20 × 1–2.5 cm., concolorous, attenuated downwards, often incrassated at the base, squarrose up to the ring with crowded, revolute, darker scales. Ring of the same colour as the scales, fibrillose, laciniate, superior. Gills pallid olivaceous, then ferruginous, adnate with a recurrent tooth, crowded, narrow. Flesh light yellow. Spores ferruginous, elliptical, 7–9 × 4–5 μ. Cystidia “clavate, pointed, 30–

var. Mulleri Fr. Cke. Illus. no. 392, t. 471.

O. F. Muller, the Danish mycologist.

Differs from the type in the obtuse, moist, pallid p., with darker adpressed scales, in the equal stem, the entire ring, and in the gills becoming fuscous. Spores ferruginous, elliptical, 7−9 × 4−5 μ, 1−2-guttulate. On beech stumps. Sept.—Oct. Not uncommon. (v.v.)

var. verruculosa (Lasch) Fr. Cke. Illus. no. 398, t. 370, upper figs., as Pholiota tuberculosa (Schaeff.) Fr. sec. Boud.


var. reflexa (Schaeff.) Fr. Schaeff. Icon. t. 80. Reflexa, bent back.

Differs from the type in the thinner, cuspidately umbonate, pilosely-squamulose p., the long, equal stem, and the membranaceous ring. At the base of oak, and beech trees. Uncommon.

282. P. subsquarrosa Fr. Fr. Icon. t. 103, fig. 3.

Sub, somewhat; squarrosa, scaly.

P. 5−6 cm., brown-ferruginous, with darker, adpressed, floccose scales, fleshy, convex, obtuse, or gibbous, viscid. St. 5−8 cm. × 8−10 mm., yellow-ferruginous, clothed with darker, adpressed scales, equal, furnished with an annular zone at the apex. Gills pale, then dingy yellow, deeply sinuate, emarginate, almost free, arcuate, crowded. Flesh of stem becoming yellow-ferruginous. Spores ochraceous, oblong-elliptical, 4.5−5 × 2−2.5 μ. Cystidia ochraceous, fusiform, tapering into a long exserted point, 25−30 × 6−8 μ, thick walled, contents yellowish, granular. Subcaespitose. On fir stumps and at the base of trunks. Sept. Uncommon. (v.v.)

283. P. grandis Rea.

Grandis, large.

P. 20−30 cm., fulvous tawny, fleshy, convex, then expanded and broadly gibbous, covered with innate, deep tawny squamules at the circumference, which become revolute at the disc. St. 25−30 × 6−7 cm., tawny below the ring, paler and deeply striate for 5 cm. above, fusiform, slightly squamulose. Ring distant, almost fugacious. Gills pallid, then fuscous, deeply sinuato-decurrent, very broad, 1−5−2 cm. wide, attenuated in front, somewhat crowded. Flesh light yellow, ferruginous

β. Gills yellow then truly ferruginous, or tawny.

284. P. spectabilis Fr. Fr. Icon. t. 102. Spectabilis, remarkable.

P. 5–13 cm., tawny, or golden yellow, then becoming pale, fleshy, compact, convex, obtuse, shining as if varnished in dry weather, torn into adpressed, innate, pilose squamules of the same colour, continued into the veil at the inflexed margin. St. 6–13 × 2–3 cm., sulphur yellow, hard, more or less ventricose, extended into a fusiform root, sheathed with the veil, sometimes squamulose, sometimes smooth, shining, apex mealy. Ring yellowish, becoming discoloured, inferior, persistent, spreading. Gills pure yellow, becoming ferruginous, adnate, most frequently with a small decurrent tooth, very crowded. Flesh sulphur yellow, reddening when touched, thick, hard. Spores ferruginous, elliptical, 8–9 × 5 μ, 1-guttulate. Smell pleasant. Taste bitter-aromatic. Caespitose. Stumps, and at the base of trees, especially ash and apple. Aug.—Dec. Common. (v.v.)


P. 3–17.5 cm., yellow, covered with superficial, floccose, subconcentric, fugacious, ferruginous scales, fleshy, convex, then plane, somewhat gibbous, very viscid. St. 6–15 × 1–2.5 cm., whitish, then light yellow, clothed with squarroso-reflexed, separating, ferruginous scales, thickened downwards, viscid. Ring yellow, at length ferruginous, floccoso-radiate, cortinate. Gills pallid light yellow, then ferruginous, adnate, slightly rounded, broad. Flesh yellowish, tawny at the base of the stem. Spores fusco ferruginous, elliptical, 6–7 × 3–4 μ. Beech, ash, and birch trunks. July—Oct. Not uncommon. (v.v.)


Lucifera, light-bringing.

P. 3–5 cm., yellow, covered with minute, adpressed, fugacious, tawny scales, fleshy, convexo-plane, at length umbonate, sometimes gibbous, viscid, becoming smooth with age. St. 2–5 cm. × 4–8 mm., yellow, covered with floccose, fugacious, ferruginous scales, pale yellow above the ring, equal, or attenuated downwards. Ring ferruginous, apical, floccose, fugacious. Gills yellow, then cinnamon, or ferruginous, sinuato-adnate, crowded, margin crenulate, pubescent, white. Flesh yellow, ferruginous in the stem. Spores yellow under the microscope, obovate, or subreniform, 7–8 × 5–6 μ. Cystidia “on edge of gill clavate-subulate, 30–35 × 6–8 μ” Rick. Trunks, branches, straw, and burnt earth. Sept.—Oct. Rare. (v.v.)
287. **P. flammans** Fr. Fr. Icon. t. 104, fig. 1. Flammans, flaming.

P. 2–10 cm., yellow tawny, sprinkled with superficial, pilose, somewhat concentric, paler, or sulphur yellow, squarrose, or curly scales, convex then plane, subumbonate. St. 5–8 cm. × 4–10 mm., very light yellow, as are also the crowded squarrose scales, equal, often flexuose. Ring concolorous, floccose, apical. Gills bright sulphur yellow, then ferruginous, adnate, somewhat thin, crowded. Flesh light yellow, thin. Spores ferruginous, elliptical, 8 × 4 μ, 1-guttulate. Cystidia "clavate-bottle-shaped, rarely pointed, 30–33 × 6–8 μ, contents becoming yellow" Rick. Gregarious, or solitary. Pine woods. July—Oct. Common. (v.o.)

288. **P. tuberculosa** (Schaeff.) Fr. Fr. Icon. t. 104, fig. 2, as *Pholiota tuberculata*.

Tuberculosa, having swellings.

P. 3–5 cm., tawny yellow, compactly fleshy, convexo-plane, obtuse, sometimes depressed, smooth, then broken up into innate, broad, adpressed scales. St. 2.5–4 cm. × 4–6 mm., bright light yellow, incurved, base bulbous, rooting, fibrillose, somewhat scaly, often excentric. Ring concolorous, floccose, reflexed, fugacious. Gills light yellow, then tawny, or spotted ferruginous, emarginate, crowded, broad, plane, edge serrulatate, white floccose. Flesh becoming yellow, not very thick. Spores ochrey-ferruginous, elliptical, 5–8 × 3 μ. Solitary, or caespitose. Beech and birch trunks, and on sawdust. Oct. Uncommon.

289. **P. curvipes** Fr. Fr. Icon. t. 104, fig. 3. Curvus, bent; pes, foot.

P. 3–5 cm., tawny yellow, or orange, fleshy, thin, but slightly firm and tough, convex, then plane, obtuse, wholly innato-flocculose, then torn into minute scales. St. 2.5–5 cm. × 2–6 mm., light yellow, equal, incurved, tough, fibrillose, or delicately squamulose, sometimes attenuated downwards. Ring floccose, fugacious, rarely manifest. Gills light yellowish, at length tawny, adnate, crowded, 4–6 mm. broad, edge white, at length floccoso-crenate. Flesh yellowish, darker in the stem. Spores slightly tawny, "6–7 × 3–4 μ." Karst. Smell and taste pleasant. On sawdust, and fallen trunks, especially poplar, birch, and rose bushes. Oct. Rare.

290. **P. muricata** Fr. *Muricata, pointed.*

P. 2–3 cm., yellow, covered with innate, fasciculate, granular, or needle-shaped, tawny flocci, that are either erect, or convergent like the warts of a Lycoperdon, convex, then expanded, obtuse, or umbilicate. St. 2.5–5 cm. × 2–4 mm., pale yellow, becoming fuscous, covered up to the ring with floccose, subsquarrose, or peronate, brownish tawny squamules, equal, or curved. Ring inferior, small, or incomplete, squamulose, or floccosely radiating, fugacious, like that of *Lepiota granulosa*. Gills whitish, or yellow, at length pale cinnamon, adnexed,

291. **P. Erinacea** (Fr.) Quél. (= Naucoria Erinacea Fr.) Cke. Illus. no. 513, t. 480, as Naucoria Erinacea Fr. Erinaceus, a hedgehog.

P. 5–15 mm., ferruginous-umber, scaly and prickly with very dense, crowded, fasciculate, squarrose flocci, slightly fleshy, convex, umbilicate; margin at first involute, appendiculate with the fibrillose remains of the ring. St. 1–1.5 cm. × 2–3 mm., concolorous, tough, equal, incurved, everywhere shaggy with strigose hairs. Ring yellowish, fibrillose, ferruginous on the under side. Gills concolorous, adnate, subdistant, ventricose. Flesh reddish, dry, tough. Spores ferruginous, elliptical, 9–11 × 6–7μ, 1–2-guttulate. Dead branches. Jan.—Dec. Not uncommon. (v.v.)

292. **P. Cruentata** Cke. & Sm. Cke. Illus. no. 399, t. 502.

Cruentata, stained with blood.

P. 4–5 cm., yellow, then turning red, breaking up into darker, adpressed scales, fleshy, convex, then expanded, obtuse; margin incurved. St. 3–5 cm. × 6–8 mm., concolorous, curved, attenuated at the base and rooting, dark red brown and sparsely squamulose below. Ring fibrillose. Gills yellow, then clay colour, emarginate, rather distant, 4–6 mm. broad, finally separating from the stem. Flesh pale yellow, at length changing to cinnabar colour. Taste insipid. Oak stumps, and burnt ground. Aug.—Sept. Uncommon.

***Hygrophanous. Gills cinnamon (not at first light yellow).

293. **P. Paxillus** Fr. Paxillus; like the species Paxillus involutus.


Dissimulans, deceiving.

P. 2–3 cm., lurid, becoming pale, or whitish, campanulate, very obtuse, at length flattened, scarcely viscid, hygrophanous; margin involute. St. 3–5 cm. × 3–4 mm., shining white, thickened downwards, fistulose with transverse dissepiments, base cottony. Ring erect, mostly persistent. Gills pallid clay colour, sinuato-adnate, at length decurrent. Flesh white, thin. Spores fusco-s, elliptical, 7 × 4–4.5μ. Sloe and hawthorn sticks. Oct.—Nov. Rare.
295. **P. sublutea** (Fl. Dan.) Fr.  
*Sub*, somewhat; *lutea*, yellow.  

296. **P. phalerata** Fr. Fr. Icon. t. 105, fig. 1.  
*Phalerata*, decorated.  
P. 5 cm., yellow, covered with superficial, fugacious, pale scales, fleshy, thin, convex, then plane, obtuse, moist; margin involute, appendiculate. St. 7–10 cm. × 6 mm., *concolorous*, base becoming *ferruginous*, equal, everywhere *fibrillose*, or fasciculately squamosely pilose, adpressedly flocculose above the ring. Ring white, distant, entire, reflexed. Gills yellow, then *cinnamon*, adnato-decurrent, 2 mm. broad, attenuated at the margin. Flesh *concolorous*. Spores "elliptical, 6–7 × 3–4 μ, smooth. Cystidia on edge of gill fusiform-filamentous, 30–36 × 5–6 μ" Rick. Pine woods, on twigs, pine needles, and the ground. Rare.

297. **P. confagosa** Fr. Fr. Icon. t. 105, figs. 2, 3.  
*Confagosa*, rough.  
P. 3–4 cm., brick-red, or *cinnamon rufous* when moist, tawny when dry, hygrophanous, slightly fleshy, convexo-plane, very obtuse, densely *flocculoso-furfuraceous*, becoming smooth with age. St. 2.5–7.5 × 2–4 mm., *pale ferruginous*, fragile, equal, flexuose, or incurved, *fibrillosely peronate* with the veil, or naked, striate above the ring. Ring *white*, membranaceous, spreading, fibrillose, persistent, or fugacious, at length reflexed. Gills *rufous*, or *cinnamon rufous*, sometimes tinged with purple, adnate, scarcely decurrent, very thin, crowded, linear, 2 mm. broad, *edge* under a lens unequal, *crenulate*. Flesh *concolorous*, becoming *pale*. Spores "ferruginous, elliptic-oblong, 8 × 4 μ" Massee. Subcaespitose. Beech, and fir trunks, and on old fallen elm. Oct. Uncommon.

298. **P. mutabilis** (Schaeff.) Fr. Cke. Illus. no. 402, t. 355.  
*Mutabilis*, changeable.  
P. 3–6 cm., *cinnamon* when moist, becoming *pale* when dry, hygrophanous, slightly fleshy, convex, then flattened, commonly obtusely umbonate, sometimes depressed, sometimes squamulose when young. St. 4–8 × 5–1 cm., *ferruginous blackish*, or *umber downwards*, paler upwards, *rigid*, equal, or attenuated downwards, *squamulose scaly* up to the ring. Ring *concolorous*, membranaceous, externally squamulose. Gills *pallid*, then *cinnamon*, adnato-decurrent, crowded, rather broad. Flesh *white*, tinged brownish under the cuticle of the *p.* and in the st. Spores deep ochraceous, elliptical, or subglobose, 7–8 × 4–5 μ, 1-guttu-

299. **P. marginata** (Batsch) Fr. Cke. Illus. no. 403, t. 372.

*Marginata*, furnished with a border.

P. 2-5 cm., *honey coloured when moist, tan when dry*, hygrophanous, slightly fleshy, convex, then expanded, *obtuse, margin striate*. St. 3–9 cm. × 2–8 mm., *concolorous, equal, fibrilllose, striate, but becoming fuscous, and commonly white velvety at the base*. Ring pale yellow, membraneous, distant, often cortinate and fugacious. Gills *pallid, then darker cinnamon, adnate, crowded, thin, narrow*. Flesh *concolorous, becoming paler*. Spores *deep ochraceous, fusiform-elliptical, 8–10 × 5 μ, 1–2-guttulate, “almost punctate”* Rick. Cystidia *“ventricose-fusiform, 50–60 × 10–12 μ”* Rick. On twigs, and on the ground, especially in coniferous woods. Aug.—Dec. Common. (v.v.)

300. **P. sororia** Karst.

*Sororia*, sisterly.

P. 2-5-4 cm., *tawny cinnamon, convex, then expanded, slightly striate, squamulose*. St. 5 cm. × 4–6 mm., *concolorous, then paler, variegated with white squamules, equal, wavy, apex scurfy*. Gills *pallid, then cinnamon, sinuato-adnate, crowded*. Spores 6–7 × 3–4 μ. On chips, and twigs. Rare.

301. **P. mustelina** Fr. Cke. Illus. no. 404, t. 356.

*Mustelina*, belonging to a weasel.

P. 1–1·5 cm., *yellow, ochraceous, slightly fleshy, campanulate, convex*. St. 2–2·5 cm. × 1–2 mm., *pallid, equal, base thickened and white villose, white mealy above the ring*. Ring brown, membraneous, reflexed. Gills *tawny cinnamon, adnate, subdistant, edge white, crenulate*. Stumps, especially pine. Sept. Uncommon. (v.v.)

302. **P. unicolor** (Fl. Dan.) Fr.

*Unicolor*, of one colour.

P. 6–20 mm., *bay brown, then ochraceous, hygrophanous, fleshy, campanulate, then convex, umbonate, at length striate*. St. 3–4 cm. × 2 mm., *concolorous, or bistre brown at the base, equal, apex mealy*. Ring *yellowish, membraneous, thin, entire, distant, persistent*. Gills *pallid-ochrey, slightly adnexed, ventricose, broad, edge white*. Flesh *concolorous, thin*. Spores *deep ochraceous, elliptical, 7–8 × 4–5 μ, 1-guttulate, “almost punctate. Cystidia on edge of gill filamentous, ventricose at base, 50–60 × 8–10 μ, apex 5 μ in diam.”* Rick. Trunks and branches of larch, and on the ground. Sept.—Nov. Not uncommon. (v.v.)
III. Growing amongst mosses. Like ringed Galerae, hygrophanous.

303. P. pumila Fr. Fr. Icon. t. 105, fig. 4. *Pumila*, dwarf.

P. 8–15 mm., ochraceous, somewhat fleshy for its size, campanulate, then hemispherical, obtuse. St. 2.5–4 cm. × 2–3 mm., concolorous, equal, lax. Ring distinct, floccoso-woven in the form of a zone like that of the Cortinarii. Gills pallid, wholly adnate, at first ascending, then plane, 4–6 mm. broad, almost triangular, crowded, stopping short of the acute margin. Flesh concolorous, thin, watery. Spores ferruginous, pip-shaped, 9 × 4–5 μ. Amongst moss in pastures, on twigs, sawdust, and old walls. Aug.—Jan. Common. (v.v.)

304. P. mycenoides Fr. (= Galera mycenoides (Fr.) Quél.) Boud. Icon. t. 102. *Mycena*, the genus Mycena; ἐδέσθη shape.

P. 1–2.5 cm., ferruginous, disc darker, transparent when moist; becoming tawny, or pale when dry, membranaceous, hygrophanous, striate, campanulate, soon hemispherical, somewhat obtuse. St. 4–10 cm. × 1–3 mm., tawny ferruginous, darker than the pileus, filiform, apex furfuraceous, paler, then concolorous. Ring white, membranaceous, entire, large, persistent. Gills yellowish, then ferruginous, adnate, with a small decurrent tooth, subdistant, at length plane. Flesh concolorous, darker in the stem. Spores ferruginous, broadly elliptical, 10–11 × 6–7 μ, 1–3-guttulate. Amongst moss in pastures, bogs, and on lawns. Sept.—Dec. Not uncommon. (v.v.)

305. P. rufidula Kalchbr. Kalchbr. Icon. t. 37, fig. 3. *Rufus*, red.

P. 6–10 mm., rufous brick-red, clay colour when dry, often becoming livid round the umbo, somewhat fleshy, convex, then somewhat plane, disc always depressed, white-flocculose at the margin from the white veil, rarely appendiculate. St. 3–4 cm. × 2–3 mm., watery rufescent, sprinkled with white fugacious fibrils, floccose at the white base. Ring white, floccose, somewhat persistent, subapical, narrow, spreading, reflexed. Gills reddish, adnate, then decurrent, linear, branched, of different lengths, subdistant. Flesh concolorous. Spores ochraceous ferruginous, "8–10 × 4–6 μ," Masse. Pastures, and lawns. April. Rare.

Spores purple, or fusceous.

**Stropharia** Fr.

(*στρόφως*, a belt.)

Pileus fleshy, regular. Stem central. Ring membranaceous, adnate, persistent, or fugacious. Gills more or less adnate. Spores purple, or fusceous, rarely blackish, elliptical, elliptic-oblong or pip-shaped, smooth, with an apical germ-pore. Cystidia variable. Growing on the ground, on dung, and on wood, sometimes caespitose, subcaespitose, or fasciculate.
A. Pellicle of the p. even, or scaly, most frequently viscid.

*Not growing on dung.


P. 3–12 cm., *yellowish-livid,* then tan, fleshy, convex, then plane, obtuse, smooth, viscid. St. 4–15 cm. × 5–13 mm., *white,* equal, clothed with white, revolute, squarrose scales below the ring. Ring white, large, distant. Gills white, then blackish, adnato-decurrent, 3–8 mm. broad. Flesh white, compact. Spores brownish purple, elliptical, 7–8 × 4–5 μ. Amongst straw refuse, and in pine woods. Nov. Rare. (v.v.)


Cecil H. Spencer Perceval.

P. 3–6 cm., *ochraceous,* fleshy, umbonate, then flattened, slightly viscid, white floccose here and there especially at the margin, flocci at length coming off. St. 5–7.5 cm. × 6 mm., *pallid upwards,* attenuated upwards from the thickened base, rooting, transversely scaly. Ring narrow, more or less persistent. Gills white, then somewhat cinereous, at length *pallid umber,* adfixed, 8 mm. broad, very distant. Flesh at length dull umber. Spores fuscos, oblong elliptic, 16–17 × 7 μ. Sawdust, and rotten wood. Sept.—Nov. Uncommon. (v.v.)

308. **S. versicolor** (With.) Fr. (= *Armillaria mellea* (Vahl.) Fr. var. *versicolor* W. G. Sm.) *Versicolor,* of various colours.

P. 2.5–10 cm., *becoming greenish brown,* fleshy, convexo-plane, scaly, the scales of the disc crowded. St. 5 cm., as thick as a swan-quir, *whitish fuscos,* spongy-stuffed, *bulbous.* Ring persistent. Gills *pallid,* then *rufous brown,* decurrent. On the ground.

309. **S. aeruginosa** (Curt.) Fr. Cke. Illus. no. 555, t. 551.

*Aeruginosa,* full of copper rust.

P. 3–8 cm., *verdigris green from the azure blue slime,* becoming pale and yellowish as the slime separates, fleshy, campanulato-convex, then flattened, subumbonate, obtuse when larger, viscoso-pelliculose, often covered with white, fugacious squamules. St. 4–10 cm. × 4–12 mm., concolorous, equal, viscid, covered with white, fugacious squamules below the ring, smooth above. Ring *whitish above,* concolorous on the underside, distant, floccose, fugacious. Gills white, then fuscos, at length somewhat purple, adnate, soft, plane, 4–8 mm. broad, not crowded, edge often white. Flesh *bluish,* becoming *whitish,* not compact, thin at the margin. Spores brownish purple, elliptical, 7–10 × 5 μ. Cystidia “on surface of gill, clavate, often with a short point, 30–33 × 8–10, contents becoming yellow, on edge of gill filamentous-

310. S. squamulosa Massee. 

Squamulosa, squamulose.

P. 4–6 cm., very deep verdigris-green, margin whitish, disc becoming ochraceous with age, fleshy, subglobose, then expanded, and slightly depressed, margin drooping, often appendiculate with the veil, dry and silky from the first, soon becoming broken up into adpressed silky scales. St. 5–7 × 2 cm., paler green than the p., slightly constricted at the apex, fibrillose striate, clothed with white patches of the broken up ring, base white. Gills brown, sinuately adnate, ventricose, rather broad, crowded, thin, dry. Flesh of p. white, tinged with green in the st., rather thin. Spores pale brown, elliptic-oblong, 8–9 × 5μ, obliquely apiculate. Amongst stones, and in woods. Sept.—Oct. Uncommon. (v.v.)

311. S. albocyanea (Desm.) Fr. Cke. Illus. no. 556, t. 552.

Albus, white; κύανος, dark blue.

P. 1–3 cm., verdigris green, becoming whitish, sometimes white and shining when young, fleshy convex, then plane, viscid with a colourless gluten, smooth, naked. St. 5–8 cm. × 6–8 mm., whitish, or tinged green, equal, ascending, or flexuose, fragile, not viscid, smooth, pruinose about the ring. Ring white, becoming stained fuscous with the spores, narrow, distant, often incomplete. Gills whitish, becoming fuscous, sinuato-adnate, 3–4 mm. broad, thin, scarcely crowded. Flesh white, soft, watery. Spores purple, elliptical, 8–9 × 4–5μ, with a large central gutta. Woods, heaths, pastures, and ditches. Aug.—Nov. Not uncommon. (v.v.)


P. 2.5–5 cm., pallid light yellow, becoming livid-purple with the dense gluten with which it is at first besmeared, fleshy, convexo-plane, sub-umbonate, pelliculose, smooth; margin slightly striate. St. 4–7.5 cm. × 3–4 mm., shining white, equal, very flexuose, often decumbent, very soft, dry, silky fibrillose below the ring, pruinose above. Ring white, median, distant, very thin, fugacious. Gills whitish, then fuscous when bruised, whitish at the sides, adnate, with a decurrent tooth, 6 mm. broad, scarcely crowded. Flesh white, thin, soft. Spores fuscous purple, elliptical, 8 × 5μ, 1–2-guttulate. Smell and taste often disagreeable. Heaths, and pastures. Sept.—Nov. Common. (v.v.)

var. Lundensis Fr. Lundensis, appertaining to Lund, Sweden.

Differs from the type in the campanulate, then expanded p., and the stuffed st.
var. *Upsaliensis* Fr.  
*Upsaliensis*, appertaining to Upsala.

Differs from the type in the convex then plane *p*. being distinctly umbonate, and in the hollow st. Woods, and pastures. Sept.—Oct. Uncommon. (v.v.)

var. *pallida* B. & Br.  
Pallida, pallid.

Differs from the type in being very pale.

313. *S. coronilla* (Bull.) Fr. (= *Stropharia melasperma* Fr. sec. Quél.)

Quél. Jur. et Vosg. t. 14, fig. 7.  
κορώνη, a garland.

P. 2–5 cm., ochraceous tawny, fleshy, hemispherical, then expanded, smooth; margin white floccose. St. 3–4 cm. × 4–10 mm., white, becoming yellowish with age or when touched, equal, attenuated at the base. Ring white, narrow, median, striate, then violaceous, with the edge white, sinuato-adnate, crowded. Flesh white, firm. Spores purple, elliptical, 9–10 × 5 μ. Cystidia "on surface of gill clavate, 30–40 × 8–10 μ" Rick. Taste mild. Heaths, and pastures. May—Oct. Not uncommon. (v.v.)

314. *S. obturata* Fr. (= *Stropharia coronilla* (Bull.) Fr. sec. Quél.)

Obturata, stopped up.

P. 2–3 cm., light yellow, fleshy, convex, then plane, obtuse, obsolescently viscid, commonly dry, smooth, often rimosely squamulose. St. 2.5–4 cm. × 6–8 mm., white, firm, attenuated downwards, smooth. Ring white, superior, deflexed. Gills white, then purple umber, adnate, plane, crowded. Flesh shining white, thick, compact. Spores purple brown, 7–9 × 4–6 μ. Pastures. Sept.—Oct. Rare.


μέλας, black; σπέρμα, seed.

P. 3–6 cm., whitish, disc straw coloured, fleshy, convex, then plane and somewhat depressed, soft, smooth, slightly viscid, soon dry, often broken up into patches. St. 4–6 cm. × 6–7 mm., white, subequal, silky fibrillose, becoming smooth, apex striate. Ring white, adnate to the st., striately sulcate to the middle on the upper-side, smooth on the under-side, fugacious. Gills whitish, then violaceous cinereous, at length becoming blackish cinereous, sinuato-adnate, ventricose, crowded. Flesh of *p*. white, at length becoming somewhat straw colour in the st. Spores fuscos, 9–10 × 6 μ. Heaths, pastures, and woods. Aug.—Oct. Not uncommon. (v.v.)

Lutescens, becoming yellow.

Differs from the type in the yellow *p*.
316. **S. squamosa** (Pers.) Fr. Cke. Illus. no. 560, t. 553.  
*Squamosa*, scaly.

P. 2–7.5 cm., brownish when moist, then becoming ochraceous, disc tawny, fleshy, hemispherical, then flattened, more frequently obtuse, or gibbous with an obsolete umbo, viscosa-pelliculose when moist, not viscid when dry, sprinkled with superficial, fugacious, piloso-fasciculate, concentric scales. St. 6–12.5 cm. × 4–6 mm., pallid, becoming ferruginous at the base, equal, tough, pulvulent above the ring, either squarrose with fibrillose reflected scales, or covered over with dense, strigose down below the ring. Ring *pallid*, membranaceous, thin, distant. Gills cinereous, then blackish, edge white, adnate, ventricose, 10–12 mm. broad. Flesh *pallid*, often reddish when moist, thin, watery. Spores brownish purple, broadly elliptical, often depressed on one side, 14–15 × 7–8 μ, with an apical germ-pore. Cystidia "on edge of gill, filamentous-clavate, 50–70 × 4–7 μ" Rick. In troops. Woods and heaths. Sept.—Nov. Common. (v.v.)

var. *aurantiaca* Cke. Cke. Illus. no. 562, t. 555, as *Stropharia thrausta* Kalchbr. var. *aurantiaca*.  
*Aurantiaca*, orange.

Differs from the type in the orange, or brick-red *p*. Woods. Sept.—Oct. Uncommon. (v.v.)

var. *thrausta* (Kalchbr.) Cke. (= *Stropharia luteo-nitens* (Fl. Dan.) Fr. sec. Quél.) Kalchbr. Icon. t. 15, fig. 2. θπαυω, I break.

Differs from the type in being more slender, and in the *p*. being soon denuded of its scales. Woods. Sept.—Oct. Not uncommon. (v.v.)

317. **S. Worthingtonii** Fr. Cke. Illus. no. 563, t. 556.

Worthington G. Smith, the eminent mycologist.


**Growing on dung. Ring often incomplete.**

318. **S. luteo-nitens** (Fl. Dan.) Fr.  
*Luteus*, yellow; *nitens*, shining.

P. 2.5–5 cm., yellow, fleshy, conico-hemispherical, umbonate, smooth, covered with *pallid*, superficial, fugacious squamules towards the margin, viscid when moist, shining when dry. St. 5 cm. × 4 mm., pallid, equal, somewhat firm, minutely silky fibrillose, apex pruinose. Ring white, distant, membranaceous, entire, spreading. Gills cinereous, becoming blackish, subadnate, truly ventricose, broad, plane. Flesh *white*, thin. Spores "at first violet, then olive yellow under the microscope, elliptical,


P. 2–5 cm., somewhat cinnamon when moist, then yellow, and at length ochraceous, fleshy, obtusely campanulate, then convexo-plane, gibbous, smooth, pelliculose, moist, hygrophanous, slightly viscid; margin thin, deflexed, even, at length somewhat striate. St. 5–7·5 cm. × 4–6 mm., straw white, tough, equal, subflexuose, stuffed with a pith, flocculose villous, and slightly silky, dry, apex striate, base white villous. Ring concolorous, incomplete, torn, for the most part commonly adhering to the margin of the p. Gills pallid, somewhat isabelline, at length brown fuscous, adnato-decurrent, plane, 6 mm. broad, very broad behind, somewhat crowded, soft, edge white. Flesh whitish, thick at the disc, sometimes fuscous in the st. when old. Spores black fuscous, broadly elliptical, 13–15 × 8–9 μ., with a large central gutta, and flattened germ-pore. Cystidia “on edge of gill cylindrical-filamentous, 25–30 × 3–5 μ.” Rick. Gregarious, or subcaespitose. On horse dung. Aug.–Oct. Not uncommon. (v.v.)

var. **major** Fr. (= *Stropharia ventricosa* Massée.) Fr. Icon. t. 130, fig. 3. 

Major, larger.

Differs from the type in its much larger size and in the ventricose, rooting st. On horse dung. Sept.–Oct. Not uncommon. (v.v.)


P. 2–3 cm., yellow, fleshy, hemispherical, then expanded, obtuse, orbicular, *pelliculoso-viscid*, smooth; margin sometimes striate. St. 7–10 cm. × 4–6 mm., yellow, equal, stuffed with a separable, fibrous pith, clothed below the ring with the viscid flocculose veil so that it appears as if smooth. Ring viscid, distant, thin, narrow, spreading, floccose. Gills white, then umber fuscous, or olivaceous fuscous, adnate, 4–8 mm. broad, very broad behind, somewhat crowded. Flesh *pallid*, thin at the margin. Spores fuscous purple, oblong elliptical, 18–20 × 8–10 μ., with a flattened germ-pore. Cystidia “lanceolate, 50–70 × 12–18 μ.” Rick. Quélet says that the st. often rises from a sclerotium. Dry dung. Pastures. May—Nov. Common. (v.v.)


P. 1–3 cm., light yellow, fleshy, hemispherical, very obtuse, smooth, viscid. St. 6–10 cm. × 2–3 mm., becoming yellow, apex paler, equal, tense and straight, smooth, smeared with the glutinous veil. Ring viscid,

B. P. without a pellicle, but innato-fibrillose, not viscid.

322. S. caput-Medusae Fr. (= Hypholoma caput-Medusae (Fr.) Rick.) Cke. Illus. no. 568, t. 540.

Caput, head; Medusa, a monster with snakes instead of hair.

P. 3–7.5 cm., disc umber, paler, somewhat tan colour towards the margin, fleshy, ovate, then convexo-expanded, obtuse, or obtusely umbonate, dry, when young very densely, scaly-squamulose with the fuscous veil, soon becoming smooth especially at the disc, which becomes rimosely warty, or granulose; margin thin, splitting. St. 5–12 × 1–1.5 cm., whitish, equally attenuated upwards, somewhat fragile, covered below the ring with fuscous, crowded, imbricate, squarrose scales, white mealy above. Ring white, superior, membranaceous, pendulous, margin very much swollen, floccose, fuscous. Gills clay white, then pale umber, fuscous spotted in appearance, adnate, ventricose, lanceolate, or semiovate, 4–6 mm. broad, not very crowded, fragile. Flesh pallid, thick at the disc. Spores fuscous purple, pip-shaped, 8–9 × 4 μ, 1-guttulate. Cystidia “vesiculose-flask-shaped, 45–60 × 12–20 μ, rounded above” Rick. Subcaespitose, or fasciculate. On and near pine stumps. Sept.—Oct. Rare. (v.v.)

323. S. scobinacea Fr. (= Stropharia versicolor (With.) Quél., Hypholoma scobinacea (Fr.) Rick.) Cke. Illus. no. 1179, t. 1189.

Scobinacea, powdered.

P. 3–5 cm., fuscous, disc livid, becoming yellow, circumference grey-violaceous, fleshy, hemispherical, then expanded, gibbous, slightly sulcate, covered with crowded, adpressed, separating, fugacious, blackish squamules. St. 6–9 cm. × 6–8 mm., white, attenuated from the thickened base, fragile, fibrillose, apex mealy. Ring white, superior, fugacious. Gills whitish flesh colour, then purple, adnate, crowded, crenulated. Flesh whitish, pinkish when exposed to the air, thin. Spores brownish purple, elliptical, 7–8 × 3 μ. Caespitose. On and near stumps, especially ash. April—Oct. Uncommon. (v.v.)

S. cotonea Quél. = Hypholoma lacrymabundum Fr.

324. S. Battarrae Fr. Quél. Jur. et Vosg. t. 22, fig. 4, as Stropharia aculeata Quél.

J. A. Battarra, author of Fungorum Agri Ariminensis Historia.

P. 5–7 cm., whitish, grey, fuscous, or olivaceous, fleshy, hemispherical, then plane, obtuse, covered with darker, adpressed, fibrillose scales,
which are erect on the disc; margin appendiculate with the partial veil. St. 2-5-5 cm. × 5-6 mm., whitish, incurved, thickened at the base, covered below the ring with imbricate, erect, fibrillose, fuscous, or olivaceous scales, which often become rufescent, apex pruinose. Ring white, membranaceous, thin, fugacious. Gills white, then rosy, and at length fuscous, sinuato-adnate, crowded, edge white. Flesh white, thin, fragile. Spores “brownish purple, elliptical, 10μ” Quél. Poplars, and poplar stumps. Rare.


P. 4-5 cm., ochraceous, brown when dry, fleshy, campanulate, obtuse, with a broad umbo, minutely rívulose, adorned with superficial, fugacious, white scales; cuticle not peeling off. St. 5-7 cm. × 4-6 mm., snow white, cylindrical, apex pulverulent, brownish with silky transverse scales below. Ring superior, deflexed. Gills pallid, then brown, adnate, sending a line down the st. but not truly decurrent, transversely striate. Flesh white, brownish towards the base of the st., thick at the disc. Spores dark brown, “10 × 5μ” Masse. Caespitose. Fir stumps. Sept.—Nov. Rare.

326. S. spintrigera Fr. (= Hypholoma appendiculatum Bull. sec. Quél.) Fr. Icon. t. 132, fig. 1.

Spinther, a bracelet; gero, I wear.

P. 2-10 cm., brownish, or pinkish tan, becoming pale, fleshy, fragile, ovate, then expanded, smooth, soft. St. 5-15 cm. × 4-10 mm., shining white, equal, or slightly ventricose, base often subbulbous, floccosely squamose, or fibrillose, apex naked. Ring white, very distant, thin, fugacious. Gills brownish fuscous, adnate, linear, 2-8 mm. wide, joined behind, subdeliquescent. Flesh white, thin, almost none at the margin. Spores fuscous cinereous, elliptical, 7-8 × 4-5μ. Caespitose. On trunks and stumps. Sept.—Oct. Uncommon. (v.v.)

327. S. punctulata (Kalchbr.) Fr. (= Flammula gummosa (Lasch) Fr. sec. Quél.) Kalchbr. Icon. t. 14, fig. 2, as Pholiota punctulata Kalchbr.

P. 2-5-3 cm., pallid, tinged slightly yellowish or fuscous, fleshy, convex, obtuse, disc somewhat depressed, dry, minutely squamulously punctate from the veil, at length smooth; margin involute. St. 2-5-5 cm. × 4-6 mm., pallid, equal, or bulbous at the base, clothed below the ring with fibrillose, puctiform squamules, smooth above. Ring superior, or subapical, thin, formed of the fibrils of the veil brought together in a zone, fugacious. Gills pallid, then pale umber, sinuato-adnate, decurrent with a tooth, 4-6 mm. broad. Flesh becoming pale fuscous, tawny at the base of the st., thin. Spores fuscous. On buried chips. Sept.—Oct. Rare.

9—2
328. **S. hypsipus** Fr. Fr. Icon. t. 132, fig. 2. *υΨρί-πονς*, high-footed.


329. **S. cothurnata** Fr. Fr. Icon. t. 132, fig. 3.

κόθορνος, a high hunting boot.

P. 1–2.5 cm., *white, submembranaceous*, convex, then plane, obtuse, smooth, silky smooth under a lens. St. 3–5 cm. × 2–3 mm., *white*, equal, soft, *floccosely villose below the ring*, smooth above. Ring *white*, *median*, *narrow*. Gills *white*, *becoming fuscous*, adnexed, ventricose, crowded. Flesh *watery white*, thin at the disc. Shady fir woods. Rare.

*S. lacrimabunda* (Bull.) Quél. = **Hypholoma velutinum** (Pers.) Fr.

*S. pyrotricha* (Holmsk.) Quél. = **Hypholoma pyrotrichum** (Holmsk.) Fr.

**With an arachnoid or filamentous general veil.**

1. Veil forming an arachnoid, fugacious ring on the stem.

Spores ochraceous, or ferruginous.

**Cortinarius** Fr.

(*Cortina, a veil.*)

Pileus fleshy, regular. Veil arachnoid, distinct from the pellicle of the pileus, viscid, or dry. Stem central. Gills adnate, sinuate, sinuato-adnate, or decurrent, pulverulent with the spores at maturity. Spores ochraceous, citron yellow, golden, clay colour, cinnamon, ferruginous, tawny, or fuscous; oval, elliptical, pip-shaped, oblong elliptical, almond-shaped, or fusiform; smooth, verrucose, granular, aculeolate, or echinulate, continuous. Cystidia none on the surface of the gills (except 333), rarely on the edge. Growing on the ground, solitary, caespitose, or subcaespitose.

1. **Phlegmacium** Fr.

(*φλέγμα, phlegm.*)

Veil *viscid* on the pileus, arachnoid, dry on the stem.
I. Partial veil superior, pendulous from the apex of the clavate, or subequal stem as an imperfect ring.

*Gills pallid, then clay colour.


*Triumphans*, triumphal.

P. 6–12 cm., **yellow with a tinge of brown or ochraceous when moist, yellow when dry**, disc sometimes variegated with minute, adpressed, spot-like scales, margin brighter coloured, fleshy, convexo-plane, obtuse. St. 6–17 × 1–2.5 cm., **yellowish white, adorned with tawny scales arranged in many circles, or rings**, firm, attenuated upwards from the ovo-bulbous base, striate; partial veil superior, woven, **somewhat ringed**. Gills **whitish**, or inclining to very pale bluish grey, then clay colour, **and somewhat cinnamon**, emarginate, crowded, 6 mm. broad; edge **toothed, white**. Flesh **whitish**. Spores brown, punctate, elliptical, 9–10 × 4–5 μ, 1-guttulate. Taste mild. Woods, heaths, and commons, generally under birches. Sept.—Oct. Not uncommon. (*v.v.*)

331. **C. (Phleg.) claricolor** Fr. Fr. Icon. t. 141, fig. 2.

*Clarus*, bright; color, colour.

P. 7–12 cm., **yellow, fleshy, convexo-plane**, then depressed, veiled with superficial, **silky-pruinose, villose down**, at first everywhere, soon only round the margin, then smooth, and **for the most part broken up into scales**. St. 7–9 × 1.5–2 cm., **white, or yellow**, hard, clothed up to the superior cortina **with fugacious, white, scaly flocci, or lax down**, either short and bulbous, or elongated and conico-attenuated, or cylindrical. Gills **whitish, then clay colour**, emarginate, almost free, or adnate, crowded, **edge toothed**. Flesh **white**, compact. Spores brown, punctate, pip-shaped, 10–11 × 6–7 μ. Taste pleasant. Woods, and heaths, under birches and conifers. Aug.—Nov. Uncommon. (*v.v.*)

332. **C. (Phleg.) turmalis** Fr. Cke. Illus. no. 684, t. 694.

*Turmalis*, belonging to a troop.

P. 5–9 cm., **yellow-tan**, disc often darker, compact, convex, then plane, very obtuse, **when young veiled with pruinate, very fugacious, villose down**, soon smooth, sometimes obsoletely piloso-virgate. St. 7–15 × 2.5 cm., **shining white when dry**, very hard, rigid, **cylindrical**, attenuated at the base, when young sheathed with a fugacious, **white, woolly veil**. Cortina entirely fibrillose, superior and persistent in the form of a ring, at length ferruginous with the spores. Gills **white, then clay colour**, adnexed, rounded, or emarginate, even decurrent with a tooth, crowded, **serrated**. Flesh **white**, soft. Spores ferruginous, palish fuscous under the microscope, elliptical, 8–9 × 5 μ. Densely caespitose. Mixed woods, and especially amongst beech leaves. Sept.—Oct. Uncommon.
333. C. (Phleg.) crassus Fr. (= Hebeloma crassum (Fr.) Rick.) Fr. Icon. t. 142, fig. 1.

P. 6-12 cm., dirty yellow, opaque, very fleshy, convexo-plane, very obtuse, disc depressed, somewhat viscid, the circumference broken up into innate fibrils. St. 5 × 2-5 cm., whitish, either truly bulbous, or stout and equal, fibrillose, apex white-mealy, base often white-tomentose. Cortina very delicate, fugacious. Gills pallid-clay colour, then clay colour, rounded behind, crowded, 6 mm. broad. Flesh becoming pallid, pouring out a watery juice when the stem is compressed. Spores "brownish, pale yellow under the microscope, punctate, subfusiform, 6-7 × 4 μ." Rick. Smell strong. Moist woods, and grassy places. Aug.—Oct. Uncommon.

334. C. (Phleg.) balteatus Fr. (= Cortinarius (Phlegmacium) nemorensis Fr. sec. Quél.) Fr. Icon. t. 142, fig. 2.

Balteatus, girdled.

P. 7-10 cm., disc tawny-fuliginous, or date colour, beautiful violet, or lilac near the floccose margin (but this colour often disappears with age, or when the plant is dry), compact, flattened, very obtuse, disc depressed, often unequal, shining when dry, innately floccose, fibrillose, and shining towards the margin. St. 4-6 × 2-5-3 cm., whitish, stout, very compact, equal, or ovately bulbous, minutely velvety, and dingy above the fibrillose, adpressed, rusty veil, longitudinally striate, or reticulate below, but sometimes white tomentose. Gills pallid, then somewhat tan colour, emarginate, or rounded behind, or subdecurrent, rather crowded. Flesh white, compact. Spores ferruginous, pip-shaped, 8-10 × 4-5 μ, multi-guttulate. Mixed woods, and amongst pine needles in pine woods. Sept.—Oct. Uncommon. (v.v.)

335. C. (Phleg.) sebaceus Fr. Boud. Icon. t. 103.

Sebum, tallow.

P. 5-12 cm., whitish ochraceous, or deep ochraceous, convex, then campanulate, umbonate disc flattened, at first covered over with a whitish pruinose lustre; margin appendiculate with the remains of the cortina. St. 7-18 × 1-2-5 cm., concolorous, or paler, stout, compact, often twisted and compressed, fusiform towards the fibrillose base. Cortina white, delicate, fugacious. Gills white, then cinnamon, paler near the margin, emarginate, adnate, connected by veins, 8 mm. wide, not crowded. Flesh white. Spores golden yellow, attenuated at the one end, oblong, 12-15 × 5-6 μ, multi-guttulate. Taste pleasant. Mixed woods. Sept.—Nov. Uncommon. (v.v.)
CORTINARIUS

336. **C. (Phleg.) lustratus** Fr. Cke. Illus. no. 688, t. 799.

*Lustratus*, purified.

*Entirely whitish*. P. 2.5-5 cm., equally fleshy, convex, then expanded, very obtuse. St. 2.5-5 cm. × 8-10 mm., equal, rarely attenuated at the base, covered with a few fibrils of the *white cortina*. Gills becoming slightly discoloured, rounded behind, almost free, very crowded, narrow. Flesh *white*, thick. Spores ochraceous. Amongst grass in sunny places. Oct. Rare.

**Gills violaceous, or purplish, then cinnamon.**

337. **C. (Phleg.) crocolitus** Quël. Grevillea, t. 127, fig. 1.

κρόκος, saffron; *litus*, daubed.

P. 10 cm., *bright yellow*, disc sprinkled with tender, saffron flocci, convex. St. 6-10 × 1 cm., *white*, then *citron yellow*, fragile, swollen at the base, fibrillose, apex silky, adorned with scales, or woolly zones below the membranaceous, very fragile ring. Cortina *white*, fugacious. Gills whitish lilac, then nankeen yellow, uncinate, uneven, edge *white*. Flesh *white*, then *citron yellow*, soft. Spores "citron yellow, granular, pruniform, 11-12 × 5-6 μ." Bat. Taste becoming bitter. Woods, especially birch. Sept.—Oct. Rare.

338. **C. (Phleg.) varius** (Schaeff.) Fr. Cke. Illus. no. 689, t. 698.

*Varius*, changeable.

P. 5-9 cm., *bright ferruginous-tawny, or yellow tawny*, compact, hemispherico-flattened, very obtuse; margin thin, at first incurved, appendiculate with the cortina. St. 4-8 × 2-3 cm., *shining white*, compact, adpressedly flocculose, the superior veil pendulous, *base bulbous*. Cortina *white*, silky. Gills violaceous-purplish, then ochraceous-cinnamon with the edge violaceous, emarginate, thin, somewhat crowded. Flesh *white*, firm. Spores ferruginous, warted, broadly elliptical, 8-10 × 6-8 μ., often apiculate at one end. Woods. Sept.—Nov. Not uncommon. (v.v.)

339. **C. (Phleg.) cyanopus** (Secr.) Fr. Cke. Illus. no. 690, t. 699.

κυανός, dark blue; πους, a foot.

P. 5-8 cm., *date-brown-livid, then tan, and opaque*, fleshy when unfolded, flattened, obtuse, regular, dry in fine weather. St. 5-10 × 1-2 cm., violaceous, becoming whitish, the apex remaining violaceous, firm, ventricose, *base bulbous*. Gills intensely violaceous, or pallid bluish-grey, soon becoming cinnamon, adnate, then emarginate, broad, 6-10 mm. wide, not much crowded. Flesh violaceous at the apex of the stem, whitish elsewhere. Spores ferruginous, punctate, pip-shaped, 9-10 × 5-6 μ. Woods and under oaks. Aug.—Nov. Not uncommon. (v.v.)
CORTINARIID

340. C. (Phleg.) variecolor (Pers.) Fr. Varie, diversely; color, colour.

P. 8–15 cm., date-brown, then fulvous-reddish, disc darker, the tomentose margin violet, rarely entirely violet, convex, then expanded, obtuse. St. 5–8 × 2.5–3 cm., white with the apex becoming blue, or blue becoming whitish, hard, stout, base bulbous, diffused upwards into the p., at first villose, then flocculose. Gills blue, then clay-cinnamon, emarginate, decurrent, somewhat arcuate, thin, 12 mm. wide, margin crenulate. Flesh violaceous, becoming whitish. Spores ferruginous, "almond-shaped, 15–18 × 8–9 μ," Rick. Smell and taste pleasant. Edible. Pine woods. Sept.—Nov. Uncommon. (v.v.)

var. nemorensis Fr. (= Cortinarius (Phlegmacium) balteatus Fr. sec. Quél.) Cke. Illus. no. 692, t. 863.

Nemorensis, belonging to a wood.

P. 10–12.5 cm., bay-brown, then yellowish, margin violet, smooth, slightly viscid at first, soon dry, opaque, pilosely rivulose. St. 7.5 × 2.5 cm., bluish, becoming white, obclavate, not bulbous, nor villose, apex mealy. Gills rounded, subdecurrent. Flesh white, bluish at the periphery. Beech woods. Sept.—Oct. (v.v.)

341. C. (Phleg.) largus Fr. Largus, large.

P. 5–15 cm., sometimes violet when young, date-brown-tawny, fleshy, compact at the disc, thin at the circumference, convexo-flattened, very obtuse, only slightly viscid, adpressely silky-fibrillose when dry, commonly rivuloso-squamulose, sometimes fibrillose towards the margin. St. 6–13 × 2–3 cm., white, tinted violaceous, equal, often curved and ascending, wholly fibrillose, apex pruinose. Cortina white, silky, thick, superior, pendulous. Gills bluish-grey-clay-colour, then cinnamon, adnate, or emarginate, crowded, 10–14 mm. broad, minutely denticulate. Flesh whitish-bluish-grey, becoming white when exposed to the air, that of the stem sometimes becoming bloody when bruised, wholly fibrous, firm. Spores ferruginous, pip-shaped, 10–11 × 5–6 μ, "rough" Rick. Smell and taste pleasant. Edible. Caespitose. Deciduous and pine woods. Sept.—Oct. Not uncommon. (v.v.)


M. Rieder, of Petrograd.

P. 5–7.5 cm., ochraceous, compact, campanulate, then expanded, umbonate, glutinous, shining when dry. St. 5–12.5 cm. × 5–12 mm., white, apex violaceous, or lilac, tawny fibrillose, clavate. Gills lilac, then cinnamon, adnate, rather thick, crowded. Flesh greyish-white, becoming yellow under the cuticle. Spores ferruginous, “warted, almond-shaped, 15–17 × 8–10 μ” Rick. Pine woods. Sept.—Oct. Rare.
CORTINARIUS

***Gills yellow, cinnamon, or ferruginous.

343. C. (Phleg.) percomis Fr. Fr. Icon. t. 143, fig. 2.

Percomis, very friendly.


Latus, broad.

P. 6-10 cm., tan colour, disc darker, fleshy, convex, then expanded, obtuse, slightly viscid, soon dry, fibrillose, then glabrous. St. 5-7 x 1.5-2 cm., white, equal, base ovately bulbous, rarely emarginately bulbous, somewhat squamose, then fibrillose. Cortina white, superior, forming a ring, fugacious. Gills pallid, then clay cinnamon, emarginate, 6 mm. broad, crowded, distantly dentate. Flesh white. Spores ochraceous, punctate, minutely rough, oblong elliptical, 10-13 x 6-7 μ. Taste pleasant. Gregarious, or subcaespitose. Coniferous woods. Oct. Rare.

345. C. (Phleg.) saginus Fr.

Saginus, fattened.

P. 10-12.5 cm., yellow, fleshy, plano-convex, irregular, repand. St. 7.5 x 2.5-3 cm., light yellowish, somewhat bulbous, fibrillose, apex naked. Cortina fibrillose, fugacious, not very conspicuous. Gills dingy-pallid, then cinnamon, truly decurrent, 8-10 mm. broad, attenuated at both ends, edge eroded. Flesh white, soft. Spores "pale yellow under the microscope, almond-shaped, 10-11 x 6-6.5 μ, warded-punctate." Rick. Gregarious, subcaespitose. Mountainous fir woods. Oct. Rare.


P. 6-10 cm., unicolorous, rufous, fleshy, convex, then flattened, obtuse, innately fibrillose round the margin. St. 7.5 x 1.5-2 cm., pale white, attenuated upwards, often curved-ascending, soft, adpressedly fibrillose, apex delicately pruinose. Cortina concolorous, very tender, fugacious. Gills rufous-ferruginous, obtusely adnate, 8-10 mm. broad, crowded, connected by veins. Flesh whitish-flesh-colour, violaceous under the cuticle. Spores ferruginous, elliptical, 8-12 x 5-7 μ, "warted-punctate." Rick. Taste bitter, nauseous. Woods. Sept.—Oct. Uncommon. (v.v.)
****Gills olivaceous.


P. 5–10 cm., olivaceous-fuliginous, becoming fulvous, fleshy, convex, then plane, streaked, often fuscous zoned near the undulate, broken margin. St. 3–7 × 1–3 cm., concolorous, ovato-clavate, or elongate and bulbous, adpressedly fibrillose, apex often violaceous. Gills olivaceous-fuliginous, then umber, crowded, or somewhat distant, broad, undulate, crisped. Flesh yellowish white, somewhat violaceous at the apex of the stem. Smell somewhat nauseous. Taste bitter. Woods. Sept.—Oct. Uncommon. (v.v.)


P. 7.5–20 cm., fuliginous, or brown, disc darker, often with a tinge of violet at the margin, at first inclosed in a whitish volva which breaks up in patches on the disc, convex, then expanded, shining when dry, very fleshy, sometimes radiately silky, becoming paler and rivulose with age. St. 10–20 × 3–6 cm., white, covered with the general veil, which is at first violaceous, then pale, often remaining appendiculate at the margin of the pileus, finally becoming ochraceous when old, base bulbous. Gills dingy olive, then cinnamon, adnate, slightly emarginate, broad, scarcely distant. Flesh pale ochraceous, darker under the pellicle of the pileus. Spores yellow-brown, fusiform, minutely verrucose, 15–16 × 8–9 μ. Forming large circles in woods. Sept.—Oct. Uncommon. (v.v.)

II. Bulb depressed, or turbinate, marginate. St. fleshy, fibrous; cortina commonly inferior, arising from the margin of the bulb. P. equally fleshy. Gills somewhat sinuate.

*Gills whitish, then clay-coloured, or palé cinnamon.

349. C. (Phleg.) multiformis Fr. (= Cortinarius rapaceus Fr. sec. Quélt., Cortinarius talus Fr. sec. Quélt.) Boud. Icon. t. 104. Multiformis, many shaped.

P. 4–7 cm., unicolorous, light yellow, clay yellow, tawny, etc., fleshy, convex, then flattened, very obtuse, at length depressed, very viscid, or somewhat dry, and sprinkled with the universal white veil. St. 5–12 × 1–1.5 cm., white, then yellowish, equal, or attenuated upwards,
often adpressedly fibrillose, with a somewhat marginate bulb. Cortina white, fibrillose, fugacious. Gills whitish, often tinged with violet, then clay colour, emarginate, free, or with a small decurrent tooth, very thin, crowded, edge serrulate. Flesh white, becoming yellowish at the base of the stem. Spores ochraceous-tawny, verrucose, elliptical, 10 × 6 μ. Taste mild. Woods, especially beech. Aug.—Nov. Not uncommon. (v.v.)

var. flavescens (Cke.) Cke. Illus. no. 702, t. 709.

Flavescens, becoming yellow.

Differs from the type in the yellow gills, and yellowish flesh.

350. C. (Phleg.) napus (Fr.) Cke. Illus. no. 703, t. 710.

Napus, turnip.

P. 5–8 cm., fuliginous, then date-brown-tawny, fleshy, convexo-plane, obtuse, glutinous, margin abruptly bent inwards. St. 5 × 1–2 cm., white, at length becoming yellow at the base, equal, ascending, firm, inserted in an obconic, acutely and obliquely marginate bulb. Gills whitish-fuliginous, emarginate, somewhat distant, broad, crisped. Flesh white, with a horny line at the base of the gills. Spores brownish, elliptical, 10 × 5 μ. Pine woods. Sept.—Oct. Uncommon. (v.v.)

351. C. (Phleg.) allutus (Secr.) Fr. Cke. Illus. no. 704, t. 752.

Allutus, washed.

P. 2–3 cm., rufescent, fleshy, conical, then convex, finally expanded, and sometimes depressed, margin darker. St. 2–3 cm. × 3–4 mm., white, striate with reddish lines below, equal, apex mealy, viscid, base marginately bulbous. Gills whitish, then rufescent, adnate, rather crowded, edge crenulate. Flesh rufescent, thin. Pine woods. Oct. Rare.

352. C. (Phleg.) talus Fr. (= Cortinarius (Phlegmacium) multiforinis Fr. sec. Qué.) Fr. Icon. t. 145, fig. 2. Talus, the ankle bone.

P. 4–8 cm., of a yellowish dirty colour, becoming pale, margin somewhat olivaceous, yellowish, fleshy, thin, convexo-plane. St. 7.5 cm. × 12 mm., pale, equal, cylindrical, base marginato-bulbous. Gills beautiful straw colour, or ochrey-pallid, emarginate, somewhat crowded. Flesh dingy pallid whitish, watery, with hyaline spots, and variegated with a horny line next the gills. Spores ferruginous, elliptical, 8–10 × 4–5 μ, 1–2-guttulate. Woods. Sept.—Nov. Uncommon. (v.v.)

**Gills violaceous, dark blue or purplish, at length cinnamon.

353. C. (Phleg.) glaucopus (Schaeff.) Fr. Cke. Illus. no. 706, t. 712.

γ'λαυκός, pale blue; πούς, a foot.

P. 6–12 cm., dingy yellow, tan-tawny, or clay colour, very fleshy, compact, convex, then flattened, somewhat repand, often floccoso-scaly
and marked with a raised fuscous zone round the split margin. St.
6–8 × 1–2 cm., pale azure-blue, becoming yellowish, firm, fibrillose,
striate, base marginately bulbous. Gills azure-blue, then cinnamon,
rounded behind, emarginate, crowded, sometimes crisped. Flesh
white, or bluish, becoming yellowish. Spores ferruginous, minutely
verrucose, broadly elliptical, 9–10 × 5–6 μ, with a hyaline apiculus at
the one end. Woods, and pastures. Aug.—Oct. Not uncommon. (v.v.)


καλός, beautiful; χρώς, colour.

P. 4–8 cm., tawny, yellow round the margin, compact, convex, then
plane, obtuse, guttate, often stained with soil; margin involute,
flexuose when expanded. St. 4–6 × 1.5–3 cm., yellowish, firm, equal,
fibrillose, marginately bulbous, bulb very depressed. Cortina yellow
(“amethyst” Quelet), marginal, fugacious. Gills dark blue-purple,
then ferruginous, emarginate, crowded, serrated. Flesh white, firm.
Spores ferruginous, elliptical, 10–11 × 6–5 μ, minutely punctate.
Smell sometimes footid. Taste mild, sometimes acrid. Pastures, and
woods, especially beech. Sept.—Nov. Not uncommon. (v.v.)


Caerulescens, becoming azure.

P. 5–7 cm., blue-violaceous, becoming tinged with ochre especially on
the disc, sometimes entirely yellow ochraceous, convex, then convexo-
plane, sometimes finally a little depressed at the disc, fleshy, pellicle
separable; margin incurved, pubescent, white, then expanded and vio-
laceous. St. 4–6 × 1–1.5 cm., blue-violaceous, or violet-amethyst, cylin-
drical, conical, fibrillose silky, then becoming smooth, marginately
bulbous, bulb white. Cortina violaceous. General veil fibrillose, viola-
ceous, fugacious, little distinct from the cortina. Gills violet-amethyst, or
blue-violaceous, becoming rust colour, edge remaining violet for a long
time, broadly adnate, deeply emarginate, attenuated in front, rounded
behind, wide, somewhat crowded. Flesh pale blue-violaceous, especially
in the stem and under the pellicle of the p., becoming whitish, finally
tinged with ochre where wounded. Spores ferruginous in the mass,
yellow ochraceous under the microscope, elliptical, or somewhat
almond-shaped, 12–14 × 7.5 μ or 6–6.5 × 5 μ, compressed on the side,
verrucose. Taste sweet, or slightly bitter. Woods, especially beech,
and fir. Sept.—Oct. Not uncommon. (v.v.)

356. C. (Phleg.) caesiocyanus Britz. Cke. Illus. no. 708, t. 721, as

Cortinarius (Phlegmacium) caerulescens Fr.

Caesius, bluish grey; καυς, dark blue.

P. 5–10 cm., pale blue-violaceous, more or less washed with yellow
ochre at the centre, fleshy, convex, then convexo-plane, more or less
radially streaked with innate fibrils, sometimes marked with loose, white patches, the remains of the volva. St. 5–8 cm. × 12–15 mm., bluish, then becoming pale, and finally whitish, attenuated upwards from the distinctly marginate, bulbous base, fibrillose; bulb white from the first, the margin often forming a ledge, or sheath. Cortina bluish, fugacious. Gills whitish, then bluish white, and finally clay colour and rust colour, narrowly adnate, slightly sinuate, or emarginate, thin, crowded, somewhat narrow. Flesh yellowish, whitish in the bulb, bluish in the stem. Spores ferruginous in the mass, yellowish brown under the microscope, almond-shaped, 10–12.5 × 5–6μ (“8–10 × 4–5μ” Britz.), verrucose. Smell faint, like that of Cortinarius purpurascens. Taste pleasant. Fr. woods. Sept.—Oct. Not uncommon. (v.v.)

357. C. (Phleg.) purpurascens Fr. Cke. Illus. no. 710, t. 723.

P. 6–15 cm., bay brown, or date brown olivaceous, then tawny olivaceous, fleshy, convex, obtuse, glutinous, opaque when dry, tiger-spotted, often depressed round the margin which is at first inflexed, then repand, and marked with a raised, violet fuscous zone. St. 5–9 × 1.5–3 cm., intensely pallid azure-blue, darker when touched, fibrillose, base bulbous, somewhat marginate. Gills azure-blue-clay, then cinnamon, violaceous purple when bruised, broadly emarginate, 6–12 mm. wide, crowded. Flesh azure-blue. Spores ferruginous, rough, elliptical, 9–11 × 5μ. Woods, and heaths. Sept.—Nov. Common. (v.v.)

var. subpurpurascens Fr. Cke. Illus. no. 712, t. 725.

Subpurpurascens, becoming somewhat purple.

Differs from the type in the thinner, somewhat virgate p., becoming pale, in the somewhat equal, bluish white, somewhat marginately bulbous stem only fibrillose at the base, in the pallid, then cinnamon gills becoming somewhat purplish when rubbed, and in the flesh in young specimens becoming purplish when broken, and finally white. Woods. Sept.—Oct. Not uncommon. (v.v.)

***Gills ferruginous, tawny, or yellow.

358. C. (Phleg.) dibaphus Fr. Saund. & Sm. t. 10.

§i-§αφος, twice dyed.

P. 5–10 cm., purplish, disc yellowish, and at length variegated with lilac, fleshy, convex, then plane, at length depressed, somewhat repand. St. 6–9 × 1–3 cm., yellow, shining purplish at the apex, fibrillose, base marginato-bulbous. Gills purplish-ferruginous, adnate, slightly rounded, somewhat crowded, broad (“margin lilac” Quél.). Flesh white, then yellow, variegated under the pellicle with a violet line. Spores purplish brown, pip-shaped, 12–14 × 7–8μ, verrucose. Smell and taste mild. Beech, and oak woods. Sept.—Nov. Uncommon. (v.v.)
var. xanthophyllus Cke. Cke. Illus. no. 713, t. 753.

ξανθός, yellow; φύλλον, a leaf.

Differs from the type in the yellow gills. Woods. Oct.—Nov. Rare. (v.v.)

359. C. (Phleg.) turbinatus (Bull.) Fr. Boud. Icon. t. 105.

Turbo, a spinning-top.

P. 5–13 cm., unicolorous, dingy yellow, or green, becoming pale, hygrophanous, opaque when dry, fleshy, convex, then flattened, obtuse, at length depressed, orbicular, covered with adpressed fibrils which are deeper coloured and somewhat squamulose at the disc. St. 5–7 × 2–3 cm., concolorous, or paler than the p., sometimes tinged with violet at the apex, equal, cylindrical, springing from a globosodepressed, distinctly marginate, turbinate bulb. Gills pallid light yellowish, sometimes tinted with dark purple, then ferruginous, uncinately adnate, thin, crowded, broad. Flesh white, soft. Spores ferruginous, elliptical, 15 × 7–8 μ (“8–10 × 5–6 μ” Boud.), verrucose. Taste somewhat bitter. Beech woods, and pastures. Sept.—Oct. Uncommon. (v.v.)

var. lutescens Rea. 

Lutescens, becoming yellow.

Differs from the type in the bright yellow colour of the flesh. Woods, and pastures. Oct. Rare. (v.v.)


Corrosus, gnawed to pieces.

P. 5–8 cm., clay colour, becoming ferruginous, then pallid, fleshy, compact, expanded, umbilicate, opaque when dry, rivulose, flocculose, only fugaciously viscid. St. 2.5–5 × 1–2.5 cm., white, cortinately-fibrillose, equal, base marginately bulbous. Gills somewhat ferruginous from the first, emarginate, or rounded behind, very crowded, narrow, 4 mm. wide, edge unequal. Flesh white, rarely zoned with violet. Pine woods. Sept. Rare.


Fulgens, shining.

P. 5–10 cm., orange-tawny, very fleshy, convexo-plane, obtuse, occasionally punctate as if with drops, at length silky-fibrillose, or squamulose. St. 5–10 × 1.5–2 cm., yellow, paler at the apex, equal, densely fibrillose with the yellow cortina which is viscid in wet weather; base acutely marginately bulbous, then depressed and oblique. Gills bright yellow, then tawny, or ferruginous with the spores, emarginate, 6–10 mm. broad, somewhat crowded. Flesh white-yellow, compact, then spongy and tan colour. Spores ferruginous, verrucose, pip-shaped, 11–12 × 6 μ. Smell pleasant, “like fennel” Quél. Woods. Sept.—Nov. Not uncommon. (v.v.)

_Fulmineus_, pertaining to lightning.

P. 4–8 cm., tawny, almost brown, margin orange, variegated with dense, irregular, agglutinated scales, very fleshy, at first hemispherical, and attached to the bulb, then convex, very viscid; margin involute. St. 2–5 × 1–1·5 cm., yellow, white cortinate at the apex, when young inclosed in the bulb, bulb very depressed, marginate, rooting, wider than the young p. Gills golden yellow, at length tawny, rounded, thin, very crowded. Flesh white, often yellow at the circumference or wholly yellowish. Spores ferruginous, elliptical, 13–14 × 7–8 μ, verrucose. Deciduous woods. Sept.—Oct. Uncommon. (v.v.)


ὀριχαλκός, copper ore.

P. 4–13 cm., reddish copper colour, disc darker, often spotted with scales, bluish green towards the margin, convex, then flattened, fleshy; margin incurred, pubescent, or white, then expanded and concolorous. St. 5–12 × 1·5–2 cm., pale greenish yellow, more or less covered with the fibrils of the cortina, fibrillose, silky, somewhat cylindrical, base marginately bulbous. Cortina whitish, or very light greenish yellow, then rust colour from the spores. General veil whitish, often becoming reddish copper colour, fibrillose, scarcely distinct from the cortina. Gills yellow tinted greenish, then olive, and finally olive rust colour, slightly adnate, sinuate, or emarginate, attenuated in front, slightly rounded behind, narrow, 4–6 mm. wide, thin. Flesh greenish yellow, then citron yellow under the pellicle of the pileus and in the base of the stem, finally becoming reddish brown in the bulb, with a strong bluish grey horny line at the base of the gills. Spores ferruginous, elliptical, or almond-shaped, 10–11 × 6–7 μ, verrucose. Smell strong, "of fennel" Quél. Coniferous woods, and under beeches. Sept.—Nov. Uncommon. (v.v.)

364. *C. (Phleg.) elegantior* Fr.

_Elegantior_, neater.


P. 7–10 cm., brick-red, rather vinous, becoming paler, fleshy, convex, then flattened, umbonate, or depressed. St. 7–9 × 1·5 cm., whitish
above, becoming rufous at the base, attenuated upwards, longitudinally, fibrously striate below; base submarginate, bulbous. Gills dusky cinnamon, adnate, a little emarginate behind, 6–10 mm. wide. Flesh rather flesh-colour, becoming ruddy at apex and base of stem. Spores elliptical, 9–11 × 5–6 μ, rarely 16 × 8 μ, narrowed at each end, verrucose. Woods, amongst leaves. Sept.—Nov. Uncommon. (v.v.)

****Gills olivaceous.

366. C. (Phleg.) prasinus (Schaeff.) Fr. Boud. Icon. t. 107.

πράσινον, a leek.

P. 5–8 cm., olivaceous, aeruginous, or tawny ferruginous, tiger-spotted as if scaly, convex, then plane and depressed at the centre, adpressedly fibrillose; margin involute. St. 5–8 × 1–2 cm., concolorous, equal, or slightly attenuated upwards, fibrillosely silky; base marginately bulbous. Cortina whitish, or pallid-green. Gills yellow-olivaceous, or somewhat olivaceous, darker and cinereous olivaceous at the base, emarginate, undulate. Flesh dingy white, greenish white in the stem, olivaceous under the pellicle of the p. and at the base of the stem. Spores ferruginous in the mass, ochraceous under the microscope, elliptical, 12–15 × 6–8 μ, verrucose. Smell none, or “of sulphur” Quel. Taste mild. Beech woods. Sept.—Oct. Uncommon. (v.v.)

367. C. (Phleg.) atrovirens (Kalchbr.) Fr. Kalchbr. Icon. t. 19, fig. 3.

Ater, black; virens, green.

P. 5–10 cm., dark green, or olivaceous green, compact, convex, obtuse. St. 5–8 × 1–2 cm., yellow, firm, equal, fibrillose, except the sub-turbinate, marginate bulb. Gills sulphur colour, then greenish, at length cinnamon, adnate, 6–8 mm. broad, crowded. Flesh greenish yellow, then darker. Spores ferruginous, “elliptical, 10 × 6 μ” Massee. Mycelium sulphur colour. Pine woods. Oct.—Nov. Rare.


σκαύρος, with projecting ankles.

P. 5–10 cm., of a peculiar tawny fuliginous colour, more tawny when dry, tiger-spotted, fleshy, convex, then plane and depressed; margin thin, slightly striate when old. St. 6–8 cm. × 8–10 mm., azure-blue, or olivaceous, becoming white and also yellowish when old, attenuated upwards, fibrillosely striate; base marginately bulbous, the bulb sometimes evanescent. Cortina greenish, fibrillose. Gills purplish-olivaceous, olivaceous, or fuliginous, attenuato-adnexed, rounded, 2–4 mm. broad, thin, very crowded. Flesh watery, thin, soft. Spores ferruginous, broadly elliptical, 10–11 × 6–7 μ, “punctate-rough” Rick. Taste mild. Woods, and bogs. Sept.—Nov. Uncommon. (v.v.)
369. **C. (Phleg.) herpeticus** Fr. [έρπετον, a creeping thing.]

P. 3–8 cm., olivaceous, then dirty tan colour, disc becoming pale, fleshy, convexo-plane, obtuse, somewhat spotted, slightly viscid. St. 5–8 × 1 cm., pallid, firm, unequal, somewhat twisted, fibrillose; bulb napiform, marginate. Gills violet-umber, then fuliginous-olive, slightly emarginate, at first crowded, 4–6 mm. broad. Flesh of the pileus pale violet when young, then becoming dirty white. Spores “nearly almond-shaped, punctate-rough, 7–8 × 4–5 μ.” Rick. Woods. Sept. Rare.

III. Cortina simple, thin, fugacious, median, or inferior. St. at the first exerted, somewhat thin, rigid-elastic, externally subcartilaginous, polished, shining. P. thin, often hygrophanous.

*Gills whitish, then clay coloured, or dirty cinnamon.

370. **C. (Phleg.) cumatilis** Fr. Fr. Icon. t. 146, fig. 2. κυμα, a wave.

P. 4–8 cm., of a very charming violet, or purple violet, fleshy, convex, obtuse, often irregular. St. 5–10 × 1–1.5 cm., white, often curved, cortinate only at the apex, the universal veil (which serves as a pellicle of the p.) ruptured at the base, and adnate to it as a separable, agglutinated membrane of the same colour as the p. Gills white, then clay colour, attenuato-adnexed, almost free, crowded, narrow, 4–6 mm. broad, with a small decurrent tooth. Flesh white. Spores ferruginous, pip-shaped, 9–10 × 4–5 μ, verrucose. Taste pleasant. Solitary, or subcaespitose. Fir woods. Sept.—Oct. Uncommon. (v.v.)

371. **C. (Phleg.) serarius** Fr. [Serarius, living on whey.]

P. 7–10 cm., reddish-tan, fleshy, convex, then plane, obtuse, or broadly gibbous, viscid, opaque, appearing as if pruinately silky when dry. St. 10 × 1 cm., white, equal, entirely fibrillose, and soft, polished, shining. Cortina white, inferior, inconspicuous. Gills white, then clay colour, arcuately-adnate with a decurrent tooth, crowded, broad. Flesh white, with a hyaline line near the base of the gills. Spores “thin, fusiform, 7–8 × 3 μ, almost smooth” Rick. Mixed woods. Sept.—Oct. Rare.

372. **C. (Phleg.) emollitus** Fr. [Emollitus, softened.]

P. 5–8 cm., tawny, then ochraceous yellow, fleshy, globose, then campanulato-convex, finally plane, or deformed, often fibrillosely virgate, shining when dry; margin incurved, flexuose. St. 4–8 × 1–1.5 cm., white, becoming yellowish, equal, or attenuated downwards, often thickened at the apex, striate, or fibrillose, base sometimes thickened, often compressed, curved, or somewhat twisted. Cortina white, fugacious, often appendiculate from the margin of the p. Gills white, then ochraceous, adnate, or emarginate, somewhat distant, 10–12 mm. broad, fragile. Flesh white, very soft. Spores ferruginous, elliptical,


P. 3–5 cm., ochraceous nankeen yellow, almost hemispherical, then convex, and plane, sometimes slightly umbonate, and finally slightly depressed at the centre, pellicle easily separable, at first covered with the white fibrils of the universal veil, soon white pruinose, silky towards the margin, only slightly viscid when young, soon dry and shining; margin slightly incurved, then straight. St. 5–8 cm. × 3–5 mm., white, straight, or flexuose, firm, elastic, covered with the fibrillose veil, and slightly viscid when young, soon dry, very minutely pruinose at the apex; base equal, or somewhat bulbose, sometimes fusiform and slightly rooting. Cortina white, fugacious. Gills cream colour, then ochraceous rust, broadly adnate, slightly emarginate, diminishing in width towards the margin, slightly crowded. Flesh yellowish when young, becoming whitish when dry. Spores ferruginous in the mass, yellowish brown under the microscope, elliptical, 6.5–7.5 × 4μ, apiculate, very minutely verrucose. Smell rather strong. Taste of the cuticle of the pileus very bitter, of the flesh sweet, or very slightly bitter. Pine woods, and under conifers. Sept.—Oct. Not uncommon. (v.v.)

374. C. (Phleg.) crystallinus Fr. Grevillea, t. 107, fig. 3.

P. 1.5–4 cm., shining silvery white towards the margin, disc watery-pallid, becoming altogether shining white when dry, fleshy, convex, then plane, hygrophanous. St. 5–7 cm. × 6–10 mm., whitish, then straw colour, fragile, equal, or attenuated at the base, fibrillose. Gills clay colour, emarginate, thin, 6 mm. broad, crowded. Flesh white, thin. Spores clay colour, elliptical, 4–5 × 3μ, “7.8 × 4–5μ, faintly punctate” Rick. Taste very acrid. Woods, especially beech. Sept.—Nov. Uncommon. (v.v.)


Decoratus, stained.

P. 4–10 cm., clay colour, disc darker, thin, equally fleshy, campanulate, then convex, obtuse, soft, soon dry, and flocculose, corrugated and stained when old. St. 5–10 cm. × 10–12 mm., silvery, equal, thickened at the base, sometimes attenuated downwards, fibrillose. Cortina white, fibrillose, inferior. Gills whitish, or bluish, then clay colour and cinnamon, emarginate, adnate, or decurrent, not much crowded, 6 mm. broad. Flesh white, watery, soft. Spores pale ferruginous, pip-shaped, 11–12 × 5–6μ, verrucose. Taste slightly acrid. Woods, especially beech. Aug.—Oct. Not uncommon. (v.v.)
**Gills violaceous, purplish, or flesh coloured.


Decolorans, discoloring.

P. 3–6 cm., persistently yellow, fleshy, convex, then flattened, somewhat gibbous. St. 5–7 cm. × 6–10 mm., shining white, equal, attenuated downwards, or slightly thickened at the base. Cortina white, persistent, median. Gills purplish, then soon cinnamon, sinuato-adnexed, thin, crowded, 6 mm. broad. Flesh white, thin, firm. Spores pale ferruginous, subglobose, 7–8 × 7 μ; "almond-shaped, 10–12 × 5–6 μ, warted" Rick. Coniferous woods, and under birches. Sept.—Oct. Not uncommon. (v.v.)


Porphyrēs, purple; Pous, foot.

P. 3–8 cm., livid-light-yellowish, or clay colour, fleshy, very thin at the margin, convexo-plane, obtuse, innately streaked. St. 5–10 cm. × 6–10 mm., violaceous-lilac, becoming pale, even whitish, but soon becoming violaceous-lilac when touched, fragile, somewhat bulbous, or rather equally attenuated from the thickened base, sometimes equal. Cortina violaceous-lilac, fibrillose, inferior. Gills purplish, then watery cinnamon, becoming purple again when touched, rounded, or emarginate, somewhat crowded, 4–10 mm. broad. Flesh of pileus whitish, soon becoming purple-lilac when broken, of stem purple-lilac becoming whitish. Spores pale ferruginous, pip-shaped, 10–11 × 6–7 μ, "slightly rough" Rick. Woods, especially beech. Sept.—Oct. Uncommon. (v.v.)


Croceus, saffron; caeruleus, azure.

P. 2–3 cm., lilac, or faintly violaceous, fleshy, thin, convex, then plane, obtuse, or gibbous. St. 5 cm. × 4–6 mm., whitish, fragile, somewhat equal, or attenuated downwards. Cortina white, fibrillose, fuggacious. Gills lilac, then clay-saffron, attenuated, or broadly emarginate, with a small, very thin decurrent tooth, somewhat distant. Flesh pallid, lilac under the pellicle, watery. Spores ferruginous, pip-shaped, 6–8 × 4–5 μ, punctate. Taste "bitter" Pers. Woods, especially under beeches, and hazels. Sept.—Oct. Not uncommon. (v.v.)

***Gills pure ochre, tawny, or ferruginous.


Coruscans, glittering.

P. 10 cm., yellow-ochraceous, often spotted tawny, fleshy, soon plane, regular, at length depressed, shining when dry. St. 7–15 × 1 cm., shining white, elastic, equal, apex enlarged, fibrillosely-striate. Cortina 10—2
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Papulosus, having pimples.

P. 6-9 cm., honey-tan colour, disc ferruginous, or fuscous, and here and there gibbous, fleshy, convex, obtuse, then plane, and at length depressed, the cuticle breaking up into minute, granular, fuscous patches when dry. St. 6-7 × 1-1.5 cm., white, firm, equal, or thickened at the base, densely fibrillose, apex naked. Cortina white, inferior, very fugacious. Gills pallid, soon ochraceous, at length very pale yellow cinnamon, adnato-decurrent, crowded, slightly joined behind, separating from the stem when old, and connected by a spurious collar. Flesh white, thick at the disc, thin at the margin. Spores “sub-elliptical, 8-10 × 5-6 µ, very slightly punctate” Rick. Pine woods. Oct.—Nov. Rare.

var. major Fr.

Major, larger.

P. yellowish, ferruginous, margin much paler, glutinous, disc truly granular. St. at length coloured like the gills, attenuated from the base, filamentous from the inferior veil, apex cortinate. Gills slightly sinuate.

381. C. (Phleg.) vespertinus Fr. Vespertinus, pertaining to evening.

P. 7-9 cm., yellowish ochraceous, disc egg-yellow, fleshy, convex, then plane, glutinous, wrinkled and folded at the margin. St. 5-7.5 × 1-1.5 cm., shining white, firm, elastic, incrassated at the base, fibrillose. Cortina pallid, inferior, fugacious. Gills bright and intense fulvous-cinnamon, broadly emarginate, very broad, firm, little crowded, shining. Flesh white, firm. Spores “elliptical, 4-5 × 3-4 µ, almost smooth” Rick. Deciduous woods. Oct. Rare.

****Gills olivaceous, fuliginous.

382. C. (Phleg.) olivascens (Batsch) Fr. Fr. Icon. t. 147, fig. 2.

Olivascens, becoming olivaceous.

P. 3-5 cm., somewhat fuliginous, or bistre olivaceous, becoming pale, somewhat fleshy, convexo-plane, obtuse; margin substriate. St. 7-9 × 1 cm., silvery, becoming pallid (“whitish lilac, then silvery at the apex, white in the middle and citron yellow at the base” Quél.), attenuated upwards, somewhat bulbose, fibrillose, striate. Gills olivaceous, or clay colour, then cinnamon, adnate, emarginate, thin, little crowded. Flesh paler (“violaceous, then reddish” Quél.), thin. Spores “tawny olivaceous, pruniform, 10-12 × 5.5-7 µ, punctate” Bat. Taste acrid. Damp woods amongst Sphagna. Sept. Rare.
2. **Myxacium** Fr.

(μούξα, mucus.)

General veil glutinous. Stem viscid. Pileus slightly fleshy.

†St. floccoso-peronate, the flocci at first covered with gluten.

383. **C. (Myx.) arvinaceus** Fr. (= **Cortinarius (Myxacium) micosus** (Bull.) Quél., (Myxacium) alutipes (Lasch) Fr. sec. Quél.) Cke. Illus. no. 734, t. 739, as **Cortinarius (Myxacium) micosus** Fr.

Arvinaceus, greasy.

P. 6–10 cm., orange-tawny, or reddish tan, fleshy, soft, convex, then soon flattened, at length reflexed and undulating, viscid, glistening when dry; margin slightly striate when in full vigour. St. 10–20 × 1–1.5 cm., white, equal, silky-viscous. Cortina soon fibrillose, fugacious. Gills straw colour, then bright ochraceous, adnato-decurrent, very broad, 12–18 mm., somewhat distant, edge crenulate. Spores ochraceous, “fusiform, 15–17 × 8–9 µ, rough” Rick. Beech woods. Oct. Rare.

384. **C. (Myx.) collinitus** (Sow.) Fr. (= **Cortinarius (Myxacium) mucifluus** Fr. sec. Quél.) Cke. Illus. no. 735, t. 739, as **Cortinarius (Myxacium) mucifluus** Fr.

Collinitus, besmeared.

P. 6–11 cm., orange-tawny, fleshy, not compact, convex, with the margin bent inwards, then expanded, obtuse, covered with persistent orange-tawny gluten, shining when dry. St. 7–12 × 1–2.5 cm., violaceous, white, or yellowish, firm, cylindrical, at length soft, covered with a floccose, glutinous veil, which is commonly broken up into concentric scales, near the apex the gluten is continuous with that of the p. and forms an entirely viscous, fugacious ring. Gills whitish-bluish-grey, or clay colour then cinnamon, adnate, somewhat crowded. Flesh whitish, brownish under the cuticle of the p. and at the base of the st. Spores ferruginous, pip-shaped, 10–11 × 6 µ, rough. Woods. July—Nov. Common. (v.v.)

385. **C. (Myx.) micosus** (Bull.) (= **Cortinarius (Myxacium) alutipes** (Lasch) Fr. and (Myxacium) arvinaceus Fr. sec. Quél.) Boud. Icon. t. 108. 

Micosus, full of mucus.

P. 4–10 cm., chestnut, fleshy, campanulato-convex, then expanded, covered with chestnut gluten, margin paler, striate. St. 5–15 × 2 cm., whitish ochre, or ochraceous, cylindrical, slightly attenuated at the base, fibrillosely tomentose. Cortina white, glutinous. Gills whitish, then cinnamon, adnate. Flesh whitish, tinged with chestnut under the cuticle of the p. and at the base of the st. Spores tawny, verrucose, lemon-shaped, 14–17 × 7–8 µ. Pine woods. Aug.—Oct. Not uncommon. (v.v.)
386. *C. (Myx.) mucifluus* Fr. (= *Cortinarius (Myxacium) collinitus* Sow. sec. Quél.) Fr. Icon. t. 148, fig. 1.

*Mucus, mucus; φλάω, I boil over.

P. 3–9 cm., livid-clay, tan when dry, opaque, thin, somewhat fleshy, campanulate, then expanded, at length reflexed and repand, smeared with separating, hyaline gluten; margin membranaceous, striate. St. white, or inclining to azure-blue, spongy, attenuated downwards, viscid with the floccose-scyaly fugacious veil. Gills clay colour, then watery cinnamon, adnate. Spores ferruginous, almond-shaped, granular, 12 × 7μ. Cystidia "on edge of gill, vesiculose, 30–45 × 18–30μ" Rick. Pine woods. Aug.—Oct. Not uncommon. (*v.v.*)

387. *C. (Myx.) elatior* Fr. Fr. Icon. t. 149, fig. 1. Elatior, taller.

P. 6–12 cm., livid-light-yellow when moist, dingy ochraceous when dry, sometimes whitish, tan fuscos, date brown, violaceous brown, black, whitish round the margin, or grey with the margin violaceous, slightly fleshy only at the disc, cylindrical, or bullate, then campanulate, afterwards flattened and somewhat reflexed, disc above the stem obtuse, membranaceous and longitudinally plicato-wrinkled at the sides, fragile. St. 7–18 × 1–5 cm., violaceous, lilac, becoming white, commonly attenuated at both ends, especially at the base, fibrillosesely floccose. Cortina concolorous, viscid, fugacious. Gills ochraceous, or lilac, then dark brown cinnamon, adnate, broad, connected by veins or wrinkled at the sides. Flesh whitish, or pale yellowish. Spores purplish-ferruginous, almond-shaped, 12–14 × 6μ, verrucose. Cystidia "on edge of gill vesiculose-pyriform, 36–45 × 21–28μ" Rick. Woods. Aug.—Nov. Common. (*v.v.*)


Grallae, stilts; pes, foot.

P. 4–8 cm., ferruginous when moist, ochraceous tan when dry, opaque, almost membranaceous with the exception of the prominent, often acutely umbonate disc, campanulate, then flattened, hygrophanous, very viscid when wet. St. 10–15 cm. × 4–6 mm., yellowish tawny, ochraceous when dry, tough, equal, flexuose, fibroso-striate, viscid. Cortina pale, whitish brown, fugacious. Gills clay colour, then ferruginous, adnate with a decurrent tooth, 12 mm. broad, attenuated in front, crowded. Flesh white. Spores ferruginous, "7–8 × 4–5μ" Herpeli. Caespitose. Mixed woods, and under oaks and poplars. Oct. Uncommon.


Livido, livid; ochraceus, ochre.

P. 2–5–5 cm., livid-ochre, somewhat membranaceous, convex, then plane, cuticle thick, subcartilaginous, margin very thin, often with
a few, indistinct fragments of the veil. St. 2-5-6 cm. × 7-10 mm.,
beautiful violet, ochraceous at the base, attenuated at both ends, some-
what scaly, striate above the fugacious veil. Gills pale, then cinnamon,
margin pale, somewhat adnate, broad in front, moderately distant. Flesh yellowish, livid under the pellicle of the p. Spores ferruginous,
elliptical, 8-10 × 5-6 μ, rough, 1-guttulate. Taste “like Ag. campes-

††Veil entirely viscid, hence the st. is not floccoso-peronate, but
only viscid, acquiring a varnished appearance when dry.

Gills whitish, then clay colour.

390. C. (Myx.) nitidus (Schaeff.) Fr. Cke. Illus. no. 1189, t. 1191.

Nitidus, shining.

P. 4-12 cm., honey-coloured tan, at length whitish, disc tan colour,
fleshy, convex, then expanded, gibbous, or almost obtuse, glutinous, 
when dry the cuticle often cracked in streaks, and appearing minutely 
fuscos punctate. St. 5-10 × 1-1-5 cm., pallid white and fibrillose 
when young, then becoming yellowish and naked, base clavate, often 
curved, tough, elastic, apex at first white-mealy. Cortina slightly 
fibrillose, fugacious. Gills whitish, soon clay colour, and finally watery 
cinnamon, truly decurrent, arcuate at first, crowded, narrow, 4 mm. 
wide. Flesh white. Spores light brown, “broadly pip-shaped, 10-

**Gills at first violaceous, dark blue, or reddish.

391. C. (Myx.) salor Fr. Fr. Icon. t. 150, fig. 1. σάλος, the high sea.

P. 4-7 cm., grey, bright violaceous round the inflexed margin, at length 
of the same colour, obtusely conical, or parabolic, soon campanulate,
and at length flattened, with a broad umbo on account of the fleshy 
disc, thin towards the circumference, thinly viscid, fibrillose towards 
the margin when dried. St. 4-8 × 1-1-5 cm., white, covered up to the apex 
with the azure-blue glutinous veil when young, becoming pale when old, 
conico-attenuated from the bulbous base, gradually elongated. Gills pale 
grey, with the edge violaceous, or bluish grey, then grey clay colour, or 
cinnamon, adnate, distant, 4-6 mm. broad. Flesh white, becoming 
yellow, or faintly azure-blue. Spores ferruginous, “subglobose, 8-


Delibutus, besmeared.

P. 3-7-5 cm., light yellowish, fleshy, thin, especially towards the 
margin, convex, then flattened, obtuse, at length somewhat depressed, 
viscid with hyaline gluten, slightly silky fibrillose when the gluten has
disappeared. St. 5–10 cm. × 6–8 mm., yellowish white, apex snow white, equally attenuated from the slightly bulbose base, or somewhat equal, elastic, viscid up to the white, scanty, fibrillose, fugacious cortina. Gills dark-blue, or violaceous dark-blue, then clay cinnamon, serrulated, pallid or often crisped at the edge, adnate, at length rounded, or slightly emarginate, more or less distant, 4–6 mm. broad. Flesh white. Spores pale ochraceous, “subglobose, 7 × 6–7μ, granular” Karst. Taste watery, then slightly pungent. Grassy, and damp places. Sept.—Oct. Uncommon. (v.v.)

**elegans** Massee.

P. and st. very glabrous, yellow-viscid, shining when dry, only apex of stem white, flesh whitish-yellow, gills paler, more crowded. Grassy banks of streams. Sept.—Oct. Rare.

393. **C. (Myx.) illibatus** Fr.  

*Illibatus*, unimpaired.

P. 2.5–5 cm., yellow, disc darker, slightly fleshy, campanulate, then convex, at length plane, subumbonate, pellicle viscid. St. 7.5 cm. × 4 mm., white, commonly with reddish dots upwards, slightly attenuated upwards, viscid. Cortina superior, fibrillose, very fugacious. Gills flesh-colour, then clay and cinnamon, adnate-decurrent, arcuate, 4 mm. broad, thin, crowded. Flesh white, very thin at the circumference. Spores cinnamon, elliptical, “15–16 × 6–7μ, granular” Massee, “subglobose, 7–9μ, granular” Bat. Pine woods. Sept.—Oct. Uncommon.

***Gills at first ochraceous, or cinnamon.***

394. **C. (Myx.) stillatitus** Fr. Cke. Illus. no. 742, t. 831.  

*Stillaticius*, dripping.

P. 4–6 cm., clothed with azure-blue gluten, fuscosous-livid when the gluten separates in the form of drops, at length grey-white, slightly fleshy, convex, then plane, subumbonate; margin smooth. St. 5–7 cm. × 6–8 mm., sheathed with thick azure-blue gluten which is extended into the cortina, very soft, equally attenuated. Gills dark cinnamon, emarginate, 6 mm. broad. Flesh watery, soft, hygrophanous. Spores ferruginous, “subglobose, 8 × 6μ, 1-guttulate” Sacc., “almond-shaped, 13–15 × 7–8μ, rough. Cystidia on edge of gill, 30–40 × 12–20μ” Rick. Pastures, and amongst dead leaves. Oct. Uncommon.

395. **C. (Myx.) vibratilis** Fr. Cke. Illus. no. 743, t. 744.  

*Vibratilis*, quivering.

P. 3–6 cm., yellow, golden when dry and very shining, fleshy at the disc, thin elsewhere, convexo-plane, obtuse, very glutinous. St. 4–6 cm. × 4–8 mm., shining white, conically attenuated, or ventricose, equal and flexuose amongst mosses, fragile, very soft. Cortina glutinous, often
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P. 1.5–3 cm., pale yellow-tawny when moist, ochraceous tan and opaque when dry, slightly fleshy, somewhat globose, then convex, commonly gibbous, slightly pellucidly striate when more fully grown, hygrophanous, viscid, shining in rainy weather. St. 4–6 cm. × 4–6 mm., white, then yellow and concolorous, soft, equal, or slightly attenuated upwards, slightly viscid, silky. Cortina white, fibrillosse, slightly viscid, soon fugacious. Gills light yellowish, or at the first whitish, then ochraceous, adnexed, separating, ventricose, crowded. Flesh pale yellowish, becoming white. Spores deep ochraceous, broadly elliptical, 9–10 × 7–8 μ, 1-guttulate. Taste watery, then acrid and pungent. Woods, especially pine. Sept.—Nov. Not uncommon. (v.v.)

3. Inoloma Fr.

(ν, fibre; Λωμα, fringe.)

Pileus equally fleshy, dry, at first floccose, fibrillosse, velvety, pubescent, or silky, then becoming somewhat smooth. Veil simple.

*Gills at first white, or pallid.

397. C. (Ino.) opimus Fr. Fr. Icon. t. 151, fig. 1. Opimus, plump.

P. 7–10 cm., tan colour, fleshy, very thick, very hard, convex, then plane, deformed, repand, everywhere covered with short tan coloured tomentum, then rimoso-rivulose; margin involute, pruinose, white, often split. St. 2.5–5 × 2–5 cm., whitish, covered with the white fibrils of the veil, attenuated at the base and rooting. Gills whitish, then clay colour, emarginate, much narrower than the flesh of the p., somewhat crowded, flexuose. Flesh whitish, firm. Spores ochraceous, “sub-globose, 8–9 × 7–8 μ, warted” Rick. Smell and taste pleasant. Woods, especially conifers. Sept.—Oct. Uncommon. (v.v.)

var. fulvobrunneus Fr.

Fulvus, tawny; brunneus, brown.

P. tawny brown, undulated, thinner (margin thin), glabrous, rimoso-rivulose. St. 3.5 × 2.5 cm., attenuated downwards, fibrillosely striate. Gills very broad.

398. C. (Ino.) argutus Fr. Fr. Icon. t. 151, fig. 2. Argutus, pointed.

P. 7–10 cm., clay ochraceous, or deep ochraceous, fleshy, broadly conico-campanulate, soon convex, somewhat gibbous, at length plane,
CORTINARIUS

obtuse, fibrillosely silky, here and there minutely squamulose, becoming smooth with age, rather rimose, opaque. St. 6–10 × 2–3 cm., white, floccoso-squamulose, becoming smooth and yellowish, ovately bulbous, or ventricose at the base, often curved and prolonged below the bulb into a pointed root. Veil white, superior, simple, forming a ring when young, rarely noticeable when mature. Gills white, then clay colour, adnate, somewhat distant. Flesh very hard, white ("becoming red on exposure to the air" Quél.). Spores pale ferruginous, elliptical, 7–8×4µ, verrucose, "almond-shaped, 13–15×8–9µ, coarsely warted" Rick. Deciduous woods. Oct. Uncommon. (v.v.)

399. C. (Ino.) turgidus Fr. Grevillea, t. 109, fig. 1.  
Turgidus, swollen.

P. 5–10 cm., clay colour, silvery-shining when full grown, very fleshy, compact, convex, then plane, very obtuse, hoary, rarely sprinkled with shining atoms; margin silky and white when young. St. 4–6 × 2 cm., silvery white, stout, bulbous base much swollen, externally cartilaginous, elastic, longitudinally fibrillosely under a lens, and split up into sub-reticulate cracks, often undulate. Cortina white, fibrillosely, fugacious. Gills whitish, then clay colour, emarginate, crowded, 4 mm. broad, denticulate. Flesh whitish, tough. Spores ferruginous, pip-shaped, 7–9 × 4.5–6µ, 1-guttulate. Taste pleasant. Edible. Woods. Sept.—Oct. Uncommon. (v.v.)

Argentatus, silvered.

P. 4–10 cm., silvery-shining, disc becoming pale, at first silky-lilac round the margin, then dun-coloured, fleshy, convexo-plane, at length broadly gibbous, silky. St. 8–10 × 1.5–2 cm., concolorous, attenuated from the thickened base. Gills pallid, then watery cinnamon, emarginate, crowded; edge slightly serrated, white. Flesh whitish, often with a bluish tinge. Spores ferruginous, pip-shaped, 8–9 × 5µ, punctate. Smell and taste pleasant. Woods. Sept.—Oct. Not uncommon. (v.v.)

var. pinetorum Fr. Cke. Illus. no. 746, t. 746.  
Pinetorum, of pine woods.


Fuscus, dark; tinctus, stained.

P. 2–6 cm., pale ochraceous, becoming blood red immediately in places where touched, then fuscosely especially around the margin, fleshy, convex, subgibbose, fibrillosely silky, disc floccosely squamulose under a
lens; margin at first involute, arachnoid with the veil. St. 6–10 cm. × 5–10 mm., concolorous, becoming reddish when touched, and soon fusaceous, fusiform, often incurved at the base, solid, firm, apex minutely white pruinose. Cortina white, manifest, median, at length fugacious. Gills clay colour, then pale cinnamon, sinuato-adiuate, attenuated in front, 4–6 mm. broad, crowded; edge white, unequal. Flesh white, unchangeable, compact, firm, with a grey horn colour line at the base of the gills. Spores ferruginous in the mass, pale ferruginous under the microscope, elliptical, 9–10 × 5μ, contents granular. Smell and taste none. The change of colour is present only in the cuticle of the p., and st. Oak woods. Sept. Uncommon. (v.v.)

**Gills, as well as the st. and veil, violaceous.

402. C. (Ino.) violaceus (Linn.) Fr. Sverig. ätl. Svamp. t. 58.

Violaceus, violet.

P. 7–15 cm., dark violaceous, sometimes purplish-violet, fleshy, convex, then flattened, regular, obtuse, villous, the innate persistent villous down for the most part rimoso-squamulose; margin at first involute. St. 6–10 × 1-5–2 cm., dark violaceous, stout, remarkably bulbous, at first tomentose, then fibrillose. Cortina azure-blue, woolly, then ferruginous with the spores. Gills dark, almost black violaceous, then coloured ferruginous with the spores and again violaceous when these are rubbed off, somewhat adnate, firm, distant, connected by veins, broader than the flesh of the pileus. Flesh blue, becoming white. Spores ferruginous, broadly elliptical, 11–13 × 7–8μ, verrucose. Taste pleasant. Edible. Woods, especially under birch, and beech. Aug.—Nov. Uncommon. (v.v.)

403. C. (Ino.) cyanites Fr. Fr. Icon. t. 152, fig. 1. κύανος, dark blue.

P. 6–13 cm., dark blue, becoming azure-blue, or livid-fuscous, fleshy, soft, convex, then flattened, obtuse, silky. St. 7–13 × 1–2 cm., concolorous, very bulbous, fibrillose. Cortina azure-blue, fibrillose. Gills deep dark blue, adnate, sinuate, crowded, thin, 6 mm. broad. Flesh blue, reddening on exposure to the air, and when compressed giving out a red juice. Spores pale ferruginous, elliptical, 9–10 × 4–5μ, “warted” Rick. Woods. Sept.—Oct. Rare. (v.v.)

var. major Fr.

Major, larger.

Differs from the type in the compact stem, in the p. tardily becoming reddish, and in the somewhat distant, cinereous dark blue gills.

404. C. (Ino.) muricinus Fr.

Murex, a mollusc from which the Tyrian purple was obtained.

P. 5–10 cm., violaceous, becoming reddish, fleshy, compact, convex, then plane, very obtuse, becoming smooth; margin fibrillose. St.

405. C. (Ino.) alboviolaceus (Pers.) Fr. Fr. Icon. t. 151, fig. 3.

Albus, white; violaceus, violet.

P. 5-7-5 cm., whitish violet, fleshy, convex, broadly umbonate, or rather gibbous, dry, beautifully innately silky, the fibrils longitudinally adpressed as in Inocybe geophylla. St. 5-10 × 1-2-5 cm., concolorous, becoming whitish, firm, clavato-bulbous, or conico-attenuated, white villous, fibrillose above with the cortina, and often zoned with the white veil at the middle. Gills greyish lilac, then grey-cinnamon, adnate, scarcely emarginate, 4-5 mm. broad, subdistant, subserulate. Flesh azure blue white, juicy, thick at the disc. Spores ferruginous, oblong elliptical, 9-12 × 5-6μ, punctate. Woods, especially beech. Aug.—Oct. Common. (v.v.)

406. C. (Ino.) malachius Fr. μαλάχις, a mallow.

P. 5-10 cm., pale lilac, then fuscous ferruginous, pale brick colour when dry, very fleshy, compact, convex, then expanded, obtuse, or slightly gibbous, hoary with minute, fasciculate down, or silky towards the margin. St. 7-12 × 2-5 cm., bluish lilac, becoming whitish, bulbous base slightly marginate, ventricose, or equal, often deformed, striate with violaceous fibrils, very rarely having a white membranaceous ring. Cortina violaceous, thin. Gills purple, becoming pale, at length watery ferruginous, emarginate, crowded. Flesh violaceous, becoming white, thick, watery, soft in the st. Spores ferruginous, pip-shaped, "10-12 × 6-7μ" Cke., "punctate" Rick. Pine, and fir woods. Sept. Rare.

407. C. (Ino.) camphoratus Fr. Fr. Icon. t. 152, fig. 2.

Camphoratus, strong scented.

P. 5-8 cm., lilac, becoming whitish, or yellowish, very fleshy, convex, then flattened, obtuse, silky, becoming smooth. St. 7-13 × 1-2-5 cm., bulbous, or obclavate, peronately woolly when young. Cortina blue, fibrillose. Gills intense azure blue, becoming purple, decurrent, or emarginate, arcuate, thin, crowded. Flesh blue, white at the base of the stem, thick. Spores ferruginous, "somewhat almond shape, 12-14 × 7-8μ, granular" Cke. Smell foetid, exceedingly penetrating, like fenugreek, or curry-powder. Woods, especially pine. Sept. Rare.
408. C. (Ino.) hircinus (Bolt.) Fr. (= Cortinarius amethystinus (Schaeff.) Quél.) Bolt. Hist. Fung. t. 52. Hircinus, of a goat.


***Gills or veil cinnamon, red, or ochraceous.

409. C. (Ino.) tragannus Fr. (= Cortinarius amethystinus (Schaeff.) Quél.) Cke. Illus. no. 752, t. 757. τράγος, a goat.

P. 4–8 cm., lilac purplish, becoming pale and finally yellowish, very fleshy, convex, then flattened, obtuse, dry, silky, becoming smooth. St. 7–12 × 1–2–5 cm., violaceous, then whitish, spongy, attenuated upwards, base villous, very bulbous, silky, then fibrillose. Cortina pallid violacea, continuous with the silky covering of the p. Gills saffron-ochraceous, then cinnamon, emarginate, very broad, thick, distant, edge often somewhat crenate. Flesh yellowish, thick, deep saffron-ochraceous in the spongy st. Spores bright ferruginous, elliptical, 8–10 × 5–6μ, verrucose, l-guttulate. Smell foetid like goats, or the larvae of Cossus. Pine woods. Aug.—Oct. Uncommon. (v.v.)

var. finitimus Weinn. Finitimus, nearly related.

Differs from the type in the yellowish mottled flesh of the st., and the pleasant smell, like gum just beginning to ferment, or like camphor.

410. C. (Ino.) suillus Fr. Fr. Icon. t. 152, fig. 3.

Suillus, pertaining to swine.

P. 7–10 cm., dingy, or pallid brick-red, fleshy, convex, obtuse, at length floccosely squamulose, silky towards the margin. St. 7–10 × 1–2–5 cm., dingy pallid, clavato-bulbous, attenuated upwards, darker when touched, fibrillose, apex pale violaceous, fugacious, base white-woolly. Gills cinnamon, opaque, adnate, 10–12 mm. broad, subdistant, fragile, often veined at the base. Flesh dirty pale brick colour, especially in the st., thick at the disc, thin elsewhere. Spores “ellipsoid, obtuse at the ends, 10–12 × 6–8μ” Sacc. Fir, and pine woods. Sept.—Nov. Rare.

411. C. (Ino.) topnaceus Fr. Fr. Icon. t. 153, fig. 1. Tophus, tufa.

P. 7–10 cm., golden tawny, opaque, fleshy, hemispherical, villosely squamulose, varying slightly silky, and shining. St. 5–10 × 1–5–2 cm., tawny, slightly attenuated upwards from the bulbous base, villosely squamulose, often twisted. Gills concolorous, then tawny cinnamon,
broadly emarginate, 12–15 mm. broad, distant. Flesh white, compact at the disc, thin at the margin, soft. Spores "roundish, 8–9 × 7μ, punctate" Rick. Subcaespitose, or solitary. Beech woods. Aug.—Sept. Uncommon. (v.v.)

var. redimitus Fr. Cke. Illus. no. 754, t. 773.

Redimitus, bound round.

Differs from the type in the thinner, obtusely umonate, golden yellow p. streaked with adpressed darker fibrils, the yellowish, fibrillosely striate st. slightly thickened at the base, and the light yellow gills adnate with a small decurrent tooth. Beech woods. Oct. Rare.

412. C. (Ino.) callisteus Fr.

κάλλιστος, very beautiful.

P. 4–6 cm., yellow tawny, fleshy, convexo-expanded, rather smooth, silky towards the margin, generally broken up into minute, innate squamules. St. 7–12 × 1–1·5 cm., concolorous, or rhubarb colour, clavato-bulbous, equally attenuated upwards, fibrillosely striate. Cortina concolorous, marginal, fibrillosely fugacious. Gills concolorous, adnate, connected together at the base and to the stem by flocci, plane, sub-distant, 8 mm. broad, thin. Flesh yellowish white, rhubarb colour in the st., thin at the margin. Spores pale ferruginous, broadly elliptical, 6–8 × 6μ, 1-guttulate, "punctate" Rick. Pine woods. July—Oct. Not uncommon. (v.v.)

413. C. (Ino.) vinosus Cke. Cke. Illus. no. 758, t. 759.

Vinosus, wine colour.

P. 5–7·5 cm., vinous red, fleshy, semiglobose, then expanded, at length flattened, smooth, shining. St. 5–7·5 × 1 cm., violet, cylin-drical, abruptly thickened into a marginately bulbous, reddish base. Cortina reddish. Gills ferruginous cinnamon, adnexed, ventricose, scarcely crowded. Flesh pale violet, reddish in the st. Spores ferruginous, almond-shaped, 16–18 × 8μ, granular. Under trees, and in woods. Sept.—Oct. Not uncommon. (v.v.)


Pierre Bulliard, the eminent French mycologist.

P. 4–10 cm., dark rufescent, bay brown blood colour, becoming pale, fleshy, convex, then expanded, obtuse, smooth, -or fibrillosely. St. 5–12 × 1–1·5 cm., whitish above, blood red downwards, and covered with blood red fibrils near the ovate bulb, which arises from a blood red mycelium. Cortina whitish, fugacious. Gills purplish, then ferruginous, adnexed with a decurrent tooth, 6 mm. broad, somewhat crowded, often crenulated at the whitish edge. Flesh whitish, brownish under the cuticle, and reddish at the base of the st. Spores ferruginous, elliptical, 7–8 × 4–5μ, verrucose, 1-guttulate. Woods, especially beech. Sept. —Oct. Uncommon. (v.v.)
159. C. (Ino.) bolari (Pers.) Fr. Cke. Illus. no. 759, t. 760.

βδολος, a clod of earth.

P. 3–7 cm., light yellow red, or pale, variegated with innate, adpressed, spot-like red scales, fleshy, convexo-plane, obsoletely umbonate. St. 4–8 cm. × 6–10 mm., pale, variegated with saffron-red, adpressed, fibrillose scales, sometimes entirely scarlet, apex white, firm, equal. Cortina saffron-red, fibrillose, fugacious. Gills cream colour, then dark cinnamon, decurrent, or adnate, arcuate, crowded. Flesh white, yellowish in the st., firm. Spores pale ferruginous, broadly elliptical, 6–7 × 5 μ, minutely punctate. Taste acrid. Woods, especially beech. Aug.—Nov. Not uncommon. (v.v.)

*****Gills or veil dark, fuscous, or olivaceous.

160. C. (Ino.) pholideus Fr. Grevillea, t. 117, fig. 1. φολίδες, a scale.

P. 5–10 cm., fawn colour, becoming pale, at length somewhat cinnamon, fleshy, convex, then flattened, subumbonate and depressed round the umbo, covered with innate, piloso-fasciculate, crowded, fuscous blackish, squarrose scales. St. 7–10 cm. × 6–12 mm., brownish, attenuated upwards, sometimes shorter and clavato-bulbous, squarrose with fuliginous, blackish scales up to the cortinate, arachnoid ring, pale violaceous above. Gills violaceous, then clay colour, and at length cinnamon, submarginette, 4–8 mm. broad, thin, crowded. Flesh pallid, thin. Spores ferruginous, broadly elliptical, 6–7 × 4–5 μ, “punctate” Rick. Deciduous woods. Aug.—Oct. Common. (v.v.)

161. C. (Ino.) sublanatus (Sow.) Fr. Boud. Icon. t. 111.

Sub, somewhat; lanatus, woolly.

P. 4–10 cm., fawn colour, or olivaceous fawn, becoming tan fuscous, and at length ferruginous, slightly fleshy, campanulate, then expanded, umbonate, clothed with innate, floccose, fuscous squamules. St. 8–11 × 1-5 cm., pale ochraceous, conico-elongated, or clavato-bulbous, clothed to the middle with fuscous down, continued into a fibrillose cortina, which does not form a zone, apex slightly violaceous, naked. Cortina yellowish, arachnoid. Gills olivaceous yellowish, or ochraceous ferruginous, then cinnamon, adnate, broader behind, 6 mm. broad, scarcely crowded. Flesh ochraceous yellow, deeper coloured in the st., fairly thick, firm. Spores “ochraceous tawny, subglobose, 8–10 μ, apiculate at the one end, verrucose” Boud. Smell of radish. Fir and larch woods. Sept.—Oct. Uncommon.

162. C. (Ino.) phrygianus Fr. Fr. Icon. t. 153, fig. 3.

Phrygianus, embroidered.

P. 5–7 cm., honey colour, fleshy, convex, obtuse, densely covered with simple, black, hispid fibrils. St. 3–8 × 1–1-5 cm., paler than the p., becoming whitish when dry, reticulately clothed with lax, black fibrils,

419. C. (Ino.) arenatus (Pers.) Fr. Arena, sand.

P. 3–6 cm., pale yellowish fuscous, or olivaceous, fleshy, convex, at first gibbous, punctate with granular, floccose, brown squamules. St. 5–7 cm. × 6–10 mm., brown, clavato-attenuated, sheathed up to and beyond the middle with fuscous squamules, apex naked, cream colour. Gills yellowish, then cinnamon, emarginate, ventricose, somewhat crowded. Spores "obliquely elliptical, 7 × 5 μ" Massee. Fir, and mixed woods. Aug.—Oct. Uncommon.

4. Dermocybe Fr.

(δέρμα, skin; κύρτη, head.)

Pileus thinly, and equally fleshy, dry, not hygrophanous, at first silky with subinattile villose down, then smooth. Veil simple, forming a zone in C. caninus.

*Gills at first whitish, or pallid.

420. C. (Dermo.) ochroleucus (Schaeff.) Fr. Cke. Illus. no. 764, t. 775. ὄχρός, pale; λευκός, white.

P. 5–8 cm., pale white, or yellowish, disc ochraceous, fleshy, broadly campanulate, then expanded, and somewhat gibbous, slightly silky, becoming smooth. St. 4–7 cm. × 8–12 mm., white, firm, ventricose, naked. Cortina white, fibrillose. Gills clay colour, then ochraceous, sinuato-adnexed, then free, broader behind, 6 mm. broad, crowded. Flesh white, thick at the disc, firm. Spores pale ferruginous, broadly elliptical, 6–8 × 4–5 μ, 1-guttulate. Taste bitter. Deciduous woods. Aug.—Nov. Not uncommon. (v.v.)

421. C. (Dermo.) decumbens (Pers.) Fr. Grevillea, t. 127, fig. 3. Decumbens, lying down.

P. 2.5–4 cm., white, or yellowish, fleshy, firm, convex, then plane, gibbous, then obtuse, silky-shining. St. 2.5–5 cm. × 5–6 mm., shining white, ascending, clavato-bulbous, smooth, apex mealy. Cortina white, silky. Gills white, then clay colour, at length ochre cinnamon, adnexed, 4 mm. broad, ventricose, crowded. Flesh white, firm. Spores ochraceous, "elliptical, 9–12 × 5–6 μ." Rick. Taste slightly bitter. Woods, and grassy places. Sept.—Oct. Uncommon. (v.v.)

422. C. (Dermo.) riculatus Fr. Rica, a head veil.

P. 5–8 cm., honey colour, but only conspicuously so at the disc, elsewhere clothed with a very thin, floccose, adpressed silkiness, that makes it appear almost glabrous, fleshy, convexo-plane, slightly gibbous. St. 5–6 cm. × 5–6 mm., pallid, becoming white, thickened downwards,

423. C. (Dermo.) tabularis (Bull.) Fr. Tabula, a board.

P. 4–8 cm., clay or fuscous clay colour, sometimes tawny, becoming pale, fleshy, convexo-plane, broadly gibbous, at length very flat, veiled at first with very thin, white flocci, which rarely in wet weather are collected in a zone at the margin, becoming smooth; margin silky. St. 5–8 cm. × 6–12 mm., white, becoming pale, tough, elastic, equal, or attenuated upwards, erect, either floccosely scaly, or smooth. Cortina white, fugacious. Gills whitish, then clay colour, subemarginate, 6 mm. broad, thin, crowded. Flesh white, thick. Spores ferruginous, pip-shaped, 9 × 6 μ. Woods. Common. (v.v.)

424. C. (Dermo.) camurus Fr. Fr. Icon. t. 154, fig. 1.

Camurus, crooked.

P. 5–8 cm., fuscous, often hoary, becoming pale, pallid yellowish, umbo deeper in colour, fleshy, campanulate, then convex, with a broad, obtuse, often oblique umbo, rimosely incised when dry. St. 4–8 cm. × 7–14 mm., white, equal, ascending, flexuose, or twisted, fibrillose, apex silvery-shining, very fragile. Gills grey clay colour, then watery cinnamon, and somewhat fuscous, adnate, or sinuate, 6 mm. broad, thin, crowded. Flesh white, fuscos under the culicine when moist, thin at the margin, loose. Spores ferruginous, subglobose, 7 × 6 μ, multiguttulate. Smell unpleasant. Often caespitose. Woods, especially birch, and beech. Sept.—Oct. Uncommon. (v.v.)

425. C. (Dermo.) diabolicus Fr. Cke. Illus. no. 765, t. 816, fig. B. διάβολος, the Devil.

P. 2.5–7 cm., fuscous with a grey bloom, becoming smooth and fuscous yellow, fleshy, thin, convex, then plane, hemispherical, obtuse, or umbonate, dry, fragile, often splitting at the margin. St. 4–8 cm. × 4–10 mm., pale, bluish grey at the apex, attenuated downwards, smooth. Cortina fugacious. Gills pale bluish grey, soon becoming white, at length clay colour, adnate, separating, subemarginate, 4–6 mm. broad, firm, somewhat crowded. Flesh whitish, thin. Spores "subglobose, 8–10 × 7–8 μ, punctate" Rick. Beech woods. Aug.—Oct. Uncommon. (v.v.)

**Gills at first violaceous, becoming purple.


Azureus, sky blue.

P. 3–6 cm., lilac, becoming hoary, then fuscous, and pallid, fleshy, convex, then plane, obtuse, silky-shining, atomate. St. 6–8 cm. × 8–
10 mm., sky blue, becoming whitish, thickened at the base, fragile, silky, striate, often twisted. Cortina concolorous. Gills bright bluish violet, slightly emarginate, then decurrent, rather crowded. Flesh white, bluish in the st., thick at the disc. Spores "subglobose, 7-10 x 7-9 μ, punctate" Rick. Deciduous woods, especially beech. Sept.—Oct. Uncommon. (v.v.)

427. C. (Dermo.) caninus Fr. Cke. Illus. no. 768, t. 765.

Caninus, belonging to a dog.

P. 5-10 cm., fuscous brown, becoming brick-rufescent or tawny when dry, fleshy, firm, convex, then plane, obtuse, becoming smooth; margin at first whitish, silky. St. 7-12 cm. x 8-12 mm., pale white, apex violaceous, often ochraceous at the thickened, somewhat bulbous base, equal, fibrillose, elastic. Cortina forming a white, or fuscous zone near the apex of the st., fibrillose. Gills bluish grey, or purplish, then cinnamon, emarginate, 6-10 mm. broad, subdistant, thin. Flesh white, becoming yellowish, thick at the disc, soft. Spores ferruginous, elliptical, 9-10 x 6 μ, 1-guttulate. Taste mild. Edible. Deciduous woods, and heaths. Sept.—Nov. Common. (v.v.)

428. C. (Dermo.) anomalus Fr. Cke. Illus. no. 772, t. 776.

ά, not; ὀμαλός, even.

P. 3-6 cm., fuliginous, then rufescent, becoming hoary with separating fibrils, at length yellowish, fleshy, thin, very convex, then expanded, and gibbous. St. 5-7.5 cm. x 6-8 mm., violaceous above, whitish below, at length becoming pale and somewhat yellow, attenuated from the base, slightly sheathed, fibrillose, or somewhat scaly. Gills more or less violaceous, bluish grey purplish, then cinnamon, adnate, or emarginate, with a decurrent tooth, crowded, thin. Flesh watery, becoming white when dry, violaceous at the apex of the st., thin, soft. Spores ferruginous, elliptical, 8-9 x 6-7 μ, punctate. Taste mild. Edible. Woods, and heaths. Aug.—Oct. Common. (v.v.)


λεπίς, a scale; πούς, a foot.

P. 1.5-7 cm., umber, with a tinge of violet near the margin, disc becoming rufescent, fleshy, convex, then expanded, gibbous, smooth. St. 6-12 cm. x 8-12 mm., violet at the apex, dirty white below, attenuated upwards, with concentric, fibrillose, darker bands. Cortina whitish, with a tinge of violet. Gills violet, then cinnamon, adnate, rather crowded, thin. Flesh whitish, tinged lilac at the apex of the stem, rather thin. Spores pale ferruginous, ovate, sometimes almost globose, 8-9 x 6-7 μ, with a basal apiculus. Woods, and heaths. Aug.—Oct. Not uncommon. (v.v.)
340. C. (Dermo.) myrtillinus Fr.  

μύρτιλος, the myrtle.


341. C. (Dermo.) albocyaneus Fr.  

Albus, white; κύανος, dark blue.

P. 2–3 cm., white, becoming yellow, fleshy, convexo-plane, obtuse, hoary silky, becoming smooth. St. 6–10 × 5–1·5 cm., white, subclavate, naked. Cortina white, fugacious. Gills bluish purple, then somewhat ochraceous, emarginate, 6–8 mm. broad, crowded. Flesh white, thick at the disc. Spores pale ferruginous, elliptical, 10 × 6–7 μ, punctate. Smell “of apple” Quél. Coniferous, birch, and beech woods. Sept. Uncommon.

342. C. (Dermo.) spilomeus Fr. Fr. Icon. t. 154, fig. 3. σπιλομέος, a spot.

P. 3–7 cm., rufescent, or clay colour, fleshy, convex, then expanded, gibbous, becoming smooth. St. 5–7 × 1 cm., whitish lilac, covered in the basal half with rufous, or tawny scales, equal, slightly thickened at the base. Cortina white, fibrilloose. Gills bluish grey, or violaceous, becoming pale, at length watery cinnamon, adnate, or emarginate, crowded, thin. Flesh cinereous, becoming white, thick at the disc. Spores ferruginous, broadly elliptical, or subglobose, 6–9 × 6–7 μ, apiculate at the base, multi-guttulate, “punctate” Rick. Woods. Sept.—Nov. Uncommon. (v.v.)


Violaceus, violet; fuscus, dark.

P. 2·5–5 cm., umber, often tinged with violet, fleshy, more or less convex, then expanded, obtusely umbonate, flocculose, fibrilloose, concentrically scaly, dry; margin thin, torn, fimbriate. St. 5–6 cm. × 6–8 mm., violet above, pallid below, equal, silky. Gills violet, then umber, adnexed, rounded behind, or slightly sinuate, 4–6 mm. broad, scarcely crowded, edge paler, serrulate. Flesh thin. Spores ferruginous, elliptical, 7–8 × 4 μ. Amongst grass in open places. Uncommon.

***Gills bright cinnamon, red, or yellow.

344. C. (Dermo.) phoeniceus (Bull.) MAire.  (= Cortinarius miltinus Quél. non Fr.) Boud. Icon. t. 112, as Cortinarius miltinus Fr.  

φοινίκεος, purple-red.

11—2
P. 2–5 cm., bay brown cinnamon, or dark cinnamon when moist, becoming bright bay when dry, fleshy, convex, then expanded, broadly gibbous, or umbonate, flexuose, fibrillose-silky. St. 5–7 cm. × 4–9 mm., pale, reddish fibrillose below, equal, or slightly thickened at the base, rigid, striate. Cortina red, fibrillose. Gills reddish, then ferruginous, adnate, 3–5 mm. broad, somewhat crowded, thin. Flesh fuscosus under the cuticle of the p., becoming paler, tinged reddish in the st., thin. Spores ferruginous, elliptical, 6–8 × 4–5 μ, multi-guttulate. Smell none, or of radish. Woods, especially birch. Sept.—Nov. Common. (v.v.)

435. **C. (Dermo.) semisanguineus** (Brig.) Maire. Rolland, Champ. t. 66, no. 146.

Semi, half; sanguineus, bloody.

P. 3–6 cm., tan, or tawny olivaceous, becoming paler, convex, then plane, silky. St. 3–6 cm. × 6–8 mm., paler tawny, or yellowish, equal, often slightly thickened at the base. Cortina tawny, fibrillose. Gills blood red, sinuato-adnate, broad, or narrow, crowded, thick. Flesh fuscosus, becoming pale, thin at the margin. Spores pale ferruginous, elliptical, 6–7 × 3–4 μ. Woods, and heaths under birches. Aug.—Nov. Common. (v.v.)

436. **C. (Dermo.) cinnabarinus** Fr. Boud. Icon. t. 113.

κυνάβαρι, dragon’s blood.

P. 2–7.5 cm., scarlet-red, fleshy, campanulate, then flattened, obtuse, or obtusely umbonate, silky, then becoming smooth and shining. St. 3–6 cm. × 6–8 mm., concolorous, equal, sometimes bulbous, fibrillose, or striate. Cortina cinnabar colour, fibrillose, lax. Gills concolorous, dark blood colour when bruised, adnate, subdecurrent, subdistant, often connected by veins; edge unequal and darker. Flesh concolorous, then paler, firm. Spores ferruginous, almond-shaped, 10–13 × 5–6 μ, verrucose. Smell of radish. Woods, especially beech. Sept.—Nov. Not uncommon. (v.v.)

437. **C. (Dermo.) sanguineus** (Wulf.) Fr. Grevillea, t. 110, fig. 5.

Sanguineus, bloody.

P. 2.5–5 cm., dark blood colour, becoming paler when dry, fleshy, convex, then plane, obtuse, or slightly umbonate; sometimes depressed, shaggy, or squamulose. St. 5–10 cm. × 4–6 mm., concolorous, or darker, equal, or slightly attenuated downwards, flexuose, clothed with concolorous fibrils, base sometimes white. Cortina blood red, arachnoid, fugacious. Gills concolorous, then rust colour, adnate, sinuate, crowded. Flesh reddish, paler, thin, pouring out a blood red juice when pressed. Spores pale ferruginous, elliptical, 8–9 × 5–6 μ, 1-guttulate, verrucose. Smell of radish, sometimes obsolete. Woods, especially of conifers. Sept.—Nov. Not uncommon. (v.v.)
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438. **C. (Dermo.) anthracinus** Fr.

   \( \text{ἄνθρακς, coal.} \)

   P. 2–3 cm., dark chestnut, or brown fuscous, often reddish rose colour at the margin, fleshy, convex, then expanded, umbonate, fibrillose, becoming smooth. St. 4–5 cm. \( \times \) 3–5 mm., intense blood colour, fuscous, or yellow at the base, equal, fibrillose. Gills deep red, or fiery in colour, becoming blood red when bruised, then rust colour with the edge deep red, sinuto-adenate, crowded. Flesh concolorous (lilac according to Quélet), soft, thick at the disc. Spores ferruginous, elliptical, \( 7 \times 5\mu \), punctate. Woods. Aug.—Oct. Uncommon. (v.v.)


   \( \text{κιννάμωμον, cinnamon.} \)

   P. 1–10 cm., somewhat cinnamon, or tawny ochraceous, fleshy, convex, then expanded, obtusely umbonate, silky, or squamulose with innate yellowish fibrils, at length becoming smooth. St. 5–9 \( \times \) 5–1 cm., yellowish, equal, fibrillose. Cortina yellowish, fibrillose. Gills yellowish, then cinnamon, adnate, broad, thin, crowded, shining. Flesh yellowish, thin, scissile. Spores dark ochraceous, elliptical, \( 6–8 \times 4–5\mu \), 1-guttulate, "faintly punctate." Rick. Coniferous, and deciduous woods. Aug.—Feb. Common. (v.v.)

var. **croceus** (Schaeff.) Fr. \( \text{κρόκος, saffron colour.} \)


440. **C. (Dermo.) croceo-conus** Fr. \( \text{κρόκος, saffron; κῶνος, a cone.} \)

   P. 3–5 cm., fulvous cinnamon, conical, then campanulate, persistently acute, almost glabrous. St. 7–12 cm. \( \times \) 4 mm., yellowish, flexuose. Gills cinnamon, ascending, linear, crowded. Flesh very thin, 1 mm. thick. Spores "elliptical, almost smooth, \( 8–9.5 \times 5\mu \)" Kauffm. Subcaespitose. Amongst moss in coniferous woods. Sept.—Oct. Uncommon. (v.v.)


   \( \text{Uligo, marshy ground.} \)

   P. 3–5 cm., bright red brown, almost brick-red, fleshy, campanulato-conical, then expanded, very strongly umbonate, silky, sometimes streaked. St. 3–8 cm. \( \times \) 3–8 mm., paler than the p., flexuose. Gills yellow, becoming olive, then cinnamon, adnate with a tooth, distant. Flesh yellow-olive, then cinnamon, thick at the disc. Spores dark ochraceous, elliptical, \( 8–9 \times 4–5\mu \). Amongst Sphagnum in woods. Sept.—Oct. Uncommon. (v.v.)

442. **C. (Dermo.) orellanus** Fr. non Quél. Cke. Illus. no. 776, t. 787.

   \( \text{ἄρπος, a mountain.} \)

   P. 3–7 cm., orange tawny, fleshy, convex, then convexo-plane, more or less undulate, umbonate, covered with concolorous, or deeper coloured
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fibrillose squamules. St. 2.5–9 cm. × 4–20 mm., tawny, equal, or attenuated upwards, striato-fibrillose, or smooth. Cortina tawny, fibrillose. Gills tawny, then rust colour, broadly adnato-sinuate, broad, thick, distant, often veined on the sides. Flesh concolorous, reddening, thin at the margin. Spores brownish ferruginous, broadly ellipsoidal, 8–11 × 5–6 μ, 1–multi-guttulate, verrucose. Woods, and heaths. Aug.—Oct. Rare. (v.v.)

443. C. (Dermo.) malicorius Fr. Fr. Icon. t. 155, fig. 1.

Malicorium, the rind of a pomegranate.

P. 3–6 cm., tawny, disc darker, golden, and floccose at the margin, fleshy, convex, then plane, obtuse, velvety, or fibrillose. St. 4–5 cm. × 12 mm., golden, at length fuscous, and olivaceous, covered with golden fibrils. Cortina golden, fibrillose. Gills golden tawny, rounded behind, adnexed, crowded, edge at length floccose and discoloured. Flesh yellow, then greenish olive, rather thick, scissile. Spores “elliptical, 8–9 × 4–5 μ, faintly punctate” Rick. Taste pleasant. Coniferous woods. Sept.—Oct. Rare.

444. C. (Dermo.) infucatus Fr. Fr. Icon. t. 155, fig. 2.

Infucatus, painted.

P. 2.5–4 cm., bright yellow, fleshy, convex, obtuse, silky when dry. St. 4–7.5 cm. × 4–8 mm., pale light yellow, equally attenuated upwards from the clavate base, fibrillose. Cortina yellow, fibrillose. Gills tawny, then cinnamon, adnate, almost linear, 2 mm. broad, crowded, thin. Flesh whitish. Spores “elliptical, 10 × 5 μ” Massee. Woods. Sept.—Oct. Rare.

445. C. (Dermo.) colymbadinus Fr. Fr. Icon. t. 155, fig. 3.

κολυμβάδινος, swimming.

P. 5–8 cm., honey tan colour, becoming yellowish when dry, somewhat fleshy, convex, then expanded, scarcely umbonate, often repand, covered with yellow, fugacious fibrils, then smooth, and shining. St. 5–10 cm. × 6–8 mm., pallid, equal, somewhat naked, fibrillose-striate, sometimes twisted. Cortina almost none, very fugacious. Gills dark ferruginous, adnate, 4–8 mm. broad, subdistant, thick, edge white-floccose. Flesh pallid, darker at the base of the st., scissile. Spores “subglobose, 7–8 × 6–7 μ, almost spinose” Rick. Smell very strong of radish. Pine, and beech woods. Sept.—Oct. Rare.

****Olivaceous, veil dingy pallid, or fuscous.

P. not torn into scales.

446. C. (Dermo.) cotoneus Fr. κότινος, the wild olive.

P. 4–8 cm., olivaceous, fleshy, campanulate, then expanded, obtuse, somewhat repand, innately velvety, fragile when old. St. 5–9 × 1–
1·5 cm., pale olivaceous, bulbous, somewhat fibrillose. Cortina yellow olivaceous, persistent, woven into a fuscose zone towards the apex of the st. Gills olivaceous, then cinnamon, adnate, separating, 4–6 mm. broad, somewhat crowded. Flesh pale olivaceous, deeper coloured in the st., thin, lax, soft. Spores ferruginous, subglobose, 8–9 × 8μ, granular. Taste mild. Woods, especially oak. Sept.—Oct. Not uncommon. (v.v.)

447. C. (Dermo.) subnotatus Fr. Cke. Illus. no. 784, t. 832.

Subnotatus, marked.

P. 6–10 cm., olivaceous, becoming yellowish, then fuscose, fleshy, conical, campanulate, then expanded, gibbous, at first covered with hoary, silky fibrils, then smooth. St. 7–10 × 1–1·5 cm., pale olivaceous, conical, equally attenuated upwards, often curved and flexuose, fibrillose, or squamulose with the yellowish cortina, apex naked, silvery-shining. Cortina yellowish, fibrillose, inconspicuous. Gills bright ochraceous, then olivaceous cinnamon, adnate, 6–10 mm. broad, subdistant, often connected by veins. Flesh yellowish, very thin at the margin. Spores “elliptical, 6–8 × 5–6μ, granular” Mass. Smell of radishes or none. Beech woods. Sept.—Nov. Uncommon. (v.v.)

448. C. (Dermo.) raphanoides (Pers.) Fr. Cke. Illus. no. 786, t. 833, fig. A.

P. 2·5–5 cm., fuscose olivaceous, becoming tawny, fleshy, campanulate, then expanded, obtusely umbonate, often undulate, silky fibrillose, then smooth. St. 5–8 × 5–1 cm., olivaceous, becoming pallid, equal, or slightly attenuated upwards from the somewhat thickened base, sometimes twisted, fibrillose. Cortina pallid olive, filamentous, often forming a narrow ring-like zone on the st. Gills subolivaceous, then cinnamon, and subferruginous, adnate, slightly ventricose, scarcely crowded, edge often paler. Flesh pallid, or ochraceous, thick at the disc, firm, then soft. Spores pale ferruginous, elliptical, 7–8 × 4–5μ, granular. Smell strong of radish. Taste bitter. Beech, birch, and fir woods. Sept.—Oct. Common. (v.v.)

449. C. (Dermo.) valgus Fr. Cke. Illus. no. 785, t. 750.

Valgus, bow-legged.

P. 5–8 cm., yellowish fuscose, becoming paler, somewhat brick red when dry, fleshy, fragile, convex, then expanded and subumbonate, smooth; margin submembranaceous. St. 6–12 × 1–1·5 cm., pallid, smooth, shining, attenuated upwards, often somewhat twisted, apex lilac and striate; base white-tomentose, bulbous, rooting. Gills yellowish, then cinnamon, adnate, somewhat separating, 4–6 mm. broad, subdistant. Flesh yellowish, thick at the disc. Spores pale ferruginous, elliptical, 8 × 5μ. Smell none, or of radish. Amongst moss in coniferous woods. Oct. Uncommon.
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450. C. (Dermo.) venetus Fr. Fr. Icon. t. 155, fig. 4.

Venetus, sea-coloured.

P. 4–5 cm., green, then greenish yellow, yellowish when dry, fleshy, hemispherical, obtusely umbo nate, covered with a persistent, erect, yellow, velvety tomentum. St. 5–8 cm. × 6–8 mm., concolorous, or paler, equal, often curved, firm, very fibrillose silky, base often yellow and villous. Cortina green, or citron yellow, fibrillose. Gills olivaceous, darker than the p., then brownish, adnate, very broad, in the form of a segment, often connected by veins, subdistant. Flesh pale yellowish, or greenish yellow, thick at the disc, soft. Spores olivaceous, elliptical, 10×, echinulate” Bataille, “subglobose, 7–8×6–7μ, roughish” Rick. Smell of radish. Taste acrid. Beech, and fir woods. Aug.—Oct. Rare.

5. Telamonia Fr.

(τελαμών, a broad linen bandage.)

Pileus thinly fleshy, or abruptly thin at the margin, moist, hygrophanous, smooth or sprinkled with superficial whitish fibres of the veil. Stem cortinate, and annulate, hence the veil is somewhat double.

I. Gills very broad, rather thick, more or less distant.
   St. spongy, and wholly fibrous.
   *St. and cortina white, or whitish.


μακρός, long; πούς, a foot.

P. 5–9 cm., brick colour, at length becoming ferruginous, paler at the margin, which is at first incurved, fleshy, convex, then flattened, obtuse, dry, hoary with very small squamules, becoming smooth. St. 7.5–15 × 1–2.5 cm., dingy whitish, then concolorous, subequal, fibrillose. Cortina white, forming a distant, inferior, narrow woven ring. Gills pallid, then watery cinnamon, adnexed, very broad, 1–2.5 cm., distant, edge sometimes crenate. Flesh whitish, then cinereous, thin at the margin, firm, then soft. Spores pale ferruginous, elliptical, 9–10×5μ, minutely punctate. Woods. Sept.—Oct. Uncommon. (v.v.)

452. C. (Tela.) laniger Fr. Fr. Icon. t. 156, fig. 2.

Laniger, wool bearing.

P. 5–9 cm., bright or dark tawny, sometimes becoming pale, fleshy, hemispherical, then expanded, obtuse, at first floccosely squamulose with whitish flocci, then becoming smooth, silky towards the margin. St. 5–10 × 2–4 cm., white, equal, or bulbous, sometimes ventricose, more or less distinctly sheathed by the veil. Cortina white, forming a very soft, shining white, distinct ring, very delicate above. Gills bright saffron cinnamon, then shining tawny, adnate, or sinuate, at first crowded, then subdistant, sometimes transversely veined. Flesh
white, reddish white in the st. at length becoming tawny at the base, thick at the disc, thin at the margin. Spores ferruginous, pip-shaped, 9–10 × 6 μ, punctate. Smell strong. Coniferous woods. Sept.—Oct. Rare. (v.v.)

453. C. (Tela.) bivelus Fr. Fr. Icon. t. 156, fig. 1.

Bis, twice; velum, a veil.

P. 5–12 cm., tawny ferruginous, often spotted, or darker at the disc, fleshy, convexo-plane, always obtuse, bulblous, smooth, or slightly silky round the margin, shining, rarely opaque, sometimes rivulose. St. 6–8 × 1–2 cm., dingy white, bulbous, or equally attenuated, fibrillosely villous. Cortina white, sheathing, terminating in a spurious and fugacious ring, thin and vanishing above. Gills ochraceous, then bright tawny cinnamon, adnate, or subemarginate, at first crowded, then subdistant. Flesh white, becoming somewhat ferruginous in the stem, thick, spongy in the stem. Spores pale ferruginous, elliptical, often pointed at the base, 9–10 × 6–7 μ, 1–2-guttulate, punctate, “almost smooth” Rick. Smell “strong,” “pleasant” Qué. Taste mild. Woods, and heaths. Sept.—Oct. Uncommon. (v.v.)

454. C. (Tela.) bulbosus (Sow.) Fr. Sow. Eng. Fung. t. 130.

Bulbosus, bulbous.

P. 5–7.5 cm., date brown, becoming fuscous brick colour when dry, fleshy, campanulato-expanded, obtuse, or broadly gibbous, even, or fibrillosely squamulose towards the margin from the torn epidermis. St. 4–7.5 × 1–1.5 cm., paler than the p., becoming whitish, tinged saffron-yellow at the bulbous base, equal. Cortina white, sheathing, forming a fugacious ring. Gills dark, then brown-cinnamon, adnate, broad, subdistant. Flesh concolorous and pallid when damp, whitish when dry, tinged with saffron-yellow at the base of the st., thick and compact at the disc. Spores pale ferruginous, elliptical, 8–9 × 5–6 μ, minutely verrucose. Smell none, or of radish. Woods. Sept.—Oct. Uncommon. (v.v.)

455. C. (Tela.) urbicus Fr. Grevillea, t. 111, fig. 8.

Urbicus, pertaining to the city.

P. 3–5 cm., clay-whitish, fleshy, convexo-plane, smooth, pitted when larger. St. 5–7.5 cm. × 12–15 mm., concolorous, equal, villous above the ring when young. Cortina white, forming a narrow ring above the middle of the st. Gills watery ferruginous, emarginate, broad, thin, crowded. Flesh whitish, firm. Spores “ochraceous, pruiniform, 8 μ, punctate” Qué. Grassy places. Sept.—Oct. Rare.

456. C. (Tela.) licinipes Fr.

Licinium, lint; pes, foot.

P. 5–7.5 cm., very pale yellow, tan pallid when dry, fleshy-membranaceous, campanulate, then convex, and flattened, obtusely umbonate,
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at length depressed round the umbo, smooth. St. 5–12 cm. × 6–8 mm., pale white, at length fragile, equal, often flexuose, base white villous, clothed with shining white, fugacious, floccoso-plumose scales below the ring, even above. Cortina white, forming a distant, membranaceous ring. Gills watery cinnamon, adnate, very broad behind, up to 12 mm., somewhat crowded. Flesh watery white, thin. Fir woods, and Sphagnum swamps. Oct. Rare.

var. robustior Cke. Cke. Illus. no. 792, t. 819. Robustior, firmer.

Differs from the type in being larger and stouter. Spores 10 × 6–7 μ. Damp woods. Oct. Rare.


\[ \mu \kappa \rho \delta \], small; κύκλος, a ring.

P. 2–3 cm., brick-red fuscous, disc darker, becoming paler and opaque when dry, almost membranaceous, plano-convex, minutely umbonate, smooth. St. 2.5–5 cm. × 3–4 mm., pallid, then white, attenuated upwards from the subbulbous base. Cortina white, forming a ring-like zone on the st. Gills lilac, then dark cinnamon, adnate, very broad, almost ovate, distant, thin. Flesh thin. Spores “reddish brown in the mass, elliptical, 5–7 × 4 μ.” Herpell. Coniferous woods, and under trees. Sept.—Oct. Uncommon.

**St. and gills violaceous. Cortina commonly white-violaceous, universal veil white. Very distinguished.

458. C. (Tela.) torvus Fr. Fr. Icon. t. 157, fig. 1. Torvus, wild.

P. 4–12 cm., brick colour, date brown, copper brown, fleshy, convex, then flattened, obtuse, sprinkled with hoary squamules and fibrils, at length becoming smooth. St. 7–12 × 1–1.5 cm., whitish, becoming discoloured, short and bulbous, then elongated and subequal, often curved, sheathed to the middle, and forming a white, membranaceous, persistent ring, fibrillose and floccosely scaly below the ring; apex pale violaceous, silky; base white villous. Cortina white, villous, then fibrillose. Gills violaceous, soon purplish umber, then dark cinnamon, subadnate, very broad, 6–12 mm., thick, distant; fragile, at length sometimes veined at the base. Flesh dingy, becoming whitish when dry, thick at the disc, firm. Spores ferruginous, pip-shaped, 9–10 × 5–6 μ, 1-guttulate, “warted” Rick. Smell “of camphor” Maire. Woods, especially beech. Aug.—Nov. Common. (v.v.)

459. C. (Tela.) impennis Fr. Fr. Icon. t. 157, fig. 2.

In, not; penna, a feather.

P. 5–10 cm., umber, then brick colour, decolouring and dingy, fleshy, convex, very obtuse, smooth; margin silky when young, at length cracked. St. 5–10 × 1–2.5 cm., pale, becoming violet at the apex,

var. lucorum Fr. Cke. Illus. no. 1190, t. 1192, as a species.

Lucus, a wood.

Differs from the type in the unicolorous, clavato-bulbous stem, in the gills only being tinged with a fugacious violet, and in the firm dark watery flesh becoming isabelline when dry. Woods. Sept. Rare.

460. C. (Tela.) plumiger Fr. Grevillea, t. 112, fig. 1.

Plumiger, feather-bearing.

P. 6–9 cm., fuscous, somewhat olivaceous when moist, brick tan when dry, fleshy, conical, then campanulate, with a broad, obtuse, very prominent umbo, then expanded, often cracked, dry, clothed with dense, white, floccoso-plumose scales, which are either erect and squarrose, or adpressed and silky. St. 7.5–10 × 1 cm., pale, then often tinged with citron yellow, very clavate, apex pubescent, floccosely scaly from the veil, which forms a ring-like zone at the apex. Cortina white, floccose. Gills violaceous, soon watery then pure cinnamon, adnate, scarcely crowded, broad; edge lilac, or clay colour, often denticulate. Flesh white, or lilac, then yellowish, thin, firm. Smell unpleasant, foetid. Spores ferruginous, almond-shaped, 13–15 × 7–8 μ, minutely echinulate. Coniferous, and mixed woods. Sept.—Oct. Rare.

461. C. (Tela.) scutulatus Fr. Fr. Icon. t. 158, fig. 2.

Scutulatus, diamond- or lozenge-shaped.

P. 2–5 cm., purple umber, or brick fuliginous, very hygrophanous, brick colour when dry, fleshy, ovato-globose, then campanulato-hemispherical, obtuse, sometimes umbonate, or umbilicate, white silky round the margin, then naked, rivulose in the form of innate squamules, sometimes lacunoso-wrinkled. St. 5–15 cm. × 4–12 mm., deep violaceous, at length becoming fuscous, cylindrical, or bulbous at the extreme base, white villous at the base, rigid, somewhat rooting, fibrillosely striate, veil sheathing and forming a white, narrow, membranaceous ring. Cortina white, floccose. Gills violaceous, then purple, at length cinnamon, adnate, rarely emarginate, 6 mm. broad, more or less distant, edge often white and serrate when young. Flesh violaceous, firm, thick at the disc. Spores ferruginous, pip-shaped, 7–8 × 4 μ, 1-multi-guttulate, "slightly punctate" Rick. Smell "strong, of radish, or of violets" Quél. Woods, and moist places. Aug.—Oct. Uncommon. (v.v.)
462. **C. (Tela.) everniius** Fr. Luc. Champ. t. 191.  

*P.* 3–10 cm., *purple bay brown, brick colour when dry, becoming isabelline-hoary when old,* very hygrophanous, fleshy, conico-campanulate, then flattened, obsolesly umbo frail, adpressly silky, then smooth, *at length* rimosely incised, and torn into fibrils, fragile. *St.* 7–15 × 1–1.5 cm., violaceous, becoming pale, equal, or attenuated downwards, substrate, squamulose and obsolesly zoned with the white veil. Cortina white, fibrillose. Gills violaceous purple, becoming pale, then cinnamon, adnate, ventricose, *very broad,* 8–20 mm., distant. *Flesh concolorous in the p., violaceous in the st.,* very thin at the margin. Spores ferruginous, elliptical, 7–8 × 5–6 μ, 1–2-guttulate, “faintly warded” Rick. Smell like mushrooms. Deciduous, and pine woods, and damp places. Sept.—Dec. Uncommon. (v.v.)

463. **C. (Tela.) quadricolor** (Scop.) Fr. Cke. Illus. no. 799, t. 867.  

*Quadricolor,* four coloured.

*P.* 4–7.5 cm., *pallid yellow,* then somewhat tawny, shining when dry, fleshy, conical, then flattened, umbo flounce, smooth, *at length* spotted; margin radiato-striate. *St.* 5–7.5 cm. × 4–6 mm., violaceous, becoming *whitish,* equal, flexuose, subrigid, fibrilloso-striate with the adpressed veil, which forms an oblique, fugacious, white ring. Cortina white, fibrillose. Gills dark violaceous, or purplish, then cinnamon, adnate, 6–8 mm. broad, distant, white-serrated at the edge. *Flesh yellowish,* thin. Spores ferruginous, broadly elliptical, 7–8 × 5 μ, multi-guttulate, “nearly spinulose” Rick. Woods, especially beech. Sept.—Oct. Not uncommon. (v.v.)

***St.* and veil reddish or yellow. Gills tawny, or cinnamon, never violaceous, nor becoming brown.

464. **C. (Tela.) armillatus** Fr. (= *Cortinarius haematochelis* (Bull.) Fr.) Fr. Icon. t. 158, fig. 1.  

*Armillatus,* having a bracelet.

*P.* 4–12 cm., *red- or fuscous-brick colour,* fleshy, cylindrical, then campanulate, at length flattened, often gibbous, smooth, *then innately fibrillose,* or squamulose; margin at first incurved. *St.* 6–15 × 1–2 cm., *white,* becoming brownish with age, equal, base bulbous, the red veil forming one to four distant, oblique cinnabar zones, striate when old, and reddish fibrillose at the base. Cortina reddish *white,* fibrillose. Gills pallid cinnamon, then dark ferruginous, almost bay brown, adnate, slightly rounded, *very broad,* 10–15 mm., distant. *Flesh dingy pallid,* *isabelline in the st.,* thin at the margin. Spores pale ferruginous, elliptical, 9–10 × 5–6 μ, multi-guttulate, minutely verrucose. Smell of radish, or none. Woods, and heaths. Aug.—Oct. Common. (v.v.)
465. C. (Tela.) paragaudis Fr.

Paragaudis, a border worked on a garment.

P. 2-5–7-5 cm., bay, becoming tawny or yellowish tan colour when dry, fleshy, conical, then campanulate, and expanded, umbonate, often repand and torn on the surface, fragile. St. 7–15 × 1-1-5 cm., brick-red, becoming pale, reddish at the base, equal, or ventricose, curved and somewhat twisted, or undulate and flexuose, covered with reddish flocci, or squamules. Cortina whitish, fibrillosse. Gills pale, then becoming dark cinnamon, adnate, separating, ventricose, crowded, or subdistant, edge unequal. Flesh paler, thick at the disc. Spores “subelliptical, 8–10 × 4–5μ, punctate” Rick. Damp places under pines. Sept.—Oct. Rare.

var. praestigiosus Fr.

Praestigiosus, delusive.

Differs from the type in the submembranaceous pileus being striate to the disc, in the thin stem, 2–3 mm. thick, and the tawny cinnamon, linear gills. Under pines, and amongst Scirpus caespitosus. Rare.


κρόξος, saffron; fulvus, tawny.

P. 5–10 cm., orange-tawny, fleshy, convex, then expanded, obtusely umbonate, or gibbous, smooth. St. 7–10 cm. × 6–18 mm., yellow, becoming reddish, equal, veil forming a rufous orange zone, apex pale. Gills becoming ferruginous, adnate, slightly sinuate, 6–8 mm. broad, rather distant. Flesh bright yellow. Spores obovate, 8–10 × 6μ, rough. Woods. Sept. Rare.

467. C. (Tela.) limonius Fr. Fr. Icon. t. 159, fig. 1.

Limonius, lemon-yellow.

P. 5–10 cm., tawny lemon yellow, ochraceous yellow and opaque when dry, very hygrophanous, fleshy, convexo-plane, obtuse, smooth when moist, rimosely incised when dry. St. 6–8 cm. × 12 mm., yellow, equal, base attenuated or thickened, and at length deep saffron, floccosely scaly with the light yellow veil, which often forms a floccose ring at the apex. Gills yellow, or light yellow, at length tawny cinnamon, adnate, rarely emarginate, distant. Flesh concolorous, soft. Spores golden tawny, elliptical, 8–9 × 4–5μ, minutely echinulate. Smell slight of radish, or none. Coniferous woods. Sept.—Oct. Uncommon. (v.v.)

468. C. (Tela.) helvolus Fr. Cke. Illus. no. 802, t. 804, fig. B.

Helvolus, pale yellow.

P. 3–7-5 cm., dark tawny cinnamon, very pale yellow when dry, fleshy, convexo-plane, obtuse, or obtusely umbonate, smooth; margin incurved, at first cortinate. St. 5–20 cm. × 4–8 mm., concolorous, at length fuscous ferruginous, equal, either attenuated upwards, or at the base, fibrillosse, girt above with an annular, narrow, oblique,

469. C. (Tela.) hinnuleus (Sow.) Fr. Cke. Illus. no. 803, t. 805.

_Hinnuleus_, a young stag.

P. 3–6 cm., pallid tawny cinnamon, becoming pale, shining when dry, fleshy, campanulato-expanded, obtuse, or obtusely umbonate, sometimes depressed at the disc, smooth; margin at first silky and white. St. 2.5–10 cm. × 4–12 mm., dingy tawny, or fuscous, equal, or attenuated downwards, rigid, white-silky with the adpressed silky veil, and white-zoned above with the membranaceous, or fibrillose veil, which is often oblique, or fugacious. Gills ochraceous, then tawny ferruginous, more or less emarginato-adrnosed, 8–10 mm. broad, distant, thin, often connected by veins. Flesh concolorous, often reddish in the st., thick at the disc, firm. Spores ferruginous, pip-shaped, 9–10 × 6–7 μ, granular. Smell strong, slightly of radish, or none. Taste mild, then slightly acrid. Woods, and heaths. Aug.—Nov. Common. (v.v.)

470. C. (Tela.) gentilis Fr. Fr. Icon. t. 159, fig. 2.

_Gentilis_, of the same race.

P. 1–4 cm., tawny cinnamon, yellow when dry, very hygrophanous, fleshy, conico-expanded, then flattened, acutely umbonate, rimose incised, often somewhat silky. St. 6–9 cm. × 2–8 mm., concolorous, equal, or attenuated at the base, often curved, fibrillose, veil forming one or more oblique, yellow annular zones, sometimes floccoso-scaly below the ring, base white tomentose. Gills yellow, then tawny cinnamon, adnate, thick, very distant, often connected by veins. Flesh concolorous, thin at the margin. Spores bright ochraceous, elliptical, or pip-shaped, 7–8 × 6 μ, granular, 1-guttulate. Gregarious. Woods, especially pines, and heaths. Aug.—Oct. Not uncommon. (v.v.)

471. C. (Tela.) helvelloides Fr. Fr. Icon. t. 159, fig. 3.

_Helvella_, the genus Helvella; ἡδως, like.

P. 1–3 cm., ferruginous, becoming tawny when dry, submembranaceous, convex, then flattened, umbonate, smooth, rarely fibrillose when young, substrata when moist, cracked and squarrose when more fully grown. St. 4–7.5 cm. × 2–4 mm., subferruginous, equal, very undulate and flexuose, apex white silky and glittering, veil forming a yellow, ring-like zone at the apex. Gills violaceous umber, then ferruginous, adnate, rather broad, very thick, very distant, edge white-floccose. Flesh ferruginous in the st., very thin at the disc. Spores ferruginous, “elliptical, 9–10 × 5–5.5 μ, verrucose” Rick. Moist woods. Aug.—Oct. Uncommon. (v.v.)
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472. **C. (Tela.) rubellus** Cke. Cke. Illus. no. 806, t. 835.

*Rubellus*, reddish.

P. 5–7.5 cm., *rufous orange, darker at the umbo*, fleshy, campanulate, then expanded. St. 7–10 × 1–1.5 cm., *pale above, darker below, equal, or attenuated upwards, marked with concentric, dark ferruginous, fibrillose bands*. Gills *pale, then bright ferruginous red*, adnate, sinuate, rather narrow, scarcely crowded. Flesh *reddish ochre*, thick at the disc. Spores ferruginous, *pyriform, 8 × 5 μ*, minutely rough. Swampy places. Sept.—Oct. Rare.

****St. becoming *fuscous*, veil *fuscous*, or dirty, gills dark coloured.

473. **C. (Tela.) bovinus** Fr. (= *Cortinarius brunneus* (Pers.) Fr. sec Bar-bier.) Cke. Illus. no. 807, t. 822. *Bovinus*, pertaining to oxen.

P. 6–12 cm., *watery cinnamon, becoming tawny when dry*, convex, then plane, obtuse, or gibbous, smooth, fragile, opaque, hygrophanous. St. 6–8 × 2–2.5 cm., *dingy pallid, becoming fuscous cinnamon, very bulbous, veil forming a simple, interwoven fuscous zone*, apex whitish. Gills cinnamon, *becoming dark, adnexed, very broad, 12 mm., distant*. Flesh *pallid*, watery, thick at the disc, spongy in the st. Spores pale ferruginous, elliptical, 9–13 × 6–7 μ, coarsely verrucose. Pine, and deciduous woods. Sept.—Oct. Uncommon. (v.v.)

474. **C. (Tela.) nitrosus** Cke. Cke. Illus. no. 808, t. 837.

*Nitrosus*, full of natron.

P. 5–7.5 cm., *fawn colour, or tawny, disc darker and brownish*, fleshy, obtuse, convex, then expanded, margin undulate, soon *breaking up into minute, subconcentric darker scales*. St. 5–8 × 1 cm., *ochraceous, base darker, subequal, marked below with concentric darker squamose bands*. Gills *violet, then watery cinnamon*, emarginate, rather broad, subdistant. Flesh *pale brown*, thin. Spores pale ferruginous, elliptical, 12 × 4 μ. Smell *stinking, nitrous*. Mixed woods. Sept.—Oct. Uncommon.


*Brunneus*, brown.

P. 5–10 cm., *umber, dirty brick tan colour when dry*, fleshy, campanulate, then expanded, disc obtusely umbonate, smooth, innately fibrillose towards the margin. St. 6–10 cm. × 8–12 mm., *becoming fuscous, clavate, or attenuated upwards from the thickened base, elastic, covered with dense, minute white striae*, veil *dingy white*, forming a *brownish white, ring-like zone*. Gills *dark purple cinnamon, then brown, at length umber brown*, adnate, then adnexed, 10–15 mm. broad, thick, distant, often transversely veined, broadest in the middle. Flesh *pallid fuscous*, thick only at the umbonate disc. Spores ferruginous,

476. C. (Tela.) injucundus (Weinn.) Fr. (= Cortinarius brunneus (Pers.) Fr. sec. Barbier.) Cke. Illus. no. 809, t. 823.

Injucundus, unpleasant.

P. 6–10 cm., fuscous cinnamon, fleshy, convex, then plane, obtuse, fibrillose. St. 6–10 × 1–1·5 cm., concolorous, then tawny yellow, clavate, attenuated upwards, covered with fuscous fibrils, vein fuscous. Gills lilac tan, then cinnamon, emarginate, very broad, 8–10 mm. Flesh pale reddish, compact, firm. Spores ferruginous, elliptical, or pip-shaped, 10–11 × 5–6μ, granular. Smell musty, or pleasant. Fir woods, and under conifers. Oct.—Nov. Uncommon. (v.v.)

477. C. (Tela.) brunneofulvus Fr. Brunneus, brown; fulvus, tawny.

P. 5–11 cm., tawny cinnamon, scarcely changing colour when dry, fleshy, campanulate, then expanded, obsoletely umbownate, smooth, minutely fibrilloso-virgate with innate addressed hairs under a lens, margin at first white, fibrillose. St. 7–10 × 1–2 cm., concolorous, or paler, attenuated upwards, fibrillosely striate, veil dingy white, forming a fugacious zone. Gills tawny cinnamon, opaque, adnate, very broad, 12–20 mm., subdistant, soft. Flesh pale tawny, thin. Spores ferruginous, elliptical, 7–8 × 4–5μ, granular. Woods, heaths, and swampy places. Sept.—Oct. Uncommon. (v.v.)


Glans, acorn; color, colour.

P. 2–5 cm., brown, or cinnamon-brown, tan colour or isabelline when dry, submembranaceous, conical, then expanded, generally obtusely umbownate, soon glabrous; margin striate when moist, sprinkled with thin, short, white fibrils when dry. St. 7–12·5 cm. × 4–6 mm., concolorous, at length date brown fuscous, equal, straight, sometimes undulate, fibrillosely striate, veil forming a woven, white, distant, fugacious ring. Gills concolorous, or umber, adnate, rounded in front, very distant, somewhat thick, up to 8 mm. broad. Flesh concolorous, very thin. Spores "tawny, elliptical, 9–10 × 5–6μ, rough" Bataille. Pine woods. Sept.—Oct. Uncommon.

var. curtus Fr. Curtus, shortened.

Differs from the type in the umbo of the p. becoming somewhat black, and in the short (2·5 cm.) flexuose st., peronate and zoned by the white veil.

479. C. (Tela.) punctatus (Pers.) Fr. Cke. Illus. no. 813, t. 855.

Punctatus, dotted.

P. 1–2 cm., hoary umber, becoming pale, tan colour when dry, submembranaceous, conico-convex, umbo scarcely prominent, smooth,

II. Gills narrow, thin, more or less crowded. P. thin. St. externally more rigid, subcartilaginous, often attenuated downwards.

*St. whitish, pallid, not floccously scaly.

480. C. (Tela.) triformis Fr. Cke. Illus. no. 814, t. 790, as var. Schaefferi Fr. Triformis, three formed.

P. 4–8 cm., fawn colour, brownish, or livid yellowish, then yellowish or honey colour, isabelline, or dingy tan when dry, very hygrophanous, fleshy, convex, then plane, obtuse, or slightly gibbous, superficially fibrilllose, or becoming smooth, at length punctate-dotted, opaque. St. 7–5 cm. × 12 mm., pallid, subbulbous, fragile, rather smooth, ringed upwards with the woven veil, ring distant, white. Gills watery honey colour, then watery cinnamon, adnate, submarginate, ventricose, 8 mm. broad, subdistant, often connected by veins. Flesh whitish, thin, spongy in the st. Spores ferruginous, “fusiform-elliptical, 9–10 × 4–5 μ.” Rick. Woods, especially beech. Oct. Uncommon.

var. fusco-pallens Fr. Fuscus, dark; pallens, pale.

Differs from the type in the fuscous, umbonate p. becoming pale, and in the narrow (2–4 mm.), watery white gills. Coniferous woods.

var. melleo-pallens Fr. Melleus, honey colour; pallens, pale.

Differs from the type in the moist. isabelline yellow p. becoming yellow, in the striate margin and the pallid yellowish, fragile st. Pine woods.


Biformis, two formed.

P. 3–8 cm., dark, or ferruginous brown, pale date brown and shining when dry, submembranaceous, conical, then campanulate, at length expanded, acutely umbonate, firm, smooth, rarely covered with fugacious fibrils. St. 5–10 cm. × 6–8 mm., paler than the p., attenuated downwards, distinctly striate, adpressedly fibrilllose, firm. Ring white, distinct, oblique, interwoven, sometimes obsolete. Gills grey, then watery cinnamon, adnate, or emarginate, attenuated behind, connected by veins, 6 mm. broad, rather crowded, edge often crenulate. Flesh brownish, becoming pale, very thin except at the disc. Spores pale ferruginous, elliptical, 7–8 × 3–4 μ, minutely punctate. Pine, and mixed woods. Oct. Rare.

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482. C. (Tela.) fallax Quél. Grevillea, t. 128, fig. 6.

Fallax, deceptive.

P. 1–1.5 cm., yellow, then cream ochraceous, campanulato-convex. St. 4–5 cm. × 2 mm., whitish cream colour, flexuose, silky, lilac and satiny above the ring. Ring white, narrow, fugacious. Gills cream colour, then ochraceous, adnate, ventricose. Flesh white, thin. Spores straw colour, ovoid pruniform, 8μ, punctate. Woods.

**St. inclining to violet.


 peruσκελίς, a garter.

P. 2–5 cm., lilac, tawny at the disc, violaceous at the margin, fleshy, hygrophanous, campanulate, then convex, umbonate, submembranaceous, covered with white silky fibrils. St. 7–10 cm. × 4–8 mm., concolorous, becoming fuscous when dry, equal, straight, fibrillose, the fuscous veil forming several fibrillose zones, base white-villous. Gills pallid, then dark ferruginous, adnate, narrow, crowded. Flesh pale tawny, thin. Spores ferruginous, elliptical, 8–9 × 4–5μ, 1–2-guttulate. Woods, bogs, and under beeches. Sept.—Nov. Uncommon. (v.v.)

484. C. (Tela.) flexipes Fr. Cke. Illus. no. 817, t. 824, fig. A.

Flexus, bent; pes, foot.

P. 1–3 cm., dark date-brown fuscous, or inclining to violaceous, becoming pale, very pale yellow when dry, becoming tan when old, fleshy, at first conical and acute, then expanded and acutely umbonate, at length depressed round the umbo, hoary fibrillose, finally naked, torn when old. St. 6–10 cm. × 4 mm., pallid, violaceous throughout, or at the apex, equal, flexuose, floccoso-scaly below the ring; ring white, woven, distinct. Gills purple, or umber violaceous, then cinnamon, adnate, subdistant, edge whitish. Flesh concolorous, thin. Spores tawny, pip-shaped, 6–7 × 4–5μ, rough, 1-guttulate. Woods. Sept.—Oct. Not uncommon. (v.v.)

485. C. (Tela.) flabellum Fr. Cke. Illus. no. 817, t. 824, fig. B.

Flabellum, a small fan.

P. 1.5–3 cm., olivaceous fuscous, tan when dry, submembranaceous, conical, then flattened, generally acutely umbonate, at first covered with white, superficial, separating scales, silky when dry, at length rimosely incised, torn into fibrils. St. 5–10 cm. × 2–4 mm., pallid, becoming violet at the apex, equal, undulated, flexuose, floccoso-scaly. Veil white, inferior, giving rise to the scales on the stem, terminating in a ring which is sometimes perfect and entire, sometimes woven and oblique, and sometimes wanting. Gills dark violaceous, then cinnamon, and at length ferruginous, adnate, linear, narrow, crowded. Flesh paler, very thin. Spores "elliptical, 8–9 × 5–6μ, minutely punctate" Rick.
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***St. and p. tawny, ferruginous.

486. C. (Tela.) psammocephalus Fr. non Bull. Cke. Illus. no. 818, t. 839, fig. A.

Entirely tawny cinnamon, becoming pale and somewhat golden when dry. P. 2·5–5 cm., fleshy, convex, then plane, at length umbonate and revolute, broken up into minute furfuraceous squamules. St. 2·5–5 cm. × 4–8 mm., somewhat attenuated downwards, sheathed with the continuous, squamulose veil. Cortina fibrillose. Gills at length darker, umber cinnamon, sinuato-adnate, 4 mm. broad, crowded. Flesh concolorous, or yellowish, thin. Spores ochraceous, elliptical, 1–2-guttulate, minutely verrucose. Woods, and charcoal heaps. Aug.—Oct. Common. (v.v.)

487. C. (Tela.) incisus (Pers.) Fr. Fr. Icon. t. 160, fig. 1.

Incisus, cut into.

P. 1–3 cm., tawny ferruginous, opaque, more rarely date brown, or olivaceous fuscous, fleshy, conico-convex, then expanded, very acutely or obsolesly umbonate, naked, then, especially in dry weather, torn into fibrils, or scales, even and shining when scorched by the sun. St. 2·5–10 cm. × 2–6 mm., tawny or ochraceous, equal, flexuose, fibrillose, veil forming a woven, white ring, sometimes obsolete. Gills cinnamon-ferruginous, adnate, subdistant. Flesh concolorous, thin. Spores ochraceous, elliptical, 8–9 × 5–6 μ, 1-guttulate, rough. Subcaespitose, or in troops. Woods, heaths, and dried up swamps. Sept.—Oct. Not uncommon. (v.v.)

488. C. (Tela.) iliopodius Fr.

ɪλύς, mud; ποός, foot.

P. 2·5–5 cm., opaque cinnamon, tan when dry, fleshy, conical, then expanded, generally acutely umbonate, silky with hoary fibrils, then becoming smooth. St. 2·5–10 cm. × 2–4 mm., tawny, becoming fuscous, subcartilaginous, equal, flexuose, elastic, sheathed to the middle by the white veil which becomes even and silky, cortinately ringed where the sheathing ends, apex naked, fibrillosely striate. Gills cinnamon, adnate, thin, somewhat crowded. Flesh of st. saffron cinnamon, thin. Spores ferruginous, elliptical, 8–9 × 5–6 μ, with a large central gutta, punctate. Woods, especially pine and beech. July—Dec. Not uncommon. (v.v.)

****St. floccosely scaly, and, as well as the p., fuscous.

489. C. (Tela.) hemitrichus Fr. Cke. Illus. no. 820, t. 825.

ημ, half; θρίξ, hair.

P. 2·5–8 cm., dark fuscous, fuscous tan when dry, umbo generally persistently dark, fleshy, convexo-expanded, acutely or obtusely

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umbonate, or wholly obtuse, often umbilicate in large specimens, covered wholly, or only round the margin, with white, fibrillose, curled, erect, superficial floccii, then becoming smooth. St. 4–7 cm. × 4–8 mm., concolorous, equal, firm, white flocculose below the ring. Ring shining white, median, woven, often membranaceous and reflexed. Gills clay colour ("bluish clay" Quél.), then cinnamon, adnate, ventricose at the base, rounded, 6 mm. broad, very crowded. Flesh concolorous, becoming paler, thick at the disc. Spores ochraceous, elliptical, 8–9 × 5–6 μ, punctate. Taste mild. Woods, heaths, and boggy ground, especially under birches. April—Nov. Common. (v.v.)

490. C. (Tela.) stemmatus Fr. Fr. Icon. t. 160, fig. 3.

στέμμα, a wreath.

P. 2–5 cm., date brown, becoming pale when dry, fleshy, convex, then flattened, obtuse, fragile, hoary silky round the margin when moist, fibrillose when dry. St. 5–8 cm. × 4–8 mm., ferruginous date brown, equal, or slightly attenuated at the base, often curved, soft, generally floccosely squamulose with two to four white ring-like zones, sometimes naked, apex paler, becoming silky even. Gills date brown, opaque, narrow, 4 mm. broad, very crowded. Flesh ferruginous date brown, thin at the margin. Spores ferruginous, pip-shaped, 9–10 × 5–6 μ, punctate. Moist woods, and heaths. Sept.—Oct. Uncommon. (v.v.)

491. C. (Tela.) rigidus (Scop.) Fr. Cke. Illus. no. 822, t. 791.

Rigidus, stiff.

P. 1–4 cm., bay cinnamon, fuscous when decaying, pale yellow, or fuscous tan colour when dry, fleshy, conical, then convex, and expanded, acutely or obtusely umbonate, or quite obtuse, at length depressed round the umbo, smooth, becoming broken up into scales when fully grown, margin at length pellucidly striate, at first silky from the white veil. St. 5–10 cm. × 4–5 mm., concolorous, or becoming fuscous, or pale, equal, straight, or flexuose, adpressedly fibrillose, girt with the squamose, white veil. Ring white, floccose, sometimes membranaceous. Gills cream colour, then cinnamon, adnate, broad, plane, somewhat crowded, often connected by veins. Flesh concolorous, thin at the margin. Spores ferruginous, elliptical, 7–8 × 4–5 μ, minutely punctate. Smell strong, taste mild. Woods, and heaths, especially under birches. Sept.—Nov. Not uncommon. (v.v.)

492. C. (Tela.) paleaceus (Weinm.) Fr. Fr. Icon. t. 160, fig. 4.

Paleaceus, chaffy.

P. 1–3 cm., fuscous, dingy when dry, very hygrophanous, submembranaceous, conical, then expanded, acutely or obtusely umbo- nate, silky with white, superficial squamules, the remains of the veil, becoming smooth, opaque. St. 5–7·5 cm. × 2–3 mm., concolorous,
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paler when young, tough, equal, undulate, squamulose with white flocci, base white-villose. Ring white, fibrillosely floccose, fugacious. Gills pallid-whitish, then cinnamon, adnate, broad, crowded. Flesh concolorous, very thin at the margin. Spores ferruginous, broadly elliptical, 7–8 × 4–5 μ, rough. Smell weak. Woods, especially beech, and birch, also on boggy heaths. Sept.—Nov. Not uncommon. (v.v.)

493. C. (Tela.) penicillatus (Fr.) Quél. (= Cortinarius (Inoloma) penicillatus Fr.)

P. 2–4 cm., ferruginous fuscous, tawny when dry, fleshy, convex, minutely umbonate, dry, densely floccoso-scaly with dark, innate, ferruginous fibrils. St. 5–7·5 cm. × 3–6 mm., paler than the p., equal, fragile, squamose to the apical ring with adpressed, fuscous, ferruginous, concentric scales, paler and adpressedly silky above the ring. Gills ochraceous, then cinnamon, sinuato-adnate, then separating, plane, 6 mm. broad, somewhat crowded. Flesh concolorous, thin. Spores pale ferruginous, pip-shaped, 7–8 × 5 μ, minutely rough. Coniferous woods. Sept.—Oct. Uncommon. (v.v.)

494. C. (Tela.) Iris Massee.

P. 2–3 cm., pale ochraceous brown, fleshy, hemispherical, then expanded, acutely umbonate, silky, densely covered with minute white fibrils, usually splitting at the margin. St. 5–7 cm. × 4 mm., orange brown, conical, covered with concolorous, pointed, fibrillose squamules below the bright brown, fibrillose ring, smooth, silky, and violet, becoming pale above the ring. Gills dirty ochraceous, then bright orange brown, very much cut out behind, slightly attached, moderately broad, rather crowded. Flesh concolorous, thin. Spores orange brown, elliptical, obliquely apiculate, 10 × 5 μ. Solitary or in clusters of two to four. Woods. Oct. Rare.

495. C. (Tela.) Cookei Quél. Cke. Illus. no. 821, t. 840, fig. B.

M. C. Cooke, the eminent English mycologist.

P. 1–2 cm., tawny yellow, conical, umbonate, fibrillose, covered with a paler, shining, woolly veil. St. 3–5 cm. × 2 mm., concolorous, equal, flexuose, girt with several yellowish floccose zones. Gills violet, then reddish, at length rust colour, adnate, 2–3 mm. broad, edge often floccose, white. Flesh yellowish, thin. Spores ferruginous, elliptical, 7 × 3·5 μ. Damp woods. Rare.

6. Hydrocybe Fr.

(ὑδωρ, water; κυβη, head.)

Pileus thinly fleshy, rarely compact, moist, hygrophanous, smooth, or covered only with white, superficial fibrils. Stem not sheathed, cortina rarely forming an arachnoid ring.
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I. P. somewhat fleshy, convex, or campanulato-convex, then expanded, obtuse, or at length gibbous; margin at first incurved. St. for the most part attenuated upwards.

*St. white, cortina of the same colour.

496. C. (Hydro.) firmus Fr. Cke. Illus. no. 824, t. 792. Firmus, firm.


497. C. (Hydro.) subferrugineus (Batsch) Fr.

Sub, somewhat; ferrugineus, rust-colour.

P. 4–8 cm., ferruginous, or watery cinnamon, either tawny and shining when dry, or becoming pale, more or less hygrophanous, fleshy, convex, then expanded, obtuse, flexuose, firm. St. 6–8 × 1–1.5 cm., pallid, more or less bulbous, attenuated upwards, adpressedly fibrilloose, rigid, subcartilaginous. Cortina white, fibrilloose, marginal, very fugacious. Gills pallid, soon watery, then dark ferruginous, opaque, very emarginate, often connected by veins, 6 mm. broad, more or less crowded. Flesh dingy isabelline white, saffron yellow at the base of the st., scissile, thick at the disc. Spores ferruginous, elliptical, 7–8 × 4–5μ, 1-guttulate, "warted" Rick. Smell strong, taste unpleasant. Deciduous woods, and amongst rotting pine leaves. Sept.—Oct. Not uncommon. (v.v.)

498. C. (Hydro.) armeniacus (Schaeff.) Fr. Cke. Illus. no. 826, t. 793. Armeniacum, the apricot.

P. 5–12 cm., tawny cinnamon, ochraceous when dry, fleshy, rigid, campanulate, then convex and flattened, broadly and obtusely umbonate, smooth, here and there slightly striate at the margin. St. 5–8 × 1–1.5 cm., white, conico-attenuated, fibrilloose, subcartilaginous, rigid, elastic. Cortina white, somewhat sheathing, collapsing and forming an adpressed, silky zone. Gills pallid, then tawny cinnamon, shining, adnate, at length slightly rounded, rather broad, crowded. Flesh somewhat concolorous, thin at the margin, scissile. Spores ferruginous, elliptical, 7–9 × 4–5μ, granular. Woods, especially pine. Aug.—Oct. Uncommon. (v.v.)

var. falsarius Fr. Falsarius, deceptive.

Differs from the type in the light yellowish p. becoming white when dry.
499. **C. (Hydro.) damascenus** Fr. Cke. Illus. no. 827, t. 856.

*Damascenus*, a damson.


*Privignus*, a step-son.

P. 4–6 cm., fuscous, becoming hoary-pale with a very thin white film, pallid tan when dry, very fragile, fleshy, convex, then flattened, often reflexed and undulate, obtusely umbonate, dry, very hygrophanous. St. 5–8 cm. × 6–8 mm., silvery-pale, equal, or attenuated upwards, often twisted, white-silky. Cortina white, silky. Gills watery, then opaque cinnamon, adnate, broad, not crowded, edge white-fimbriate, serrate. Flesh white, hygrophanous, thin at the margin, fragile. Spores pale ferruginous, pip-shaped, 8–9 × 4–5 μ, punctate, 1-guttulate. Smell unpleasant. Taste scarcely acrid. Pine, and oak woods. Sept.—Oct. Uncommon. (v.v.)

501. **C. (Hydro.) duracinus** Fr. Cke. Illus. no. 829, t. 809.

*Duracinus*, hard-berried.

P. 4–7 cm., watery brick colour, tan when dry, always opaque, fleshy, campanulate, or convex, then plane, gibbous, or with a broad, obtuse umbo, with an elevated ridge at the circumference, caused by the margin being at first sharply and regularly bent inwards to the breadth of 1 mm. and white-silky, then becoming flattened and naked; cuticle hard, rigid, fragile. St. 5–8 × 1–1·5 cm., pale white, hard, fusiform, or subbulbous, rooting at the attenuated base, smooth, rigid, with a thick, cartilaginous, rigid, separable cuticle (the fragments of which when it breaks up become revolute). Cortina white, appearing only as a narrow zone round the margin of the p. Gills whitish, then watery cinnamon, adnate, 4–6 mm. broad, moderately crowded; edge often white, irregular. Flesh white, then tinged reddish, thick at the disc. Spores ferruginous, “elliptical-almond-shaped, 10–11 × 5–6 μ, punctate” Rick. Woods, and pastures. Aug.—Oct. Uncommon. (v.v.)

502. **C. (Hydro.) illuminus** Fr. Cke. Illus. no. 830, t. 841.

*Iluminus*, dull.

P. 4–8 cm., pale brick-red, or tawny cinnamon, brick-red tan when dry, somewhat fleshy, convex, then plane, gibbous, or obtusely umbonate
smooth, minutely innato-fibrillose and virgate under a lens, moist. St. 7–10 cm. × 6–10 mm., pallid, becoming ferruginous or yellowish, attenuated upwards, sometimes twisted, fibrillose silky, base white. Cortina white, fibrillose, evident. Gills pale reddish tan, then cinnamon, adnate, scarcely crowded, 4–10 mm. broad, often veined at the base. Flesh white, thin at the margin. Spores "ferruginous, subelliptical, 9–10 × 4–5 μ, punctate" Rick. Pine, and deciduous woods. Sept. Uncommon.

503. C. (Hydro.) tortuosus Fr. Fr. Icon. t. 161, fig. 1.

Tortuosus, twisted.

P. 3–7.5 cm., ferruginous bay, somewhat shining, dull ochraceous when dry, submembranaceous, campanulate, then expanded, acutely or obtusely umbonate, convex, or revolute, smooth, moist. St. 7–10 cm. × 6–8 mm., silvery, becoming pale, apex at first tinged with fugacious lilac, fragile, equal, generally twisted, naked, rooting. Gills shining tawny, then ferruginous, becoming blood red when rubbed, adnate, separating, 4–8 mm. broad, somewhat crowded. Flesh pallid, thin, fragile. Spores ferruginous, "subelliptical, 8–10 × 5–6 μ, spinulose" Rick. Damp places in pine woods. Sept.—Oct. Rare.

504. C. (Hydro.) dilutus (Pers.) Fr. Grevillea, t. 85, fig. 2.

Dilutus, diluted.

P. 4–5 cm., bay brown, or watery brick colour, tan colour when dry, opaque, fleshy, convex, then expanded, umbonate, umbo thin, vanishing, silky and white at the margin, becoming smooth. St. 5–8 cm. × 4–8 mm., whitish, opaque, slightly attenuated from the base, white-silky, becoming smooth. Cortina white, silky, often collapsing into patches, or forming spurious zones on the st. Gills ochraceous, then pale cinnamon, deeply emarginate, very ventricose, 6–8 mm. broad, crowded. Flesh white, becoming reddish, thin at the margin. Spores brownish, "subglobose, 5–6 × 5 μ, punctate" Rick. Deciduous woods. Nov. Rare.

**St. and gills commonly inclining to violet.

505. C. (Hydro.) saturninus Fr. Fr. Icon. t. 161, fig. 2.

Saturninus, dull.

P. 5–12 cm., dark bay-brown, somewhat umber when damp, soon becoming pale brick colour, changing colour very much, fleshy, campanulate, then expanded, obtuse, even, smooth, superficially white, silky round the margin when young. St. 5–8 × 1–2.5 cm., deep violet, becoming white, firm, thickened downwards, sometimes bulbo-ventricose, fibrillose striate. Cortina white, fibrillose, inferior, abundant. Gills purplish, then watery ferruginous, rounded-attached, very broad, 8 mm., crowded, thin, fragile, edge often white floccose. Flesh violaceous,
then whitish, thin at the margin. Spores yellowish ferruginous, "almond shaped, 10-12 × 5-6μ, punctate" Rick. Often subcaespitose. Woods, and pastures. Sept.—Nov. Not uncommon. (v.v.)

506. C. (Hydro.) sciophyllus Fr. (= Cortinarius saturninus Fr. var. sciophyllus (Fr.) Quél.) Fr. Icon. t. 161, fig. 3.

σκιά, shade; φύλλον, leaf.

P. 2-5 cm., dark sky blue fuscous, or steel blue, fleshy, convex, then expanded, obtuse, at first white silky round the margin from the veil. St. 5-7 × 1 cm., violaceous, becoming ferruginous at the base, attenuated upwards from the thickened base. Cortina white, very abundant, collapsing and leaving many, Telamonia-like, white zones on the st. Gills dark umber, adnate, narrow, 1-2 mm. broad, attenuated from the st. to the margin, crowded. Flesh pale umber, thick at the disc. Spores "ochraceous, elliptical, or subglobose, 8-9 × 6-8μ, granular" Bataille. Smell somewhat strong. Gregarious, or subcaespitose. Beech woods. Oct. Uncommon.


P. 5-10 cm., toast brown, then pale yellowish, fleshy, convex, obtuse, smooth, obsolescent hoary-fibrillose towards the margin. St. 4-7 × 1-2 cm., whitish, equal, sometimes twisted, scarcely fibrillose, apex pale violaceous. Cortina white, appendiculate at the margin of the p. and on the apex of the st., fugacious. Gills dark bluish grey, or violaceous cinereous, then watery cinnamon, rounded, 6 mm. broad, with narrower and shorter ones intermixed, subdistant. Flesh dingy, violaceous only at the apex of the st., subequal. Spores ferruginous, elliptical, 7-8 × 5μ. Woods. Sept. Uncommon.

508. C. (Hydro.) castaneus (Bull.) Fr. Boud. Icon. t. 117. καστανόν, the chestnut tree.

P. 2-5 cm., fuscous chestnut, becoming pale and silky when dry, shining, umbo becoming black, paler at the slightly scalloped margin, and often white silky with the cortina, fleshy, firm, almost pliant, campanulate, then flattened, obtuse, or obtusely umbonate, rarely umbilicate, often irregular, smooth. St. 4-8 cm. × 4-6 mm., pallid violaceous, or pallid rufescent, subequal, rarely thickened at the base and rooting, cartilaginous, slightly fibrillose with the veil. Cortina white, fibrillose, scanty. Gills violaceous, then ferruginous, adnate, or emarginate, 4-6 mm. broad, thin, crowded, edge often whitish. Flesh violaceous, darker under the cuticle of the p., thin. Spores ferruginous, elliptical, 7-8 × 4-5μ, minutely verrucose. Taste pleasant. Edible. Gregarious, sometimes caespitose. Woods, pastures, and roadsides. June—Nov. Common. (v.v.)
509. **C. (Hydro.) bicolor** Cke. (= Cortinarius imbutus Fr. sec. Bataille.)
Cke. Illus. no. 836, t. 871. 
Bicolor, two coloured.

P. 2–5 cm., dingy whitish, with an occasional tinge of lilac, fleshy, campanulate, then expanded, broadly or acutely umbonate, somewhat fragile, smooth, silky shining. St. 5–8 cm. × 6–10 mm., pallid violet, becoming whitish, equal, or attenuated downwards. Cortina white, fugacious. Gills purplish violet, then cinnamon, adnate with a tooth, subventricose, rather broad, scarcely crowded, slightly eroded at the edge. Flesh colour of the pileus, or paler, bright purplish at the base of the st., pallid above, thin. Spores ferruginous, elliptical, a little attenuated towards one or both ends, 9–15 × 5–7 μ, minutely verrucose. Woods. Aug.—Oct. Not uncommon. (v.v.)

***St. and somewhat obsolete veil yellow or rufous.

510. **C. (Hydro.) balaustrinus** Fr. Cke. Illus. no. 837, t. 794.

βαλαυστίνος, the flower of the wild pomegranate.

P. 3–8 cm., reddish ferruginous, tawny brick-red and shining when dry, fleshy, convex, then plane, obtuse, moist, fibrillosely virgate under a lens. St. 5–8 cm. × 10–12 mm., pale and streaked with red when young, becoming ferruginous, often curved, clavately bulbous, or attenuated upwards, firm. Cortina reddish. Gills reddish, then ferruginous red, adnate, broad behind, somewhat crowded, at length sub-distant. Flesh ferruginous in the st., thin. Spores ferruginous, “sub-globose, 6–7 × 5–6 μ, punctate” Rick. Beech woods. Oct. Uncommon.

511. **C. (Hydro.) colus** Fr. Paulet, t. 99.
Colus, distaff.

P. 2.5–5 cm., brown rufescent, paler brick colour and shining when dry, fleshy, campanulate, then convex, obtuse, or obtusely umbonate. St. 8–10 cm. × 4 mm., paler than the p., subbulbous, equally attenuated upwards, base encircled with the blood red mycelium, sometimes rooting, stiff, longitudinally fibrillosely with fibrils of the same colour as the p. Cortina tawny reddish, fibrillosely, fugacious. Gills pale, then dark cinnamon, adnate, scarcely sinuate, 6 mm. broad, plane, firm, tough, rather thick, scarcely crowded, veined at the base. Flesh concolorous, dingy whitish when dry, thin. Spores ochrey-cinnamon, “dark under the microscope, 9–10 × 5–6 μ, almost spinulose, cystidia on edge of gill vesiculose, 25–36 × 12–15 μ.” Rick. Coniferous woods. Sept.—Oct. Uncommon.

512. **C. (Hydro.) isabellinus** (Batsch) Fr. Cke. Illus. no. 839, t. 829.
Isabellinus, dirty linen colour.

P. 3–5 cm., yellowish, honey colour, yellow and shining when dry, fleshy, convex, subumbonate, smooth. St. 7–10 cm. × 8 mm., yellowish, equal, very rigid, firm, striate. Cortina concolorous, sparse, very
fugacious. Gills **yellow**, then **clay cinnamon**, adnate, broad, thin, sub-
distant, edge often yellowish. Flesh cream colour, firm. Spores “ellipt-
Uncommon.

513. **C. (Hydro.) renidens** Fr. Fr. Icon. t. 162, fig. 1.

*Renidens*, glistening.

P. 2–5 cm., **ferruginous** tawny, ochraceous when dry, or only becoming
pale at the disc, fleshy, firm, convexo-plane, obtuse, or gibbous, rarely
umbilicate, very smooth, shining. St. 4–8 cm. × 6–8 mm., pale
yellowish, then tawny, firm, equal, subcartilaginous, splitting up into
fibrils of the same colour as the p. Cortina yellow, laxly fibrillose,
fugacious. Gills **pallid cinnamon**, then tawny, adnate, separating free,
6 mm. broad, somewhat crowded. Flesh paler, thin, scissile. Spores
dark ochraceous, “subglobose, 6–7 × 6μ, minutely warded” Rick.

514. **C. (Hydro.) angulosus** Fr. Fr. Icon. t. 162, fig. 2.

*Angulosus*, full of corners.

P. 4–8 cm., reddish tawny, somewhat variegated with darker spots,
opaque tawny yellow when dry, fleshy, convex, then plane, very obtuse,
repand, hygrophanous, fragile, very smooth; margin membranaceous,
splitting, flexuose. St. 3–7 cm. × 4–8 mm., somewhat tawny, firm,
equal, often twisted, striate. Cortina tawny, very fugacious. Gills
tawny, adnate, 6–8 mm. broad, thick, subdistant, fragile. Flesh yellow-
ish white, darker in the st., thin, firm. Spores ferruginous, “roundish-
elliptical, 7–8 × 5–6μ, minutely warded” Rick. Coniferous woods.


Differs from the type in the st. being attenuated at the base. Pine
woods.

****St. inclining to fuscous; cortina pallid, dirty, or white,
not yellow, gills dark.

515. **C. (Hydro.) uraceus** Fr. Fr. Icon. t. 162, fig. 3. *Uro*, I burn.

P. 2–5 cm., **umber**, or brown, sometimes olivaceous, somewhat shining,
becoming brick colour when young, commonly tan or isabelline when dry,
fleshy, conical, then campanulate and expanded, umbonate, or ob-
tuse, smooth often becoming subfibrillose. St. 5–10 cm. × 4–8 mm.,
fuscous, sometimes olivaceous, apex becoming pale, at length becoming
tirely fuscous black, cylindrical, quite equal, firm, fibrillosely striate
with paler striae, becoming smooth, apex naked. Cortina fuscous,
superior, fibrillose, rarely noticeable. Gills **cinnamon brown**, adnate,
ventricose, 6 mm. broad, distant, firm; edge sometimes white and

516. C. (Hydro.) jubarinius Fr.

Jubar, radiance.

P. 3–7·5 cm., bright tawny cinnamon, shining, fleshy, campanulato-
flattened, obseletely umbonate, often repand, undulate, at length
reflexed, disc depressed when large and old, smooth, becoming innately
fibrillose under a lens when old, silky round the margin when young.
St. 5–6 cm. × 4–12 mm., pale tawny, paler at the base and naked at the
apex, firm, equal, fibrillosely striate. Cortina white, fibrillose, fugacious.
Gills tawny cinnamon, adnate, 2–6 mm. broad, subdistant. Flesh pale
tawny in the st., thick at the disc. Spores pale ferruginous, pip-shaped,

517. C. (Hydro.) irregularis Fr.

Irregularis, irregular.

P. 3–7·5 cm., brown ferruginous, tawny ferruginous when dry, fleshy,
convex, then plane, acutely umbonate, repand, at length depressed
round the umbo, dry, smooth, sometimes deformed, undulate, and
rugose, white silky round the membranaceous margin when young.
St. 5–10 cm. × 4–6 mm., brick-red, equal, rigid, longitudinally fibrill-
losely striate, sometimes twisted, and attenuated downwards. Cor-
tina white, silky, sparse, sometimes peronate at the base of the st.
Gills watery, then dark ferruginous, adnate with a decurrent tooth, or
arcuato-decurrent, 4–8 mm. broad, very crowded. Flesh pallid, thick
at the disc. Spores ferruginous, “almond-shaped-elliptical, 8–10 × 5–
6 μ, almost spinulose” Rick. Caespitose. Coniferous woods. Rare.

518. C. (Hydro.) pateriformis Fr.

Patera, a saucer; forma, shape.

P. 2–4 cm., fuscos chestnut, fleshy, orbicular, plane, then depressed,
very obtuse, rigid, dry, smooth, at first white silky round the margin.
St. 5–8 cm. × 2–4 mm., silvery white, becoming fuscos, firm, equal,
or attenuated at the base, straight, fibrillose, base white villose. Cortina
white, fibrillose, fugacious. Gills brick-red, or watery cinnamon, adnate
with a decurrent tooth, plano-convex, thin, crowded. Flesh pallid,
thin. Spores brownish ferruginous, elliptical, 9 × 4–5 μ, with a large
Sept.—Oct. Uncommon. (v.v.)

519. C. (Hydro.) unimodus Britz.

Unimodus, uniform.

P. 4–7 cm., reddish brown, campanulate, then convex, umbonate,
fibrillose. St. 8–11 cm. × 6 mm., concolorous, thickened at the base,
fibrillose. Gills brown, emarginato-adnate, distant. Spores “pruni-
—Oct. Rare.
II. P. submembranaceous, conical, then expanded, umbonate, umbo acute, or more rarely obtuse and vanishing; margin at first straight. St. subequal, or attenuated at the base.

*St. white.

520. **C. (Hydro.) dolabratus** Fr. Cke. Illus. no. 845, t. 811.

*Dolabra,* a pick-axe.

P. 5–10 cm., brick-red, tan colour when dry, fleshy-membranaceous, fragile, campanulate, then convex and expanded, smooth, superficially silky near the margin. St. 10–15 × 1–2 cm., shining white, quite equal, cylindrical, often curved, smooth. Cortina very fugacious. Gills tawny cinnamon, entire adnate, with a decurrent tooth, widest behind, 10–25 mm., very broad, somewhat thick, distant. Flesh whitish, thin at the margin. Spores ochraceous, broadly elliptical, 9–10 × 7 μ. Smell strong, stinking. Coniferous woods, and amongst *Vaccinium.* Sept.—Nov. Uncommon. (v.v.)


*Rigens,* rigid.

P. 2–5–6 cm., opaque tan clay colour, whitish tan when dry, fleshy, campanulate, lax, then convex, obtuse, or broadly gibbous, smooth, firm. St. 5–10 cm. × 4–10 mm., pale, white when dry, equal, sometimes thickened upwards, sometimes downwards, sometimes fusiform, rooting, tough, elastic, rigid, cortex very cartilaginous, naked, smooth. Cortina scarcely evident. Gills watery clay colour, then pallid, cinnamon, adnate, subdecurrent, very broad, 6–10 mm., distant, often veined on the sides. Flesh white, thick, somewhat firm. Spores ferruginous, pruniform, 7.5–9 × 5–5.5 μ, granular. Smell strong, like iodoform, or balsam. Taste mild, then unpleasant. Woods, especially coniferous woods. June—Oct. Uncommon. (v.v.)

522. **C. (Hydro.) fulvescens** Fr. Grevillea, t. 116, fig. 2.

*Fulvescens,* becoming tawny.


523. **C. (Hydro.) Krombholzii** Fr. (= *Cortinarius leucopus* (Bull.) Fr. sec. Quél.) Cke. Illus. no. 847, t. 813. J. V. Krombholz.

P. 2.5–5 cm., pale yellowish tan, disc darker, fleshy, conico-campanulate, then gibbous, smooth; margin appendiculate with the
membranaceous veil. St. 7–12 cm. × 6 mm., whitish, equal, slightly swollen at the base, naked. Veil white, membranaceous, fugacious. Gills ferruginous, edge yellowish, rounded behind, slightly adnexed, 6 mm. broad. Flesh whitish, thin at the margin. Spores "ferruginous, elliptical, 8 × 4–5µ" Massee. Amongst moss, often caespitose. Rare.

Miss F. Reed, sister of Mrs Hussey.

P. 2–3 cm., persistently brown, fleshy, conical, then expanded, strongly umbonate, smooth, shining, disc areolate; margin splitting. St. 4–5 cm. × 4 mm., white, slightly bulbous, fibrillose striate. Veil fibrillose, evanescent. Gills white, or pallid, then cinnamon, ascending, attenuated behind, free, ventricose broad. Flesh pallid, thin at the margin. Spores "7–8 × 4µ" Massee. Amongst moss, and beech mast. May. Rare.

525. C. (Hydro.) leucopus (Bull.) Fr. Cke. Illus. no. 848, t. 843, fig. B. λευκότους, white footed.

P. 2–3 cm., very pale yellow, tan colour and shining when dry, fleshy, conical, then expanded, umbonate, smooth, moist. St. 2.5–5 cm. × 4–8 mm., shining white, equal, or slightly attenuated upwards, soft. Cortina white, median. Gills pallid, then cinnamon, adnexed, separating, ventricose, crowded, thin. Flesh pallid, thin at the margin. Spores ferruginous, elliptical, 8–9 × 5–6µ, granular, "spiny" Rick. Woods. Aug.—Nov. Common. (v.v.)

526. C. (Hydro.) scandens Fr. Fr. Icon. t. 163, fig. 1.
Scandens, climbing.

P. 1–3 cm., tawny ferruginous, then honey colour, tan colour when dry, umbo becoming tawny, submembranaceous, conical, then campanulate, acutely or obtusely umbonate, umbo sometimes obsolete; margin slightly striate. St. 6–10 cm. × 4 mm., yellowish, shining whitish when dry, thickened at the apex, attenuated at the white base, awl-shaped, flexuose, soft, fibrillose silky, apex often mealy. Cortina white, superior, thin, fibrillose. Gills yellowish, then tawny cinnamon, adnate, narrow, 2–4 mm. broad, attenuated in front, thin, subdistant. Flesh yellowish, thick at the umbo. Spores yellow, "elliptical, 6–7 × 4–5µ, minutely warted" Rick. Pine woods. Sept.—Nov. Uncommon. (v.v.)

**St. inclining to violet, or reddish.

527. C. (Hydro.) erythrinus Fr. Cke. Illus. no. 850, t. 798, fig. A. ἐρυθρός, red.

P. 2.5–4 cm., bay brown rufous, tawny when dry, fleshy, conical, then convex, regular, umbonate, the obtuse or obsolete umbo darker, smooth. St. 4–8 cm. × 4–6 mm., shining silvery white, violaceous upwards, equal, rarely thickened at the base, straight, or ascending, fibrillose

var. argyropus Fr. 

Differs from the type in being more slender, and in the silvery stem white mealy at the apex.

528. C. (Hydro.) decipiens (Pers.) Fr. Cke. Illus. no. 850, t. 798, fig. B.

Decipiens, deceiving.

P. 2–3 cm., bay brown, shining and brick colour when dry, umbo always darker, fleshy membranaceous, campanulato-expanded, acutely umbonate, at length depressed round the umbo, smooth; margin at length striate and torn. St. 5–10 cm. × 2–4 mm., pallid, pale rufescent, or with brick coloured spots, quite equal, tense and straight, or flexuose, fibrillose, covered with a pallid separable cuticle. Cortina white, fibrillose, very fugacious. Gills brick colour ferruginous, adnate, 4–6 mm. broad, thin, more or less crowded. Flesh pale, brick colour in the st., thin. Spores pale ferruginous, elliptical, $9 \times 5\mu$, granular. Woods. Sept.—Nov. Common. (v.v.)

var. insignis Fr. 

Insignis, distinguished.

Differs from the type in the paler p., flexuose, smooth st., and in the less crowded gills.

529. C. (Hydro.) germanus Fr. Cke. Illus. no. 851, t. 844.

Germanus, born of the same parents.

P. 2–3 cm., fuscous, clay colour when dry, very hygrophanous, opaque, submembranaceous, campanulate, obtusely umbonate when expanded, fragile, somewhat silky with white fibrils. St. 6–8 cm. × 2–6 mm., silvery pale, somewhat lilac, equal, often twisted, smooth. Cortina white, fibrillose, fugacious. Gills watery cinnamon, adnate, 4–6 mm. broad, thin, subdistant. Flesh concolorous, then whitish, thin. Spores pale ferruginous, elliptical, $7–8 \times 4–5\mu$, 1-guttulate. Smell disagreeable. Beech, and pine woods. Sept.—Oct. Uncommon. (v.v.)

530. C. (Hydro.) ianthipes (Secr.) Fr. Grevillea, t. 113, fig. 7.

$\lambda\acute{v}θivos$, coloured violet; pes, foot.

P. 1–2 cm., brown, or tawny, fleshy, somewhat firm, conical, then convexo-plane, obtusely umbonate, silky, shining; margin silky white, or becoming yellowish. St. 2–4 cm. × 2–4 mm., violaceous, becoming reddish downwards, equal, somewhat fragile and flexuose, shining, silky, base white villose. Ring white, silky, floccose. Cortina tawny, fugacious. Gills whitish, then greyish olivaceous, “lilac, then brownish

***St. yellowish, generally becoming pale.

531. C. (Hydro.) detonsus Fr. Detonsus, sheared off.

P. 2.5-5 cm., bright yellowish, tan colour when dry, submembranaceous, conical, then expanded, subumbonate, striate to the middle when moist, slightly silky when dry, fragile. St. 5-8 cm. × 4 mm., yellowish, equal, or attenuated upwards, soft, smooth. Gills bright yellowish, then brick cinnamon, adnate, ventricose, subdistant. Flesh whitish, thin. Spores ferruginous, "elliptical, 7-8 × 3-4μ, minutely verrucose" Rick. Amongst moss in woods. Sept. Rare.

532. C. (Hydro.) obtusus Fr. Fr. Icon. t. 163, fig. 3. Obtusus, obtuse.

P. 1-4 cm., bay brown, ferruginous, soon cinnamon, pale ochraceous, or tan whitish when dry, submembranaceous, conical, then campanulate, at length expanded and obtusely umbonate, smooth; margin striate. St. 5-10 cm. × 4-8 mm., tan yellowish, becoming whitish when dry, ventricose, curved, flexuose, often attenuated at the base, fragile, sprinkled with adpressed, white, silky fibrils. Cortina white, very fugacious. Gills tawny cinnamon, adnate, ventricose, very broad, rather thick, subdistant, the shorter ones narrower, connected by veins, edge often white-fringed. Flesh yellowish, or reddish, thick at the disc. Spores brownish ferruginous, elliptical, 8-9 × 5.5-6μ, verrucose. Smell strong. Woods, especially pine. April—Nov. Not uncommon. (v.v.)

var. gracilis Quél. Grevillea, t. 129, fig. 1. Gracilis, slender.

Differs from the type in the pale yellow p.

533. C. (Hydro.) saniosus Fr. Fr. Icon. t. 163, fig. 2. Saniosus, full of bloody matter.

P. 1-3 cm., tawny cinnamon, fuscous tawny, or cinnamon, becoming tawny and shining when dry, slightly hygrophanous, fleshy, campanulate, then expanded, acutely, or obtusely umbonate, smooth, "covered with yellow fibrils" Quél.; margin fibrillosely torn. St. 3-6 cm. × 3-4 mm., dingy yellow, becoming yellow, rarely tawny or fuscous, equal, firm, somewhat curved, flexuose, covered with the yellow fibrils of the cortina, or fibrillosely silky, sometimes becoming saffron red at the base. Cortina yellow, fibrillos. Gills pale, then dark cinnamon, adnate, ventricose, somewhat crowded, or subdistant. Flesh concolorous, sometimes becoming yellow in the st., thin. Spores ferruginous, "nearly almond-shaped, 9-10 × 4-5μ, verrucose" Rick. Smell strong. Woods, pastures and swamps. Sept.—Oct. Uncommon.
534. **C. (Hydro.) acutus** (Pers.) Fr. Cke. Illus. no. 852, t. 845, fig. B.  

_Acutus_, pointed.

P. 1–3 cm., honey colour to very pale yellow, somewhat shining, tan, or white when dry, with a silky appearance, submembranaceous, conical, then campanulate and expanded, _acutely umbonate and concolorous_, at length depressed round the umbo, _striate when moist_; margin at first obsoletely fibrillose, then smooth. St. 4–8 cm. × 2–4 mm., _concolorous_, equal, flexuose, white fibrillose, then smooth. _Cortina white_, fibrillose, adhering to the margin of the p. Gills _ochraceous cinnamon_, adnate, sometimes free, lanceolate, _thin_, crowded, becoming subdistant. _Flesh concolorous_, thin. Spores pale ferruginous, elliptical, 9–11 × 6 μ, 1-guttulate. Woods and heaths. Aug.—Nov. Common. (v.v.)

****St. inclining to fuscous.

535. **C. (Hydro.) Junghuhnii** Fr. Cke. Illus. no. 853, t. 846, fig. A.  

_Francis Junghuhn._

P. 2–3 cm., _shining cinnamon_, tawny when dry, fleshy, convexo-plane; umbonate with a papilla, _striate to the middle when moist_, somewhat velvety with _thin_, sparse, _white_, _persistent fibris_ under a lens. St. 5–8 cm. × 4–5 mm., _pale brick colour_, equal, or attenuated at the whitish base, _shining, adpressedly fuscous fibrillose_. _Cortina white_, _inclining to fuscous_, sparse. Gills _saffron brick colour_, adnate, ventricose, 4 mm. broad, _thin_, veined at the base. _Flesh of stem darker brick colour_, thick at the disc. Spores ferruginous, “elliptical, 7–8 × 6 μ, verrucose” Rick. Woods amongst moss. Aug. _Rare._

536. **C. (Hydro.) depressus** Fr. Fr. Icon. t. 163, fig. 4.  

_Depressus_, depressed.

P. 5–8 cm., _ferruginous fuscous_, _fuscous tan when dry_, fleshy-membranaceous, _conico-convex_, obtusely umbonate, at length almost plane and depressed round the umbo, _superficially silky_ at first; margin striate when moist. St. 3–5 cm. × 4 mm., _reddish_, at length becoming _blackish_, base becoming _fuscous_, equal, or attenuated downwards, _rigid_, _subcartilaginous_, white silky, then smooth. _Cortina scarcely any_. Gills _saffron_, becoming _yellowish_, _then ferruginous_, adnate, broad, plane, _thin_, more or less crowded. _Flesh concolorous_, very thin. Smell faint, of fish, or cucumber. Damp places in woods. Sept.—Oct. Uncommon.

537. **C. (Hydro.) milvinus** Fr. Cke. Illus. no. 853, t. 846, fig. B.  

_Milvinus_, pertaining to the kite.

P. 1–3 cm., _olivaceous fawn colour_, _hoary tan and opaque when dry_, membranaceous, conical, then convex, obtusely or obsoletely umbo- nate, striate to the middle when full grown and _beautifully wreathed with white squamules at the margin_, somewhat silky when dry. St.  

R. B. B. 13

538. C. (Hydro.) fasciatus Fr. Cke. Illus. no. 855, t. 814.

Fasciatus, arranged in bundles.

P. 2-4 cm., brick colour, acute umbo blackish, becoming pale and silky when dry, submembranaceous, conical, then expanded, acutely umbonate, smooth. St. 5-8 cm. × 2-3 mm., pallid fuscous, then cinnamon fuscous, equal, straight, flexuose, undulate, fibrillosely fissile, smooth. Gills cinnamon, adnate, subventricose, 3 mm. broad, thin, distant. Flesh concolorous, slightly fleshy at the disc. Spores ferruginous, elliptical, 8-9 × 5-6μ, with a large central gutta, punctate. Pine woods, and under pines. Sept.—Oct. Uncommon. (v.v.)

2. Veil concrete with the epidermis of the pileus.

Spores ochraceous, or ferruginous, elliptical, smooth.

Inocybe Fr.

(ίς, fibre; κύβη, head.)


I. Cystidia present.

*Stem whitish, or pallid.

†Gills brownish, ochraceous, or cinnamon.

539. I. scabra (Mull.) Fr. (= Inocybe capucina Fr. sec. Quél.) Cke. Illus. no. 413, t. 391.

Scabra, rough.

P. 1-5-4 cm., becoming pale fuliginous, or pale tan, variegated with adpressed, darker (fuscous), spot-like, fibrous scales, fleshy, somewhat compact, conical, then convex, obsolesly gibbous. St. 2-4 cm. × 6-10 mm., whitish, firm, equal, cuticle cartilaginous, silky-fibrillose. Gills whitish, then somewhat fuliginous, slightly adnexed, thin, somewhat crowded. Flesh white. Spores yellowish brown, pip-shaped, 9-11 × 5-6μ. Cystidia slightly ventricose, 65-75 × 12-16μ, abundant. Coniferous, and mixed woods. June—Oct. Uncommon. (v.v.)
INOCYBE

var. firma Fr.

Differs from the type in the fuscous-tan p. spotted with fuscous scales, and in the velvety stem.


Pyrus, pear; odora, scented.

P. 4–8 cm., pale ochraceous, often reddish when young, campanulate, obtuse, fleshy at the darker disc, everywhere torn into fibrils; margin often bent in and lacerate, and sometimes repand. St. 5–15 × 1–1.5 cm., pallid often tinged with red, fragile, equal, or attenuated at the base, often curved, fibrillose, apex white-mealy. Gills whitish, then somewhat fuliginous, adnate, sinuate, thin, crowded, edge whitish. Flesh becoming reddish. Spores tawny, pip-shaped, 8–11 × 5–5 μ, 2-many-guttulate. Cystidia ventricose, or clavate, 55–60 × 15–21 μ, thick walled. Smell pleasant, like ripe pears. Woods. May—Dec. Common. (v.v.)


Rimosa, full of cracks.

P. 2–5–5 cm., yellowish, varying rufescent, and date brown (especially when old), fleshy, conico-campanulate, obtuse, then more flattened, and at length reflexed, umbonate, somewhat fibrillose, longitudinally cracked; disc sometimes even, sometimes cracked in a tesselated manner. St. 4–7 cm. × 4–8 mm., whitish, becoming yellow, or fuscous, firm, apex mealy. Gills whitish, then becoming fuscous, and ferruginous, very much attenuated behind, free, or slightly adnexed, somewhat ventricose, edge serrulatated, pallid. Flesh white. Spores ferruginous in the mass, ochraceous under the microscope, elliptical, 9–11 × 5–7 μ. Cystidia fusoid, or ventricose, 60–68 × 9–14 μ. Smell earthy. Woods, and open ground. June—Nov. Common. (v.v.)


Tomentosa, downy.

P. 2–5 cm., pale fawn-colour, campanulate, then expanded, strongly umbonate, thin, villose, fibrillose; margin white, often appendiculate with the veil. St. 4–8 cm. × 5–8 mm., pallid, or whitish, equal, slightly swollen at the base, fibrillose, slightly striate. Gills pallid, adnate, slightly toothed, margin white. Flesh white. Spores ochraceous, elliptical, 8–9 × 4–5 μ. Cystidia ventricose, 60–63 × 12–13 μ, abundant. Smell of new meal. Woods, and among fir-leaves. Aug.—Oct. Not uncommon. (v.v.)

543. I. pallidipes Ellis & Everh.

Pallidus, pale; pes, foot.

P. 2–3 cm., light brown, conico-campanulate, then expanded and umbonate, fibrose-squamose, disc innately scaly, margin subrimose.
INOCYBE

Cystidia

Corydalis, rather

fibrilloae St.

fts, tfton, 544.

merous, convex,
obsoletely 4
ginate, Spores

Spores 545.

Nov. 60

pallid.

5 55-65

546. Gills

Cystidia

fleshy,

often

cracking.

Woods,

tricose,

Flesh

547. I. corydalina Quél. (= Inocybe pyriodora Fr. sec. René Maire.)


P. 3-6 cm., whitish, covered with bistre fibrils, green at the umbo,

fleshy, campanulate, obtuse, silky-fibrillose. St. 3-5 x 4 mm.,

white, equal, slightly thickened at the base, flocculose. Gills pallid,


J. Aubrey Clark.

P. 2-3 cm., whitish, campanulate, obtuse, silky-fibrillose. St. 3-5 cm. x 4 mm., white, equal, slightly thickened at the base, fibrilloso-silky. St. 2-5-4 x 1-2-5 cm., often curved, equal, or subbulbous at the base, striate, obsoletely pruinose at the apex. Gills becoming dingy ochre, emarginate, slightly adnexed, ventricose, 4-6 mm. broad. Flesh white. Spores ochaceous, elliptical, 9-12 x 6μ. Cystidia ventricose, 50-60 x 12-16μ, scattered. Smell strong. Coniferous woods. Sept.—Nov. Uncommon.

547. I. geophylla (Sow.) Fr. (= Inocybe geophila (Bull.) Quél.) Cke. Illus. no. 440, t. 401. γη, earth; φυλλον, leaf.

P. 1-5-3 cm., white, sometimes tinged yellow when old, somewhat fleshy, conical, then expanded, umbonate, silky, then fibrillose, often cracking. St. 4-8 cm. x 2-6 mm., white, equal, base slightly thickened, often flexuose, satiny, apex white-mealy. Gills whitish, then clay-fuscous, and earth colour, almost free, rather broad, ventricose, crowded. Flesh white. Spores ferruginous, elliptical, 7-10 x 4-5μ. Cystidia ventricose, 45-60 x 13-15μ, abundant. Smell earthy, taste slightly acrid. Woods, under trees, and hedgerows. July—Dec. Common. (v.v.)
var. *lilacina* Fr. (= *Inocybe geophylla* (Sow.) Fr., var. *violacea* Pat.)

*Lilacina*, lilac colour.

Differs from the type in the violet colour of the *p.*, the yellow umbo, the paler violet stem, and the ochraceous yellow base. Woods. Aug.—Nov. Common. (v.v.)

var. *lateritia* (Weinm.) Stev.

*Lateritia*, made of bricks.

Differs from the type in the brick-red *p.*

var. *fulva* Pat.

*Fulva*, tawny.

Differs from the type in the rufous-ochre *p.*, and the paler margin.


Dr F. Buchanan White, a Scotch botanist.

P. 1·5—2·5 cm., tawny, margin white, then wholly pale tawny, conical, then convex, and at length expanded, slightly viscid. St. 3—4 cm. × 3—4 mm., shining white, then tawny, nearly equal, base slightly thickened. Gills shining white, then cinnamon, adnexed, crowded. Flesh white. Spores pale yellow-brown, obliquely elliptical, 9—11 × 4—5μ. Cystidia ventricose, or almost cylindrical, 50—60 × 16—20μ, fairly abundant. Pine woods. Oct. Rare.


P. 3—5 cm., dingy white, or at length becoming yellow, fleshy, somewhat thin, campanulate, then convex, gibbous, silky-velvety, becoming even, margin appendiculate when young with fibrils of the cortina. St. 5—7·5 cm. × 6 mm., white, stuffed with a separate pith that disappears, equal, at first slightly fibrillosely with the evanescent, delicate cortina. Gills becoming whitish fuscous, attenuato-adnexed, linear-lanceolate, 2 mm. broad. Flesh white. Spores reddish brown, elliptical, 8—10 × 5—6μ. Cystidia ventricose, 50—60 × 12—16μ. Mixed woods, damp shady places. Sept.—Oct. Rare.


*Descissa*, split up.

P. 2—3 cm., greyish white, disc somewhat fuscous, conico-campanulate, then expanded and umbonate, silky, then fibrillosely split up, subsquamulose around the umbo. St. 3—5 cm. × 3—4 mm., white, often slightly tinged with flesh colour, somewhat equal, white fibrilloose, apex white pruinose, veil white, evanescent. Gills white, then fuliginous, or fuliginous yellow, sinuato-adnexed, somewhat crowded, edge fimbriate. Flesh white, sometimes flesh colour in the stem. Spores yellow, subreniform, 9—10 × 5—6μ. Cystidia fusiform, ventricose, 55—70 × 14—20μ, thick walled, somewhat fuscous at the apex. Pine woods. Sept.—Nov. Rare.
var. *auricoma* (Batsch) Fr.  
* Auricoma, golden-haired.  

Smaller, and thinner than the type, *p.* becoming yellow, margin striate, gills adfixed, ventricose, whitish fuscous. Remarkably cracked. Woods, and burnt soil.

551. **I. cervicolor** (Pers.) Quél. Fr. Icon. t. 107, figs. 1, 2, as *Inocybe Bongardii* (Weinm.) Fr.  
* Cervus, a deer; color, colour.  


552. **I. deglubens** Fr. Cke. Illus. no. 420, t. 394.  
* Deglubens, peeling off.  

P. 2–5 cm., date-brown-rufescent, then becoming yellow, slightly fleshy, convexo-plane, obtuse, or obtusely umboinate, adpressedly torn into fibrils, peeling off in darker, then separating fibrils. St. 4–7 cm. × 4–5 mm., pallid, equal, adpressedly fibrillose, apex slightly rough with brown points. Gills grey, then cinnamon, obtusely adnate, ventricose, somewhat distant. Flesh white. Spores pallid brown, pip-shaped, 8–10 × 5–6 μ. Cystidia ventricose, 50–60 × 10–15 μ, fairly abundant. Smell earthy. Pine woods. Aug.—Sept. Rare.

††Gills with an olive tinge.

553. **I. abjecta** Karst.  
* Abjecta, mean.  

P. 1–3·5 cm., brownish, becoming ochraceous-brown when dry, everywhere covered with white fibrils, disc with whitish, subsquarrose squamules, fleshy, subcampanulate, or convex, then expanded, sometimes umboinate. St. 2·5–4 cm. × 4–8 mm., pallid, everywhere covered with white, fibrous squamules, equal, or fusiform, rather tough, flexuose, apex white-pruinose. Gills pale cinnamon-olive, adnate, ventricose in front, 6–7 mm. wide, rather distant, margin minutely flocculose-crenulate at first. Flesh white. Spores ferruginous, pip-shaped, 14–16 × 6–7 μ, 1-guttulate. Cystidia ventricose, 50–65 × 13–16 μ, scanty. Amongst sand. Sept.—Oct. Uncommon. (v.v.)

Dr Godey, an eminent French mycologist.

P. 3–5 cm., whitish at first, then more or less suffused with rose which is usually accompanied by an ochraceous tinge, fleshy, campanulate,
obtusely umbonate, silky-fibrillose, rimose. St. 4–6 cm. × 5–10 mm., concolorous, equal, often bulbous at the base, apex white-pruinose. Gills whitish, then dusky cinnamon, usually with an olive tinge, edge white, minutely flocculose, narrowed behind, adnexed, almost free, somewhat crowded. Flesh white, tinged with pink. Spores ferruginous, elliptical, slightly curved or subreniform, 7–8 × 4–5 μ. Cystidia ventricose, 36–48 × 18–25 μ, fairly numerous. Woods, and heaths. Aug.—Oct. Not uncommon. (v.v.)

555. I. lucifuga Fr. Boud. Icon. t. 123. Lux, light; fuga, avoiding.

P. 2–7.5 cm., somewhat olivaceous, sometimes becoming pale, rarely fawn colour, fleshy, convexo-campanulate, then plane, more or less umbonate, longitudinally fibrillose, or covered with minute adpressed scales. St. 3–7 × 4–12 mm., pallid, equal, rigid, often flexuose, apex white-farinose. Gills whitish, then yellowish, and finally pure olivaceous, sinuate, ventricose, crowded, broad, crisped in large specimens. Flesh strong, like radishes. Woods, roadsides, and under trees. Sept.—Oct. Not uncommon.

†††Gills tinged violet.

556. I. violaceifolia Peck. Violaceus, of a violet colour; folia, leaves.

P. 1–1.5 cm., grey, convex, or almost plane, fibrillose, squamulose. St. 2.5 cm. × 3–4 mm., whitish, firm, slender, fibrillose. Gills pale violet, then brownish cinnamon, adnexed, crowded. Spores elliptical, 10 × 6 μ. Cystidia ventricose, 50–60 × 12–16 μ, fairly abundant. Amongst moss. Sept. Rare.

**Stem coloured.

†Gills brown, ochraceous, or cinnamon.


Caesariata, covered with hairs.

P. 4 cm., tawny-dirty, or like a smooth sugared cake, fleshy, convex, then expanded, gibbous, repand, becoming silky-even, finally almost smooth at the disc, silky at the margin. St. 4 cm. × 6 mm., pallid, unequal, sometimes twisted, somewhat thickened at the base, pruinose. Gills whitish fuliginous, somewhat adnate, thin, crowded, ventricose. Spores reniform, 8–10 × 4–5 μ. Cystidia narrowly ventricose, 70–80 × 12–15 μ, “often septate” Rick., fairly abundant. Smell disagreeable. Beech woods. Sept.—Oct. Uncommon. (v.v.)

var. fibrillosa Fr. (= Inocybe delecta Karst.) Fr. Icon. t. 109, fig. 3. Fibrillosa, full of fibrils.

Differs from the type in the obsolesely umbonate, fibrillose, sometimes squamulose, ochraceous pileus becoming tawny, in the very ochraceous-
fibrillose stem, and the pallid ochraceous gills at length turning brown. Deciduous woods, especially beech.

558. I. obscura (Pers.) Fr.  
\textit{Obscura}, dark.  
\textit{P}. 1.5–2.5 cm., brown, more or less suffused with violet, somewhat fleshy, campanulato-convex, obtuse, or subumbonate, longitudinally fibrillose, \textit{disc scaly}. St. 3–6 cm. × 4–6 mm., violaceous, becoming fuscous downwards, flexuose, fibrillose. Gills olivaceous, then brown, uncinato-adnexed, crowded, ventricose, edge often unequal. Flesh tinged blueish especially at the apex of the stem. Spores brownish, elliptical, 8–9 × 4μ. Cystidia ventricose, 65–75 × 12–16μ, abundant. Smell strong, of radishes. Amongst pines, and in woods. July—Nov. Not uncommon. (v.v.)

var. rufa Pat.  
\textit{Rufus}, red.  
Differs from the type in the reddish-brown, strongly umbonate \textit{p}., the violet gills, and spores narrowed towards one end.

559. I. lacera Fr.  
\textit{Lacera}, torn.  
\textit{P}. 2–4 cm., brownish, then mouse colour, becoming pale, slightly fleshy, convex, then expanded, obtuse, or obtusely umbonate, at first adpressedly fibrillose, then rimosely scaly and squarrose. St. 3–7 cm. × 5–8 mm., paler than the \textit{p}., covered with brown, fibrillose squamules, tough, equal, or attenuated at the base. Gills white flesh, then mouse colour, attenuato-adnexed, ventricose, broad. Flesh of stem reddish. Spores ferruginous, elliptical, 10–12 × 6–7μ. Cystidia ventricose, 56–80 × 13–17μ, numerous. Pine, and mixed woods. July—Oct. Not uncommon. (v.v.)

560. I. carpta (Scop.) Fr.  
\textit{Carpta}, torn.  
\textit{P}. 3–5 cm., tan colour, or dusky brown, convex, then flattened, usually at length more or less depressed at the disc, everywhere densely fibrillose and woolly. St. 3–5 × 1 cm., paler than the pileus, attenuated downwards, covered with a spreading, fibrillose woolliness like the \textit{p}. Gills ochraceous, then brown fuscous, adnate, then free, ventricose, broad. Flesh pale ochraceous, becoming tinged with brown. Spores elliptical, 9–10 × 4–5μ, 1–2-guttulate; \textquoteleft angular, nearly trapezium shaped, 10–12 × 5–6μ\textquoteright Rick. Cystidia often slightly curved, ventricose, 60–70 × 13–15μ, abundant. Taste sweet, then bitter. Woods. Aug.—Sept. Uncommon. (v.v.)

561. I. hystrix Fr. Fr. Icon. t. 106, fig. 1.  
\textit{Hystrix}, porcupine.  
\textit{P}. 4–9 cm., dull brown, or mouse colour, fleshy, firm, convex, then flattened, obtuse, or slightly gibbous, orbicular, squarrose with revolute, floccose scales, which are fibrillose-adpressed towards the margin. St. 5–9 cm. × 6–10 mm., fuscous mouse colour, firm, equal, or attenu-


Incarnata, made flesh colour.

P. 5–8 cm., yellowish rufescent, or flesh colour, fleshy, convexo-campanulate, then expanded and gibbous, or broadly umbonate, fibrillose, then squamulose, margin villosely fimbriate. St. 6–8 cm. × 6–15 mm., rosy flesh colour, apex white, furfuraceous, attenuated downwards, somewhat rooting, somewhat fibrillose. Gills whitish, then cinereous-cinnamon, at length spotted with red, or from the first becoming red, sinuato-adnate, crowded, edge fimbriate. Flesh of pileus white, becoming deep red when broken, that of the stem red from the first. Spores yellowish-brown, broadly elliptical, 12–15 × 6–8μ. Cystidia fusoid, 50–65 × 15–18μ, apex brownish. Smell pleasant, like pears. Woods. June—Oct. Not uncommon. (v.v.)

563. I. nigrodisca Peck.

Niger, black; discus, a quoit.

P. 1–2 cm., blackish-brown, margin greyish, convex, then plane, or depressed, umbonate, very minutely fibrillose. St. 2.5–3.5 cm. long, reddish brown, slender, firm, flexuose, minutely pruinose downy. Gills greyish, then rusty-brown, sometimes tinged yellow, free, or subadnexed, rounded behind, crowded. Spores ferruginous, subelongate, 5.5–6.5 × 4.5–5μ. Cystidia fairly abundant, ventricose, 45–55 × 12–16μ. Among moss and grass. Rare.


P. 2.5–5 cm., whitish, or tinged yellowish with darker adpressed squamules, fleshy, convex, then plane, always very obtuse, at length subdepressed in the centre. St. 3–6 cm. × 5–8 mm., white straw colour, becoming somewhat fuscous, often attenuated downwards, sometimes enlarged at the base, fibrillose. Gills white, then slightly fuscous, adnate, or attenuated behind and becoming free, thin, crowded. Flesh white. Spores elliptical, 8–10 × 5μ, 1-guttulate. Cystidia fusoid, 51–80 × 12–15μ, abundant. Woods, and roadsides. Sept.—Nov. Not common. (v.v.)


Brunnea, brown.

P. 3–5 cm., chestnut colour, fleshy, campanulate, umbonate, fibrillose, then cracked. St. 3–6 cm. × 5–6 mm., concolorous, or
INOCYBE


P. 2·5–5 cm., umber, margin pallid, often becoming stained with red, or verdigris, disc darker, subsquamose, fleshy, compact, obtuse, campanulate, then expanded, floccosely fibrilllose. St. 4–5 cm. × 6–8 mm., whitish above, tinged verdigris-green at the base, and often higher up, scarcely fibrilllose, nearly equal. Gills pallid, then dingy tan, adnate, slightly rounded behind. Flesh turning blood red when touched or wounded, verdigris at the base of the stem, and also often elsewhere. Spores reddish brown, elliptical, 8–9 × 5μ, 1-guttulate. Cystidia ventricose, 66–78 × 14–16μ, fairly numerous. Lawns, and gardens. Aug.—Oct. Uncommon. (v.v.)

var. rubra Rea. Rubra, red.

Differs from the type in the blood red colour of the p. and st., which is only tinged verdigris at the extreme base, although the flesh is tinged verdigris for some considerable distance upwards. Bare earth. Sept. Rare. (v.v.)


P. 1–3 cm., pale fuscous, or tinged rusty, convex, then expanded, umbonate, fibrillosely rimose, sometimes minutely, adpressedly, floccosely squamulose. St. 3–5 cm. × 3–6 mm., concolorous, apex at first tinged violet, equal, often flexuose, solid, minutely fibrilllose. Gills pallid, then brownish, 4–5 mm. wide, adnexed, ventricose, somewhat crowded; margin white, fimbriate. Flesh white, brownish under the cuticle of the p., bluish at first in the stem, thick at the disc, very thin at the margin of the p., firm. Smell and taste none. Spores brownish in the mass, oblong elliptical, depressed on one side, 8–11 × 4–5μ. Cystidia hyaline, fusiform ventricose, apex muricate, 65–75 × 15–19μ. Under oaks in woods. Sept. Uncommon. (v.v.)


Cke. Illus. no. 416, t. 393.

P. 2·5 cm., brownish fawn colour, somewhat fleshy, convex, subcampanulate, umbonate, silky squamulose, margin smoother, veil white, fibrilllose, fugacious. St. 4 cm. × 4 mm., pale fawn, fibrilllose, brown beneath the fibrillae, apex minutely squamuloso-pulverulent. Gills pale fawn, at length dull-ferruginous, rounded behind, adnate

††Gills tinged olive.

569. I. dulcamara (A. & S.) Fr. Cke. Illus. no. 408, t. 582, fig. B.

Dulcis, sweet; amara, bitter.

P. 3–6 cm., olivaceous-fuscous, becoming paler, campanulato-convex, then expanded and umbonate, floccoso-scaly, silky towards the margin. St. 4–6 cm. × 4 mm., paler than the pileus, equal, cortinato-fibrillose, adpressedly squamulose, apex mealy. Gills pallid, then olivaceous, arcuato-adjunct, ventricose, crowded. Flesh becoming yellowish white, thin. Spores brown, almost colourless under the microscope, elliptical, 7–9 × 4–5 μ. Cystidia ventricose, 55–65 × 15–18 μ, fairly abundant, “on edge of gill only” Rick. Taste slightly bitter. Pine, and mixed woods. Aug.—Oct. Not uncommon. (v.v.)

570. I. relicina Fr. (= Astrosporina relicina (Fr.) Schroet.)

Relicina, curled backwards.


571. I. Bongardii (Weinm.) Massee.

H. G. Bongard, a Russian botanist.

P. 3–7 cm., whitish with a rufescent, or yellowish tinge, covered with darker fibrillose squamules, fleshy, campanulate, then expanded, obtusely umbonate. St. 5–8 cm. × 5–12 mm., concolorous, or slightly paler, equal, straight, or curved, tough, apex white-mealy. Gills whitish, then olive-cinnamon, arcuato-adnate, crowded, ventricose, edge white, eroded. Flesh reddish. Spores cinnamon brown, yellow under the microscope, elliptical, 9 × 6 μ, 1-guttulate. Cystidia ventricose, 50–65 × 12–16 μ, scattered, “only on edge of gill, basidia with olive granular contents” Rick. Smell pleasant, like ripe pears. Woods and pastures. May—Oct. Uncommon. (v.v.)

†††Gills tinged violet.

572. I. cincinnata Fr. Bres. Fung. Trid. t. 51, fig. 2.

Cincinnata, with curled hair.

P. 1–5–3–5 cm., mouse colour, or brownish chestnut, somewhat fleshy, convex, then expanded, obtuse, or obsoletely umbonate, disc
besprinkled with flocose scales; margin fibrillose. St. 3–5 cm. × 2–3 mm., fuscous, apex tinged violet at first, then becoming pale, base subbulbose, fibrillosely-squamulose. Gills fuscous-violaceous, then cinnamon, adnexed, or attenuated behind, separating, ventricose, crowded. Flesh whitish, bluish at the apex of the stem. Spores brown, elliptical, 7–8 × 4–5 \( \mu \), 1–2-guttulate. Cystidia subcylindrical, or ventricose, 60–70 × 9–15 \( \mu \), “sometimes filled with a dark juice” Rick., fairly abundant. Woods. Aug.—Oct. Not uncommon. (v.v.)

II. No cystidia.

*St. whitish, or pallid.

†Gills brownish, ochraceous, or cinnamon.


Perlata, very broad.

P. 6–10 cm., ochraceous, longitudinally streaked with darker, fuscous fibrils, disc dark bistre nearly black, fleshy, convex, then expanded, broadly umbonate; margin incurved. St. 6–11 × 1:5 cm., pallid, darker below, straight, or curved, sometimes twisted, striate, equal, apex mealy. Gills pallid, then pale umber, adnexed, somewhat rounded behind, broad, margin whitish, irregular. Flesh dingy white. Spores reddish brown, elliptical, 10 × 6–7 \( \mu \), with a large central gutta. Woods, and under hornbeam. Aug.—Sept. Uncommon. (v.v.)

574. I. perbrevis (Weinm.) Fr. Cke. Illus. no. 434, t. 519.

Per-brevis, very short.

P. 1:5–3 cm., fuscous, or rufous, becoming yellowish, somewhat fleshy, convex, then plane, obtusely umbonate, often depressed round the umbo, fibrillose, or squamulose; margin fibrillose, often splitting. St. 2–2:5 cm. × 3–5 mm., pallid, somewhat attenuated downwards, white-fibrillose, apex pruinose, cortinate. Gills whitish, becoming fuscous, or clay colour, adnexed with a tooth, ventricose, rather distant. Flesh white. Spores brown, elliptic-oblong, 8–9 × 4:5–5 \( \mu \), apiculate. “Cystidia only on edge of gill, basidia-like, 48–60 × 12–15 \( \mu \)” Rick. Woods, and shady places. Sept.—Oct. Uncommon.


Squarrosa, rough with scales.

P. 5–13 mm., mouse grey with an ochraceous tinge, slightly fleshy, campanulate, or convex, covered with erect, revolute, flocose, darker grey scales especially at the disc, floccosely fibrillose elsewhere; margin at first involute, white. St. 1:5–3 cm. × 1–2 mm., white with a pinkish tinge, apex pruinose, base white, subbulbose. Gills white, then brownish, adnato-sinuate, 2 mm. wide, edge white. Flesh white. Spores greenish-fuscous, elliptical, 9–10 × 5–6 \( \mu \), 1-guttulate. Under willows and alders in a brick pit. July—Aug. Uncommon. (v.v.)
576. **I. vaticosa** Fr. Fr. Icon. t. 110, fig. 3.

_Vaticosa_, with crooked feet.

P. 1–7 cm., yellowish, becoming whitish with age, slightly fleshy, convex, then plane, obtuse, or umbonate, _viscid when moist_, shining when dry; margin obsoletely silky. St. 3–7 cm. × 3–10 mm., white, or greyish, equal, slightly thickened at the white villose base, _often curved and contorted, white pulverulent_. Gills white, then _fuscous_, adnexed, broadly emarginate, almost free, broad. Spores brownish, elliptical, 5–6 × 3–3.5 μ. Woods, dead stumps, chips, and sawdust. Sept.—Oct. Uncommon.

**St. coloured.**

†Gills brownish, ochraceous, or cinnamon.


Mordecai Cubitt Cooke, the eminent English mycologist.

P. 3–5 cm., _yellowish straw colour_, becoming _lurid yellowish_, fleshy, conico-campanulate, then expanded and umbonate, margin at length revolute and split, silky-fibrillose, then rimose. St. 4–7 cm. × 5–7 mm., _concolorous_, equal, silky fibrillose, base marginately bulbous. Gills _whitish cinereous_, then _yellowish cinnamon_, attenuated behind, adnexed, crowded, somewhat ventricose, margin _white, fimbriate_. Flesh _whitish straw colour_. Spores ochraceous, subreniform, 8–10 × 5–5.5 μ. Smell somewhat pleasant when young, becoming somewhat earthy. Fir woods. Sept. Rare.

578. **I. mimica** Massee. (= _Inocybe adequata_ Britz. sec. Cke.)

_μιμικά_, a mimic.

P. 6–8 cm., _yellow-brown_, everywhere covered with _large, adpressed, slightly darker, fibrous scales_, fleshy, campanulate, obtusely umbonate, fibrillose. St. 6–8 × 1 cm., _paler than the p._, equal, fibrillose. Gills _yellow-brown_, deeply sinuate, attached to the stem by a very narrow portion, broad. Flesh _brownish_. Spores brown, subcylindrical, 14–16 × 6–8 μ, with an oblique apiculus. Woods. Sept. Rare.


_ρόδιολα_, a rose.

P. 4–8 cm., _rufous-chestnut, or fuscous flesh colour_, fleshy, campanulate, then expanded and umbonate, fibrillosely cracked, centre even. St. 5–8 × 1–1.5 cm., _vinous_, fibrilloso-squamulose, becoming glabrous, _apex pallid, subfloccose_. Gills _white_, then _yellowish umber_, _often spotted with brownish umber_, _sinuato-uncinate_, almost free, crowded, edge fimbriate. Flesh _white, vinous at the base of the stem_. Spores yellowish, subreniform, 12–13 × 6–8 μ, or 9–10 × 5–7 μ, 1–2-guttulate. Cells on edge of gills, clavate, or subfusoid, 45–60 × 12–15 μ. Smell fruity. Woods, fields, and parks. Aug.—Oct. Not uncommon. (v.v.)
580. **I. hirsuta** (Lasch) Fr. Bres. Fung. Trid. t. 86, fig. 2.

Hirsuta, bristly.

P. 1–4 cm., fuscous, or ochraceous fuscous, disc sometimes tinged with green, slightly fleshy, conico-campanulate, then expanded, and acutely or obtusely umbonate, squarrose with fusciculato-pilose scales, margin fibrillose, fimbriate. St. 4–9 cm. × 2–6 mm., concolorous, base verdigris, somewhat equal, or somewhat thickened at the base, tough, fibrillose, apex white floccoso-scaly. Gills pallid, then fuscous cinnamon, adnate, crowded, narrow, edge whitish, fimbriate. Flesh pallid, becoming faintly tinged with red on exposure to the air, greenish in the stem. Spores ochraceous, oblong pip-shaped, 9–11 × 4–5 μ. Woods. Sept.—Oct. Not uncommon. (v.v.)

581. **I. calamistrata** Fr. Fr. Icon. t. 106, fig. 2.

Calamistrata, curled with the curling-iron.

P. 2–5–6 cm., fuscous, slightly fleshy, campanulate, obtuse, margin at first bent inwards, often repand, at length flattened, everywhere squarrose-scaly. St. 4–9 cm. × 4–6 mm., concolorous, base dark azure blue, rigid, tough, equal, somewhat rooting, squarrose throughout with rigid, recurved scales. Gills white, then ferruginous, adnexed, separating, crowded, broad, edge whitish, somewhat serrated. Flesh reddish, azure blue at the base of the stem. Spores ochraceous, elliptical, 10–11 × 6 μ. Smell strong. Pine, and fir woods. Aug.—Oct. Uncommon. (v.v.)

*I. echinata* (Roth) Cke. = **Lepiota haematosperma** (Bull.) Boud.

††Gills tinged olive.

582. **I. destricta** Fr. Boud. Icon. t. 121. **Destricka**, stripped off.

P. 4–8 cm., livid violet tinged brownish, fleshy, campanulate, covered longitudinally with darker fibrils, then torn into scales, rimosely cracked. St. 5–10 × 1–1.5 cm., concolorous, covered with darker fibrils, apex mealy. Gills olivaceous, uncinately adnate, narrow, 4 mm. wide. Flesh whitish violaceous, deeper coloured under the cuticle, reddish at the base of the stem. Spores olivaceous, often slightly curved, oblong, 11–13 × 5.5–7 μ, multi-guttulate. Cystidia none. Woods, and under poplars. July—Nov. Uncommon.


P. 3–7 cm., straw colour, yellow fuscous, sometimes fuscous brown, disc ochraceous, or livid-fulvous, fleshy, conico-campanulate, obtusely, or acutely umbonate, longitudinally fibrillose and cracked, rarely adpressedly scaly; margin sometimes lobed. St. 4–9 cm. × 4–8 mm., pallid, becoming fuscous, equal, slightly enlarged downwards, minutely fibrillose, often twisted with age. Gills yellow, then olivaceous, sinuato-

1 Massees and Ricken have a different plant in view as they describe cystidia.
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III. Insufficiently described.


P. 5–10 cm., fuliginous, becoming brownish, subcampanulate, rarely flattened and umbonate, smooth. St. 7–13 cm. × 8–14 mm., grey, with brownish lines, base white and swollen, naked. Gills yellowish bistre colour, free, semilunate, very broad. Spores bright ferruginous red, elliptical, 6 × 4 μ. Pine, and mixed woods. Oct. Rare

586. I. schista Cke. & Sm. Cke. Illus. no. 423, t. 504. σχίστος, split.

P. 5–7.5 cm., bay brown, obtusely campanulate, broadly subumbonate, cracking longitudinally, rather fibrillose. St. 5–8 × 1 cm., paler than the p., equal, twisted, solid. Gills rufescent, adnate with a decurrent tooth, rather broad; edge pale, serrate. Lawns. May. Rare.

I. subrimosa (Karst.) Sacc. = Astrosporina asterospora (Quél.) Rea.

I. scabella (Fr.) Bres. = Inocybe flocculosa Berk.


I. strigiceps Fr. = Flammula strigiceps Fr.

I. Curreyi Berk. = Inocybe fastigiata (Schaeff.) Fr.

I. adequata Britz. = Inocybe mimica Massee.


I. violaceo-fusca Cke. & Massee = Cortinarius (Dermocybe) violaceofuscus (Cke. & Massee) Massee.

I. Trinii (Weinm.) Bres. = Inocybe Godeyi Gill.

I. hiulca (Fr.) Kalchbr. = Inocybe Godeyi Gill.

Spores ochraceous, or ferruginous, irregular, angular, echinulate, or verrucose.

Astrosporina Schroet.

(ἀστήρ, star; σπόρα, seed.)

Pileus fleshy, regular. Veil marginal, fugacious. Stem fleshy, central. Gills adnate, sinnato-adnate, or adnexed. Spores ochraceous,
ferruginous, olivaceous, or fusaceous; angular, nodose, verrucose, echinulate, or irregular in shape. Cystidia present, or absent, fusiform, ventricose, cylindrical, or clavate. Growing on the ground, rarely caespitose.

I. Cystidia present.

*Stem whitish, or pallid.

587. A. fibrosa (Sow.) Rea. (= Inocybe fibrosa (Sow.) Fr.) Bres. Fung. Trid. t. 56, as Inocybe fibrosa Sow. *Fibrosa, fibrous.*

P. 6–10 cm., white, or straw colour, sometimes spotted yellow, fleshy, obtusely campanulate, then expanded and gibbous, or broadly umbo- nate, silky, at length cracking; margin deeply split, often lobed. St. 6–10 × 1.5–2.5 cm., white, base at length straw colour, subequal, striate, or somewhat sulcate, apex pruinose. Gills *white, becoming cinereous-cinnamon with age,* attenuated behind, nearly free, crowded. *Flesh white.* Spores ochraceous, angular, oblong, 10–13 × 5–7 μ. Cystidia fusoid, 70–90 × 10–16 μ, thick walled. Smell foetid. Coni- ferous woods. May—Sept.


P. 6–7 cm., fulvous ochraceous, disc becoming pale, fleshy, campanu- late, then expanded and gibbous, floccose, soon longitudinally fibril- lose; margin at length revolute. St. 8 × 1.5 cm., white, enlarged at the apex and base, firm, striate, apex *ribbed with the decurrent teeth of the gills.* Gills *white, becoming fusaceous, sinuato-adnate with a decurrent tooth,* 6–8 mm. wide, somewhat crowded. *Flesh white,* very firm. Spores umber, strongly nodulose, 9–10 × 7–8 μ, 1-guttulate. Cystidia ventricose, 52–60 × 13–15 μ, abundant. Woods. Sept.—Oct. Not uncommon. (v.v.)


P. 2–5 cm., pallid yellow, disc, and especially the umbo, becoming rusty brown, or bay, fleshy, conico-convex, then expanded and umbo- nate, becoming longitudinally fibrillosely cracked. St. 6–8 × 5–1 cm., *pallid,* slightly narrowed upwards, often attenuated at the base, sometimes wavy, subfibrillosely. Gills *pallid, then tan, finally brown,* adnate, 6–7 mm. wide, crowded, ventricose. *Flesh white.* Spores ferruginous, nodulose, irregularly oblong, 7–10 × 5–7 μ, 1-guttulate. Cystidia ventricose, 55–70 × 15–24 μ, abundant. On the ground. Sept.—Oct. Uncommon. (v.v.)
590. **A. praetervisa** (Quél.) Schroet. (= *Inocybe praetervisa* Quél.)


*Praetervisa*, overlooked.

P. 2–6 cm., *fawn*, generally darker at the margin, conico-campanulate, then expanded, umononate, or gibbous, often splitting at the margin with age, *slightly viscid*, *fibrillose*, disc glabrous, soon *longitudinally virgate*. St. 4–7 cm. × 4–8 mm., *white*, then *pale straw colour*, equal, *base bulbous*, apex pruinose. Gills *white*, then *dirty cinnamon*, attenuated behind, adnexed, almost free, narrow, 3 mm. wide, crowded; *edge white*, *fimbriate*. Flesh *white*. Spores dark brownish in the mass, ochraceous under the microscope, angular, 9–11 × 5–6 μ, 1–3-guttulate. Cystidia *fusiform*, ventricose, 55–75 × 18–30 μ, *sometimes with olive granular contents*.


P. 1·5–3 cm., *tawny*, or *greyish brown*, campanulato-convex, then plane, obtusely umononate, *fibrillose*, cracked (“*fibrils septate*, *apical cell* 35–40 × 8–11 μ, with rounded ends” Schroeter). St. 1·5–5 cm. × 1·5–5 mm., *pallid*, apex at first delicately tinged with lilac, *base brownish*, equal, *fibrillose*. Gills *pallid*, then *cinnamon*, 2–3 mm. wide, slightly adnexed, somewhat crowded, edge fimbriate. Flesh *white*, tinged reddish under the cuticle of the pileus and stem, thick at the disc, thin at the margin of the pileus, *firm*. Spores cinnamon in the mass; oblong, obtusely angular, 8–11 × 5–7 μ. Cystidia *hyaline*, either fusiform, ventricose, obtuse at the apex, *muricate* or not, 40–70 × 15–23 μ, or *acicular* and *acute*. On the ground in oak woods. Aug. Uncommon. (v.v.)


Bres. Fung. Trid. t. 58, fig. 2, as *Inocybe commixta* Bres.

*Infida*, unsafe.


593. **A. trechispora** (Berk.) Rea. (= *Hebeloma trechisporum* Berk.)

Cke. Illus. no. 443, t. 403, upper figs., as *Inocybe trechispora* Berk.

*τραχύς*, rough; *στορά*, seed.

P. 1·5–2·5 cm., *whitish*, or *cinereous*, *umbo tawny*, submembranaceous, convex, *strongly umononate*, *viscid at first*, then *dry* and *silky*;

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margin paler with a slight livid tinge, thin. St. 5 cm. × 4 mm., white, equal, often flexuose, with a mass of white mycelium at the base, slightly striate under a lens and mealy. Gills whitish, then pinkish grey, emarginate, scarcely adnate, ventricose, margin denticulate. Flesh white. Spores bistre-brown, warted, angular, 7–8 × 5–6μ. Cystidia fusoid, or subventricose, 40–50 × 12–18μ, fairly abundant. Woods. Aug.—Oct. Uncommon.

**Stem coloured.**


αστριήρ, star; σπορά, seed.


Fasciata, bound together in bundles.

Densely caespitose. P. 5–7–5 cm., tawny, disc rufous, campanulato-convex, silky, clad with minute, darker, squarrose scales. St. 5–7–5 cm. × 3–10 mm., pallid, base reddish, equal, or a little attenuated below, fibrilllose. Gills pallid, attenuated in front, rounded behind, or slightly sinuate, crowded. Flesh white, reddish towards the base of the stem. Spores fuscos, angular, elliptical, 10 × 6μ. Cystidia ventricose, 40–50 × 12–15μ, scanty. Amongst grass. Rare.


Lanuginosa, woolly.

P. 2–5–4 cm., umber, at length becoming yellow, slightly fleshy, hemispherical, or campanulato-convex, then expanded and umbonate, flocculosely-scaly, disc squarrose with hairy scales. St. 2–5–4 cm. × 2–3 mm., somewhat concolorous, equal, fibrilloosely-squamulose; cortina greyish white, soon disappearing. Gills pallid clay colour, then reddish cinnamon, rounded behind, adnexed, then separating, somewhat crowded; margin white, floccosely crenulate. Flesh pallid. Spores fuscos ochraceous, angular, 10–15 × 8–9μ. Cystidia cylindrical, or clavate, 50–60 × 20–25μ, somewhat fuscos at the apex. Mossy stumps, especially conifers, "never on the ground" Bres. July—Nov. Uncommon. (v.v.)
597. **A. calospora** (Quél.) Rea. (= *Inocybe calospora* Quél.) Bres. Fung. Trid. t. 21, as *Inocybe calospora* Quél.

 καλός, beautiful; σπόρα, seed.

 P. 2–3 cm., fuscous rufescent, becoming somewhat yellowish, somewhat fleshy, conico-campanulate, then expanded and umbonate, fibrillosely villose, then covered with adpressed, concolorous squamules; margin whitish, fibrillose. St. 3–5 cm. × 2–4 mm., livid then rufescent, apex white-pruinose, base subbulbose. Gills pallid, then tawny cinna-

598. **A. Gaillardii** (Gillet) Rea. (= *Inocybe Gaillardii* Gillet.)

A. Gaillard.

 P. 1–3 cm., tawny-yellow, or rust colour, convex, then plane, umbo-
bate, floccosely squamulose; margin fimbriate. St. 1.5–3 cm. × 2–4 mm., concolorous. Gills brownish cinnamon, free, ventricose; edge whitish. Flesh concolorous, or paler. Spores ferruginous, globose, covered with long, slender, hyaline spines, 8 μ, or 10–12 μ, including the spines. Cystidia subcylindrical, 40–45 × 10 μ, scanty. Woods, and under trees. Aug.—Oct. Uncommon. (v.v.)

599. **A. scabella** (Fr.) Schroet. (= *Inocybe scabella* (Fr.) Quél.) Fr. Icon. t. 110, fig. 1, as *Inocybe scabella* Fr. Scaber, rough.

 P. 1–2 cm., fuscous, or fuscous rufescent, somewhat fleshy, conical, then expanded, umbonate, silky-fibrilloose, at length torn into scales around the even umbo. St. 4 cm. × 1–2 mm., rufescent, or becoming pale, apex pruinose, equal, tense and straight, or flexuose. Gills dingy, becoming fuscous, adnerved, more or less crowded. Flesh dingy. Spores bistre, warted, angular elliptical, 8 × 6 μ. Cystidia ventricose fusiform, 55–65 × 12–15 μ. Woods, and amongst short grass. Sept.— Nov. Not uncommon. (v.v.)


Carl Bernard Trinius, the Russian botanist.

 P. 1–2 cm., whitish with a rufous tinge due to longitudinal rufous fibrils, tawny when dry, hemispherical, obtuse. St. 4–6 cm. × 2–3 mm., white, covered with loose reddish, or rufous fibrils, equal, apex white-mealy. Gills dusky cinnamon, rounded behind, adnerved, ventricose, edge white-flocculose. Flesh white. Spores angular, subglobose, or somewhat oblong, 9–10 μ, or 9–10 × 6–8 μ. Cystidia ventricose, 50–60 × 14–17 μ, abundant. Smell pleasant, like clove-pinks. Woods, and amongst grass. Aug.—Sept. Uncommon. (v.v.)

14—2
601. A. maritima (Fr.) Rea. (= Inocybe maritima Fr.) Cke. Illus. no. 414, t. 392, as Inocybe maritima Fr.

Maritima, pertaining to the sea.

P. 2–3 cm., fuscous, or mouse colour, becoming hoary when dry, hygrophanous, fleshy, somewhat soft, convex, then flattened, obtuse, or umbonate, flocculose fibrillose, more or less adpressedly scaly. St. 2–4 cm. × 4–6 mm., a little paler than the pileus, equal, fibrillose, at first furnished with a cortina. Gills fuscous-grey, then becoming ferruginous, rounded, adnexed, somewhat separating, ventricose. Flesh becoming fuscous-grey. Spores ferruginous, angular, oblong, 9–10 × 6 μ, 1-guttulate. Cystidia ventricose, 45–55 × 12–18 μ. Often caespitose. Sea shores, and sandy ground in woods. Sept.—Oct. Not uncommon.


J. Renny, a British mycologist.

P. 1.5–2 cm., pale fawn colour, disc brown, hemispherical, slightly fibrillose. St. 3–5 cm. × 3–4 mm., paler than the p., attenuated downwards, fibrillose. Gills dingy ochraceous, rounded behind, almost free. Spores ochraceous, angular, slightly nodulose, oblong, 11–13 × 7–8 μ, pointed at one end. Cystidia fusoid, 40–50 × 12–16 μ, scanty. On the ground.


Differs from the type in its larger size, and slightly nodulose spores, 13–17 × 10 μ. Fir woods. Nov.


Sabuletorum, of sandy places.

P. 1–3 cm., umber, at length becoming yellowish, slightly fleshy, convex, then expanded, obtuse, or somewhat umbonate, velvety, the pile becoming matted together into little squamules, which stand erect at the disc. St. 2–4 cm. × 6–8 mm., concolorous, tough, equal, fibrillose squamulose, or downy, apex white mealy. Gills clay colour, then ferruginous, sinuate, or separating free, thin, ventricose; edge white, minutely fimbriate. Flesh concolorous. Spores ferruginous, angular, 9–10 × 6–7 μ. Cystidia fusoid, or ventricose, 45–50 × 12–15 μ, somewhat scanty. Woods. July—Nov. Not uncommon. (v.v.)


P. 3–4 cm., tawny, darker at the disc, fleshy, convex, then expanded, longitudinally adpressedly fibrillose; margin thin. St. 5–6 cm. × 5–
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6 mm., concolorous, apex lilac colour becoming pale, equal, slightly attenuated at the base, fibrillose striae. Gills white, then ochraceous, margin whitish, sinuato-udnate, 6–7 mm. broad, somewhat crowded. Flesh white, becoming reddish in the stem, thin. Spores deep ochraceous, oblong, angular, 10 × 5–6.5 μ. Cystidia hyaline, bladder-like, obtuse, 42 × 20 μ, thin walled, often slightly granular at the apex. Bare ground in frondose woods. Sept. Uncommon. (v.v.)


P. 6–12 mm., olivaceous honey colour with the umbo somewhat darker, then becoming yellowish, or fuscous olive with the umbo tawny, conico-campanulate, then expanded, and umbonate, flocculose silky, glabrous at the centre, somewhat hygrophanous. St. 2–3 cm. × 1–2 mm., lilac, soon changing to rufescent, attenuated downwards, apex white-pruinose. Gills lilac, then cinnamon, rounded behind, and almost free, ventricose, 1–5 mm. wide, subdistant, edge fimbriate. Flesh yellowish, lilac at the apex of the stem and then rufescent. Spores ferruginous, angular, warted, 7–9 × 5–6 μ. Cystidia fusiform, ventricose, 45–60 × 10–18 μ, somewhat fuscous at the apex. Amongst moss. Aug.—Oct. Uncommon. (v.v.)

606. A. Bucknallii (Massee) Rea. (= Inocybe Bucknallii Massee.) Annals of Bot. xviii (1904), t. 32, figs. 5, 6, as Inocybe Bucknalli Massee.

Cedric Bucknall, the Bristol mycologist.

P. 1–2 cm., brownish, campanulato-convex, fibrillose, disc with a few squamules. St. 2–4 cm. × 2 mm., concolorous, equal, or slightly thickened at the base, fibrillose. Gills rusty-brown, adnexed, thick, rather distant, edge minutely fimbriate. Spores irregularly oblong, 15–17 × 8–9 μ, angular, apiculate at one end. Basidia clavate, exceptionally large, 70–80 × 16–18 μ, 4-spored. Cystidia on edge of gill only, clavate, 75–85 × 15–20 μ, thin walled. Under bushes. Autumn. Rare.

607. A. petiginosa (Fr.) Rea. (= Hebeloma petiginosum Fr., Inocybe petiginosa (Fr.) Quél.) Fr. Icon. t. 114, fig. 4, as Hebeloma petiginosum Fr.

Petiginosa, scurfy.

P. 1–2 cm., fuscous at the gibbous, naked disc, hoary-silky with superficial, closely adpressed fibrils at the circumference, when old rufescent, or becoming yellow, slightly fleshy, conical, then convex, somewhat umbonate. St. 2.5–5 cm. × 2 mm., brick rufescent, becoming fuscous, tough, equal, or slightly attenuated at the base, white pulverulent. Gills light yellow, then olivaceous-date-brown, beautifully ciliated under a lens, at first slightly adnexed, soon free, ventricose, crowded. Flesh cream colour, rufescent in the stem. Spores

II. No cystidia.

608. **A. margaritispora** (Berk.) Rea. (=*Inocybe margaritispora* Berk.)
Cke. Illus. no. 432, t. 505, as *Inocybe margaritispora*.

\[\mu \gamma \alpha \pi \tau \eta \nu \], a pearl; \( \sigma \tau \omicron \rho \upsilon \), seed.

P. 3–5 cm., *fawn colour*, or *pale yellowish-brown*, campanulate, then expanded and broadly umbonate, undulating, silky, clad with adpressed fibrillose scales. St. 6–10 cm. × 5–8 mm., *pallid*, equal, fibrillose. Gills *pallid*, reaching the stem, scarcely adnate. Flesh *yellowish*. Spores ochraceous, coarsely warted, subglobose, 8μ. On the ground. Oct. Rare.

III. No record given in the diagnosis whether cystidia are present or not.

609. **A. plumosa** (Bolt.) Rea. (=*Inocybe plumosa* (Bolt.) Fr.) Boud. Icon. t. 118, as *Inocybe plumosa* (Bolt.) Fr.

*Plumosa*, feathered.


**A. leucocephala** (Boud.) Rea. (=*Inocybe leucocephala* Boud.) Massee makes this a synonym for *Astrosporina infida* (Peck) Rea, but this requires confirmation.

**A. hiulca** (Fr.) Rea. (=*Inocybe hiulca* (Fr.) Bres.) This Astrosporina has erroneously been recorded as British, but the specimens should have been referred to *Inocybe Godeyi* Gill.

***Gills sinuate.

Spores white.

**Tricholoma** Fr.

(\( \theta \rho \iota \xi \), hair; \( \lambda \omega \mu \alpha \), fringe.)

Pileus fleshy, regular, margin incurved. Stem central, fleshy. Gills sinuate, sinuato-adnate, or decurrent by a tooth. Spores white, rarely pinkish, or yellowish in the mass; elliptical, oval, pip-shaped, globose, subglobose, or oblong; smooth, punctate, verrucose, or echinulate, continuous. Cystidia present, or absent. Growing on the ground, very rarely on wood, sometimes forming large rings.
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A. P. viscid, fibrillose, scaly or pubescent.
(a) Gills not changing colour.


Equestre, belonging to the order of knights.

P. 7·5–12·5 cm., pale yellowish, sulphur-olive, olivaceous, brick rufescent, disc and inner squamules darker, becoming fuscous, compactly fleshy, unequal, convex, then plane, very obtuse, flexuoso-repand, viscid. St. 2·5–5 × 1·5–2·5 cm., sulphur-yellow, hard, squamulose. Gills sulphur-yellow, or sulphur-olive, emarginate, or rounded, scarcely adnexed, broad, somewhat ventricose, crowded. Flesh whitish, yellow under the cuticle of the p., thick. Spores white, elliptical, 6 × 3 μ. “Cystidia on edge of gill cylindrical-clavate, 30–36 × 10–14 μ, filled with yellow juice” Rick. Taste pleasant. Edible. Pine woods. Sept.—Nov. Not uncommon. (v.v.)

611. T. coryphaeum Fr. Bres. Fung. Trid. t. 76. 

κορυφαῖος, a leader.

P. 5–12 cm., yellowish, disc darker, punctate with brown squamules, fleshy, convexo-campanulate, then plane, sometimes broadly umbo-nate, somewhat viscid, soon dry. St. 5–7 × 1 cm., white, tinged with yellow in the middle, apex white mealy, base obclavate, or fusiform and somewhat rooting. Gills white with a yellow margin, often grey at the base, sometimes connected by veins, emarginate, crowded, broad. Flesh white, citron-yellow under the epidermis, thick. Spores white, subglobose, 5–6 × 4–5 μ, 1-guttulate. Taste somewhat bitter. Beech woods. Sept.—Nov. Rare. (v.v.)


Sejunctum, separated.

P. 7·5–10 cm., light yellow, streaked with innate fuscous fibrils, convex, then expanded, gibbous, viscid in wet weather; margin yellowish, or white, villous, becoming torn. St. 6–12·5 × 1·5–2·5 cm., white, tinged with yellow, ventricose, then elongated, apex delicately squamulose. Gills shining white, sometimes tinged with yellow, emarginate, broad, subdistant. Flesh white, yellowish under the cuticle of the p. and in the st., fragile. Spores white, subglobose, 5–7 μ. Smell of new meal. Taste slightly bitter. Mixed woods, especially oak, and pine. Sept.—Nov. Common. (v.v.)

613. T. portentosum Fr. Fr. Icon. t. 24, upper figs. 

Portentosum, monstrous.

P. 7·5–12·5 cm., fuliginous, livid, sometimes violaceous, streaked with black, innate fibrils, fleshy, convexo-plane, subumbonate, unequal, repand, viscid. St. 7·5–15 × 2·5 cm., white, becoming tinged with sulphur-yellow, or greenish glaucous, equal, sometimes attenuato-
rooted at the villous base, fbrilloosely striate. Gills white, becoming straw colour, or glaucous, rounded, almost free, broad, distant. Flesh white, often tinged with yellow or greenish, very thin at the margin of the p., fragile. Spores white, elliptical, 4–5 × 3µ, 1-guttulate. Taste pleasant. Edible. Pine, and fir woods. Sept.—Nov. Uncommon. (v.v.)

614. T. fucatum Fr. Fr. Icon. t. 24, lower figs. Fucatum, painted.

P. 5–10 cm., lurid yellow, or cinereous light yellow, variegated with bistre, tiger-like spots, disc darker, fleshy, convex-plane, obtuse, often irregular, viscid, soon dry. St. 5–7.5 cm. × 8–12 mm., straw colour, streaked with fibrils that become blackish, apex white, pruinose, fragile, subequal. Gills white, deeply emarginate, 6–10 mm. broad, somewhat crowded, fragile. Flesh yellowish, thin, fragile. Spores “5–6 × 5µ” Sacc. Taste mild. Pine woods. Sept.—Nov. Rare.

615. T. quinquepartitum Fr. Fr. Icon. t. 25. Quinque, five; partitum, divided.

P. 5–7.5 cm., pallid light yellow, margin paler, fleshy, convex, then plane, obtuse, umbonate, repand, viscid, fragile. St. 6–10 cm. × 12–15 mm., white, or whitish, equal, or attenuated upwards, striate. Gills white, emarginate, 12 mm. broad, not crowded. Flesh white, fragile, thin at the margin. Spores “5–6 × 3–4µ” Sacc. Taste mild. Pine woods. Oct.—Nov. Rare.

616. T. resplendens Fr. Fr. Icon. t. 29, upper figs. Resplendens, shining brightly.

Entirely shining white, becoming yellowish externally and internally. P. 5–10 cm., silvery shining when dry, often with hyaline spots, disc becoming yellow, fleshy, convex, then flattened, obtuse, viscid; margin straight, thin. St. 5–7.5 cm. × 12–15 mm., equal, or subbulbous, sometimes curved, apex slightly flocculose. Gills emarginate, somewhat crowded, 6–8 mm. broad, equally attenuated in front. Spores white, elliptical, 8 × 4µ. “Cystidia on edge of gill basidia-like, 30–36 × 8–9µ” Rick. Smell pleasant, taste mild. Beech, and hazel woods. Sept.—Nov. Not uncommon. (v.v.)

617. T. spermaticum (Paul.) Fr. (= Tricholoma columbetta Fr. sec. Quéél.) Gillet, Hym. t. 62. σπέρμα, semen.

Entirely white. P. 4–9 cm., somewhat fleshy, convex, then flattened, obtuse, repand, viscid, shining when dry, and often becoming yellowish; margin involute. St. 5–9 × 1.5–2 cm., twisted. Gills emarginate, subdistant, eroded. Spores white, elliptical, 6–8 × 5–6µ, verrucose. Smell strong, taste unpleasant. Oak, and fir woods. Sept.—Oct. Uncommon. (v.v.)
(b) Gills changing colour, generally with reddish spots.

T. colossum Fr. = Armillaria colossa (Fr.) Boud.


619. T. fulvum Fr. Fulvus, tawny.

P. 2–5–8 cm., pale yellowish rufescent, or tan colour, fleshy, convex, then plane, viscid, disc darker, dotted wrinkled. St. 4–7–5 × 1 cm., whitish rufescent, fibrillose, apex naked. Gills white, then rufescent, rounded, then emarginate, crowded. Flesh often more or less yellow. Spores white, “subglobose, 4–5µ” Massee. Beech woods. Oct.—Nov. Rare.

620. T. aurantium (Schaeff.) Fr. (= Armillaria aurantia (Schaeff.) Fr. Hym. Eur.) Fr. Icon. t. 27, upper figs., as Armillaria aurantia Schaeff. Auranium, orange coloured.

P. 5–8 cm., rusty orange colour, disc often darker, fleshy, convex, then plane, obtuse, viscid, obsoletely innato-squamulose, or almost smooth. St. 6–8 × 1–1.5 cm., concolorous with concentric, orange scales, apex white, mealy, equal, or slightly attenuated upwards. Gills white, then tinged with rufous, emarginate, adnerved, crowded, 4 mm. broad. Flesh white, reddish in the st. Spores white, elliptical, 6–7 × 4–5µ, 1-guttulate. Smell very pleasant. Taste bitter. Edible. Coniferous woods. Sept.—Nov. Uncommon. (v.v.)

621. T. fulvum (DC.) Fr. (= Tricholoma flavo-brunneum Fr. Hym. Eur.) Fr. Icon. t. 26, upper figs., as Tricholoma flavo-brunneum Fr. Fulvum, tawny.

P. 7.5–15 cm., reddish brown, or rufous tawny with a darker disc, fleshy, conico-convex, then flattened, broadly gibbous, viscid, streaked with fibrils, or innately squamulose. St. 7.5–12–5 cm. × 12 mm., rufescent, or becoming fuscous, streaked with rufous fibrils, attenuated at both ends, equal only when smaller, viscid at first, apex naked. Gills light yellow, spotted rufous when old or touched, emarginate, decurrent by a tooth, crowded. Flesh white, sulphur-yellow in the stem. Spores white, elliptical, 5–6 × 3–4µ, 1-guttulate; “basidia on edge of gill filled with yellowish juice” Rick. Smell of new meal, or rancid. Deciduous woods, and heaths under birches. Sept.—Nov. Common. (v.v.)
622. **T. albobrunneum** (Pers.) Fr. (= *Tricholoma striatum* (Schaeff.) Quél.) Barla, Champ. Alp. Marit. t. 27, figs. 7–11.

*Albus*, white; *brunneum*, brown.

P. 7–5–10 cm., rich brown, or chestnut, fleshy, compact only at the *papillose* disc, campanulate, then hemispherical, viscid, *streaked with innate fibrils*; margin incurved, often wrinkled-crenate. St. 4–5 × 2–5–4 cm., rufescent, constantly white at both ends, equal, dry, apex white mealy. Gills white, becoming pale, or rufescent, rounded emarginate, scarcely crowded, very broad, 6 mm. and more wide, firm. Flesh *white, scissile*. Spores white globose, or elliptical, 4–6 × 4 μ, 1-guttulate. Taste mild. Edible. Coniferous woods. Sept.—Nov. Common. (v.v.)

623. **T. irregulare** Karst.

*In*, not; *regulare*, regular

P. 10 cm., pale, tinged tawny rufous, convex, then expanded, *very irregular*, rather viscid, *fibrillosely virgate*. St. 6–9 × 1–5–3 cm., white, equal, curved, *apex flocculose*. Gills white, then reddish, or spotted, emarginate. Flesh *white*. Spores white, subglobose, 3–4 × 2–3 μ. Smell strong of meal.

624. **T. ustale** Fr. Gonnem. & Rabenh. t. 14, fig. 2. *Ustale*, burnt.


625. **T. pessundatum** Fr. Rolland, Champ. t. 21, no. 39.

*Pessundatum*, ruined.

P. 6–9 cm., bay brown, or rufescent, paler or whitish at the margin, compactly fleshy, convex, then expanded, very obtuse, *granulate, or guttato-spotted*, viscid. St. 5–7–5 × 2–5 cm., white, covered with small, brownish granules, bulbous at first, then somewhat equal. Gills white, then rufescent, deeply emarginate, somewhat free, crowded. Flesh *white*. Spores white, globose, 5 μ, 1-guttulate. Smell of new meal, taste acid, and bitter. Edible. Fir woods, heaths, and pastures. Sept.—Oct. Uncommon. (v.v.)

626. **T. stans** Fr. (= *Tricholoma striatum* Schaeff. sec. Quél.) Fr. Icon. t. 28, as *Tricholoma pessundatum* Fr. *Stans*, standing.

P. 7–12 cm., rufescent, compact, convex, then flattened, smooth, viscid. St. 5–7–5 × 1–5–2 cm., whitish, tinged rufescent, *squamulose*, somewhat equal. Gills *whitish, stained reddish on the margin*, rounded behind, crowded. Flesh *reddish under the cuticle*. Spores white,
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T. russula (Schaeff.) Fr. = Hygrophorus russula (Schaeff.) Quél.

T. frumentaceum (Bull.) Fr. = Hygrophorus russula (Schaeff.) Quél.

B. P. never viscid; torn into scales, or fibrillose.

(a) Gills not changing colour.

627. **T. rutilans** (Schaeff.) Fr. Rolland, Champ. t. 18, no. 32.

Rutilans, becoming reddish.

P. 5–20 cm., yellow, densely covered with granular, purplish downy scales, fleshy, campanulate, then convex and flattened, often umbo-

628. **T. variegatum** (Scop.) Fr. Cke. Illus. no. 1117, t. 642.

Variegatum, variegated.

P. 4–6 cm., yellowish, covered with purple-reddish flocci, slightly fleshy, fragile, convex, then flattened. St. 5–6 × .5 cm., yellowish, equal, curved, sometimes bulbous, rarely sprinkled with purple red-


P. 5–12 cm., yellow, covered with linear, bistre fibrils that become black with age, fleshy, brittle, convex, then expanded, or depressed, often excentric. St. 6–10 × 1.5–2 cm., concolorous, covered with fibrils that blacken with age, equal, slightly enlarged at the base, often twisted. Gills golden yellow, adnate, or sinuato-adnate, 5–10 mm. broad, crowded, often separating from the p. when old, edge uneven. Flesh pale yellow, thin. Spores white, elliptical, 6 × 4–5µ, with a large central gutta. Taste bitter. Stumps of conifers. Sept.—Oct. Un-
common. (v.v.)

630. **T. centurio** Kalchbr. (= Tricholoma molybdinum (Bull.) Quél., Clitocybe ampla Pers. sec. Quél.) Kalchbr. Icon. t. 4, fig. 2.

Centurio, captain.

P. 7.5–12.5 cm., fuscous, then livid, acorn-shaped, then campanulate,
strongly umbonate, at length expanded, and somewhat repand, cuticle breaking up into adpressed fibrils; margin splitting. St. 7–10 × 5 cm., white, ventricose, obsoletely fibrillose. Gills pallid, deeply emarginate, almost free, 6–8 mm. wide, scarcely crowded. Flesh white, thick. Spores white, globose, minute. Taste mild. Pine woods. Sept.—Oct. Rare.


P. 10 cm., lurid, becoming yellow cinereous, sometimes light yellow, disc darker, convex, then plane, obtuse, somewhat repand, irregularly shaped, dry, the cuticle breaking up into free, brown fibrils; margin fimbriate. St. 5–7.5 × 1–2.5 cm., whitish or yellowish, unequal, fibrillose. Gills whitish, or glaucous, then greyish, emarginate, broad, very crowded. Flesh white. Spores white, “elliptical, 12 × 7–8μ, 1-guttulate” Bat. Smell of new meal. Taste mild. Fir woods. Sept.—Oct. Uncommon.

632. **T. guttatum** (Schaeff.) Fr. (= **Tricholoma amarum** (A. & S.) Quél., **Tricholoma gentianeum** Quél.) Barla, Champ. Alp. Marit. t. 31, figs. 9–12.

P. 7.5–12 cm., cinnamon, or pale yellowish, disc darker, fleshy, convex, then flattened, broken up into granular, or floccose squamules; margin involute at first, white floccose, remotely sulcate. St. 5–8 × 1.5 cm., white, subequal, mealy. Gills snow-white, emarginate, decurrent in the form of lines, very crowded. Flesh white. Spores white, elliptical, 4–6 × 3μ. Smell and taste bitter, somewhat acrid. Woods. Oct. Uncommon.

633. **T. truncatum** (Schaeff.) Quél. (= **Hebeloma truncatum** (Schaeff.) Fr.) Boud. Icon. t. 26.

P. 5–10 cm., somewhat rufous, or yellowish tawny, convex, then depressed, undulato-repand, very irregular, smooth, then minutely floccose; margin whitish, or flesh colour, lobed, incurved, pruinose. St. 4–9 cm. × 8–10 mm., white, equal, firm, pruinose externally. Gills cream coloured, then flesh colour, emarginate with a tooth, narrow, often crisped, branched and anastomosing. Flesh white, firm. Spores yellowish in the mass, uncoloured under the microscope, elliptical, 5–8 × 3–4μ. Smell weak. Taste somewhat bitter. Edible. Fir, and deciduous woods. Sept.—Oct. Uncommon. (v.v.)

634. **T. psammopum** Kalchbr. Kalchbr. Icon. t. 3, fig. 2.

P. 3–5 cm., tawny brown, fleshy, campanulate, then convex, obtuse, or slightly umbonate, minutely fibrillosely squamulose, or smooth. St. 5–7 × 1.5 cm., concolorous, equal, or ventricose, attenuated at the base,
granularly punctate from the breaking up of the epidermis, apex white. Gills straw, or flesh colour, emarginate, adnate by a tooth, ventricose, subdistant, 4 mm. broad. Flesh white, or whitish, firm. Spores white, subglobose, 4–5 × 3–4 μ, 1-guttulate. Taste mild, then slightly bitter. Coniferous woods. Sept.—Oct. Uncommon. (v.v.)

635. **T. amarum** (A. & S.) Quél. (= Clitocybe amara Fr., Tricholoma guttatum Schaeff., and Tricholoma gentianeum Quél. sec. Quél.)

_Amarum_, bitter.

P. 5–8 cm., rufescent, or becoming fuscos, then becoming pale whitish, fleshy, pliant, convex, then flattened, obtuse, often unequal, and repand, fibrillosely-silky, becoming smooth and rivulose; margin paler, or whitish, thin, involute at first, tomentose. St. 2.5–5 cm. × 12 mm., white, equal, attenuated at the white flocose base, tough, elastic, firm, tomentose, often striate. Gills white, adnato-decurrent, or sinuate, crowded, thin, 4 mm. broad. Flesh white, compact. Spores white, subglobose, 6 × 5 μ, 1-guttulate. Smell pleasant. Taste very bitter. Woody places, and hedgerows. Sept.—Nov. Uncommon. (v.v.)

636. **T. opiparum** (Fr.) Quél. (= Clitocybe opipara Fr.) Fr. Icon. t. 49, upper figs., as Clitocybe opipara Fr. var. major Fr.

_Opiparum_, splendid.

P. 5–10 cm., yellowish flesh colour, pale yellow, or rosy flesh colour, very fleshy, convex, then plane, obtuse, delicately floculose at first, then very smooth, shining. St. 4–7 × 1–2 cm., white, often becoming discoloured, firm, equal, or slightly attenuated at the base, smooth. Gills white, adnate, or adnato-decurrent, equally attenuated behind, crowded, 6–8 mm. broad, often connected by veins. Flesh white, compact. Spores white, elliptical, 7–8 × 3–4 μ, 1-guttulate. Smell and taste very pleasant. Edible. Mossy places under trees. Oct.—Nov. Uncommon. (v.v.)

637. **T. columbetta** Fr. (= Hypophyllum spermaticum Paul. sec. Quél.)

Fr. Icon. t. 29, lower figs. Columba, a pigeon.

_Entirely shining white, occasionally spotted with red or blue. P. 5–10 cm., disc sometimes greyish, fleshy, convex, then flattened, obtuse, flexuose, dry, at first smooth, then silky-fibrillose, becoming even, or squamulose; margin incurved, tomentose. St. 7.5–10 × 2.5 cm., equal, or unequal, sometimes attenuated at the base, often fibrillosely striate and tincted with bluish green towards the base. Gills somewhat emarginate, almost free, 4–6 mm. broad, often subserulate. Flesh white, thin. Spores white, elliptical, 6–7 × 3–4 μ, 1-guttulate. Smell and taste pleasant. Edible. Woods, and pastures. Aug.—Nov. Not uncommon. (v.v.)
638. **T. scalpturatum** Fr. (= *Tricholoma argyraceum* (Bull.) Quél.)


P. 5–7–5 cm., whitish, or greyish, becoming fuscous with the adpressed scattered, floccose, umber, or rufescent scales, fleshy, conical, then convex and flattened, often umbonate, floccose when young; margin fibrillosely tomentose. St. 3–7 cm. × 8–12 mm., whitish, equal, either thickened, or attenuated at the base, firm, adpressedly fibrillose. Gills white, or greyish white, becoming yellow, or spotted with yellow, emarginate, almost free, crowded, ventricose. Flesh whitish, becoming cinereous, thin, slightly firm. Spores white, elliptical, 5–7 × 3–4 μ, 1–2-guttulate. Fir woods. Sept.—Nov. Uncommon. (v.v.)

(b) Gills rufescent, or becoming cinereous, edge often spotted red, or black.

639. **T. imbricatum** Fr. Fr. Icon. t. 30.

*Imbricatum*, covered with tiles.

P. 7.5–10 cm., rufous umber, torn into squamules except at the disc, fleshy, broadly convex, then flattened, and obtuse, very dry; margin thin, at first inflexed, pubescent, then naked. St. 4–5 × 2.5 cm., brownish, ventricose, base either conico-bulbous, or attenuated, adpressedly fibrillose, apex white, mealy. Flesh white, often becoming discoloured, firm, compact, thick. Spores white, subglobose, 4–5 × 3.5 μ, with a large central gutta. Taste pleasant. Edible. Coniferous woods. Sept.—Nov. Not uncommon. (v.v.)

640. **T. vaccinum** (Pers.) Fr. Cke. Illus. no. 80, t. 60.

*Vaccinum*, cow-like.

P. 2.5–6 cm., rufous, torn up into floccose, squarrose, or when smaller, adpressed scales, fleshy, campanulate, then expanded, umbonate, dry; margin involute, very woolly, tomentose for a short distance on the p. over the base of the gills. St. 7.5–10 cm. × 8–16 mm., brownish, equal, thickened, or attenuated at the base, fibrillose, cortinate. Gills whitish, then spotted rufous, and at length rufescent, slightly sinuate, almost adnate, subdistant, 6–12 mm. broad. Flesh white, then reddish, firm, thick. Spores white, subglobose, 6–8 × 6–7 μ. Taste somewhat acrid. Coniferous woods. Aug.—Oct. Common. (v.v.)


641. **T. inodermeum** Fr. Cke. Illus. no. 1120, t. 945.

*î's, fibre; déρμα, skin.*

P. 2–5 cm., fuscous becoming reddish, becoming torn up into fibrils, and variegated with radiating scales, slightly fleshy, conico-campanulate, acute, then rather convex and subumbonate. St. 7–8 cm. × 3–5 mm., whitish, becoming rufescent, firm, equal, scarcely fibrillose, apex white mealy. Gills white, becoming spotted red when touched, free, or slightly
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adnexed, very broad, strongly ventricose, almost semicircular, distant. Flesh white, slightly reddening, thin, fibrous in the stem. Spores white, elliptical, obtuse at both ends, more rarely with a basal apiculus, 7–9 × 4–5 µ, 3–4-guttulate. Coniferous woods. Aug.—Oct. Rare. (v.v.)

642. T. unguentatum Fr. Fr. Icon. t. 31, upper figs.

Unguentatum, anointed.

P. 5–10 cm., cinereous, or greyish brown, slightly fleshy, campanulate, then expanded, umbonate, covered with floccose, viscid squamules; margin at first inflexed, then spreading, smooth. St. 7–10 × 1–2·5 cm., grey, or white, equal, firm, laxly fibrillose. Gills dirty white, emarginate, crowded, very broad. Flesh white, firm. Pine woods. Sept.—Oct. Rare.


γαυσαπάτης, a shaggy woollen cloth.

P. 5–7·5 cm., cinereous grey, fleshy, somewhat thin, bullate, or obtusely campanulate, then expanded, repand, densely tomentose with superficial, separating, silky, adpressed fibrils; margin white, incurved, woolly. St. 5–6 × 1 cm., shining white, equal, blunt, laxly fibrillose, cortinate. Gills grey, emarginate, free, crowded, 4 mm. broad, edge often uneven. Flesh white, thin. Spores white, elliptical, 6–7 × 4–5 µ. Woods, and grassy places. Sept.—Oct. Rare. (v.v.)

644. T. terreum (Schaeff.) Fr. (= Tricholoma triste (Scop.) Quél.)

Terreum, earthy.

P. 4–8 cm., fuscous, mouse grey, bistre, or blackish, slightly fleshy, campanulate, then expanded, repand when larger, often umbonate, villous, for the most part floccoso-scaly, sometimes broken up into dark innate, adpressed, fibrils; margin inflexed, naked. St. 5–8 cm. × 8–12 mm., white, or grey, equal, floccosely fibrillose, apex white pruinose. Gills white, becoming cinereous, emarginate, subdistant, 6 mm. broad, edge uneven. Flesh whitish grey, thin, soft, fragile, scissile. Spores white, broadly elliptical, 5–7 × 4–5 µ, 1-guttulate. Taste slightly acid. Edible. Coniferous, and beech woods. Jan.—Dec. Very common. (v.v.)

var. atrosquamosum Chev. Cke. Illus. no. 85, t. 51.

Ater, black; squama, a scale.

Differs from the type in the small black squamules on the p. and in the apex of the stem having a few black squamulose points. Woods. Sept.—Oct. Uncommon. (v.v.)


ἀγρυράς, silver.

P. 5–7 cm., whitish, or pale grey, covered with grey scales and fibrils, disc darker, often speckled with yellow, or bistre, convex, then plane,
subumbonate; margin white. St. 4–7 cm. × 8–12 mm., white, or greyish, equal, often covered with small, blackish scales. Gills whitish, often tinged with yellow, sinuato-adnate, crowded. Flesh greyish. Spores white, pip-shaped, or almond-shaped, 5–6 × 3.5–4 μ, with a large central gutta. Beech, oak, and pine woods. Sept.—Nov. Common. (v.v.)

646. **T. chrysites** (Jungh.) Gillet. χρυσίτης, like gold.

P. 4–5 cm., brownish black, often stained yellowish, campanulate, then plane, umbonate, covered with floccose scales; margin yellowish. St. 4–5 cm. × 8–12 mm., white, often tinged with yellow, equal, slightly fibrillose, base reddish. Gills white, stained yellowish, especially at the edge, sinuato-adnate. Flesh yellowish. Spores white, elliptical, 6–7 × 4 μ. Pine woods, and under pines. Sept.—Oct. Not uncommon. (v.v.)

var. **virescens** Wharton. Cke. Illus. no. 1118, t. 641, as *Tricholoma argyraceum* Fr. var. *virescens* Cke. Virescens, becoming green.

Differs from the type in the p., st., and gills becoming greenish. Woods. Sept.


Os, mouth; rubens, becoming reddish.

P. 6–8 cm., grey, disc brownish black, fragile, convex, then plane, smooth and pruinose, then shaggy. St. 5–7 cm. × 8–12 mm., white, streaked with rose colour, more or less coloured blue, or greenish at the base, fusiform, fibrillose. Gills white, edge reddish, emarginate, distant, undulating. Flesh white. Spores white, elliptical, 8 × 6 μ. Smell of new meal. Taste unpleasant. Woods. Sept.—Nov. Not uncommon. (v.v.)

648. **T. triste** (Scop.) Fr. **Triste**, sad.

P. 3–4 cm., dark grey, minutely scaly fibrillose, slightly fleshy, conico-campanulate, then convex and umbonate; margin involute, fibrillose, appendiculate with the white, arachnoid veil. St. 3–5 cm. × 5–12 mm., white, with a fusaceous ring-like mark, the remains of the arachnoid veil, floccose, then smooth. Gills whitish becoming cinereous, emarginato-adnexed, narrow, subdistant. Flesh whitish, thin. Spores white, subglobose, 3–4 × 3 μ, with a large central gutta. Under beeches. Sept.—Nov. Uncommon. (v.v.)

**T. ramentaceum** (Bull.) Quél. = *Armillaria ramentacea* (Bull.) Fr.

649. **T. murinaceum** (Bull.) Fr. **Murinaceum**, like mice.

P. 5–10 cm., blackish brown, covered with darker, longitudinal fibres, and cracked, fleshy, convex, broadly umbonate, or gibbous; margin dark, incurved, woolly. St. 5–7 × 2.5 cm., concolorous, longitudinally streaked with blackish fibrils, thickened at the base. Gills white, then grey, deeply sinuate, very broad, fragile, often undulated and blackish


*Tricholoma squarrosum*, scaly.

P. 4–8 cm., fuscous, densely covered with squarrose, blackish squamules, fleshy, convex, then expanded, dry; margin fibrillose, exceeding the gills. St. 4–5 cm. × 5–7 mm., concolorous, equal, or incrassated at the base, densely covered with blackish, fuscous squamules. Gills grey, becoming reddish when touched, sinuato-adnerved, almost free, 6–7 mm. broad, crowded. Flesh greyish, then white. Spores white, pip-shaped, 7–8 × 4–5μ, with a large central gutta. In pine, and oak woods. Sept.—Oct. Uncommon. (v.v.)


*Tricholoma horribile*, terrible.

P. 10–12 cm., fuscous, and densely covered with dark fuscous squamules, that become squarrose with age especially on the disc, the p. becoming tinged with a pink background at maturity, fleshy, convex, then expanded; margin thin exceeding the gills. St. 8–9 × 2 cm., white, smooth, incrassated at the base. Gills whitish, then pinkish, emarginate, very broad, 2 cm. wide, crowded, edge uneven. Flesh white, becoming pinkish, everywhere covered with fuscous spots, which on the interior of the p. suggest that its squamules have been riveted through the depth of the flesh. Spores white, globose, 5μ. Under beech trees. Oct.—Nov. Uncommon. (v.v.)

C. Cuticle of the p. rigid, punctato-granulate, or broken up into glabrous squamules when dry.

(a) Gills white, or pallid, not spotted.

652. **T. macrorhizum** (Lasch) Fr. Kalchbr. Icon. t. 3, fig. 1, as *Tricholoma macrocephalum* Schulz. μακρός, long; ρίζα, root.

P. 20–30 cm., ochraceous, then darker, fleshy, compact, convex, then plane, depressed at the disc, at first smooth, then broken up in a tesselated manner. St. 10–15 × 5–6 cm., whitish, ochraceous downwards, very minutely granular, venticose, prolonged into a thick, blunt, white root, deeply sunk in the soil. Gills pallid, deeply emarginate, almost free, attenuated in front, scarcely crowded, 12–18 mm. broad. Flesh white, firm, becoming light yellow when broken. Spores white, “irregularly globose, 6μ” Massue. Smell very unpleasant, corpse-like Taste unpleasant. Under oaks in pastures. Sept.—Nov. Rare.

653. **T. compactum** Fr. Fr. Icon. t. 35, upper figs. *Tricholoma compactum*, compact.

P. 7–15 cm., cinereous-livid, fleshy, convex, then plane, smooth, dry, glabrous. St. 3–5 × 3 cm., white, attenuated upwards, smooth,
polished. Gills yellow, rounded, subdentist. Flesh white, spongy, compact, softer in the stem. Spores white, "elliptical, 6-7 µ, guttulate" Quél. Woods. Rare.

654. **T. cartilagineum** Fr. non Bull. Fr. Icon. t. 33.

*Cartilagineum,* cartilaginous.

P. 5–7.5 cm., blackish, becoming black-dotted from the cuticle breaking up into minute granules, fleshy, rigid, convex then expanded, gibbous, undulated; margin persistently incurved, pubescent at first. St. 2.5–5 × 2.5 cm., shining white, firm but fragile, equal, polished. Gills white, then pale grey, emarginato-sinuate, crowded, moderately thin, 4 mm. broad. Flesh white, not compact, somewhat fragile. Spores white, elliptical, 5–6 × 4 µ, with a large central guttula. Grassly places in woods, pastures, and under pines. Aug.—Nov. Uncommon. (v.v.)


*Tenuis,* thin; *caput,* head.

P. 5–8 cm., fuliginous, fleshy at the disc, convex, obtuse, or sometimes slightly gibbous, dry, granular. St. 7.5 × 2.5 cm., ochraceous white, tough, slightly attenuated upwards, minutely granular, base abrupt, furnished with long, spreading, cord-like mycelium. Gills white, adnexed, rounded behind, attenuated in front, 4 mm. broad, ventricose. Flesh white, thin at the margin. Spores white, globose, 6–7 µ. Amongst grass under trees. July. Uncommon.

*T. loricatum* Fr. = *Clitocybe cartilaginea* (Bull.) Bres.

656. **T. atrocinereum** (Pers.) Fr. Fr. Icon. t. 31, lower figs.

*Ater,* black; *cinereum,* ash-coloured.

P. 3–4 cm., cinereous, disc prominent, darker, fleshy, convexo-plane, smooth, dry, becoming rimose incised and revolute at the margin. St. 5–7.5 cm. × 8 mm., whitish, equal, slightly striate with longitudinally adpressed fibrils, apex naked. Gills hyaline white, free, or decurrent with a tooth, or arcuato-adnexed, somewhat ventricose, thin, crowded. Flesh hyaline when moist, hygrophanous, fragile. Spores white, elliptical, 10 × 6–7 µ, minutely punctate. Smell of new meal. Grassy ground, and coniferous woods. Aug.—Oct. Uncommon. (v.v.)

657. **T. cuneifolium** Cke. Illus. no. 91, t. 52, fig. B.

*Cuneus,* a wedge; *folium,* a leaf.

P. 1–2.5 cm., fusceous, or livid, then grey, slightly fleshy, convex, then plane, obtuse, at length depressed, pruinose. St. 2.5–4 cm. × 4–6 mm., pallid, attenuated downwards, rarely equal, hollow, somewhat fibrillose, becoming smooth. Gills white, then greyish, ovate-wedge-shaped, very much attenuated behind, very broad in front, deeply sinuato-adnate, crowded, fragile, often connected by veins. Flesh

var. griseo-rimosum (Batsch) Cke. Cke. Illus. no. 92, t. 261, as var. cinereo-rimosum Batsch. Griseus, grey; rimosum, full of cracks.

Differs from the type in its larger size, and the concentrically rimose p. Generally abundant with the type. (v.v.)

658. T. amplum (Pers.) Rea. (=Clitocybe ampla (Pers.) Fr., Tricholoma molybdinum (Bull.) Quél., Tricholoma centurio Kalchbr. sec. Quél.) Fr. Icon. t. 53, as Clitocybe ampla Pers. Amplum, large.

P. 10-20 cm., dark bistre, disc reddish, becoming greyish, fleshy, campanulate, then expanded, gibbous, minutely streaked with fibrils. St. 9-14 x 1-5-2 cm., white, equal, thickened at the base, firm, fibrillosely striate, apex mealy. Gills greyish, or yellowish, sinuato-emarginate, 10-12 mm. broad, subdistant, margin often toothed. Flesh white, compact. Spores white, pip-shaped, 9 x 6 μ, 1-guttulate. Caespitose. Woods. Sept.—Nov. Uncommon. (v.v.)

(b) Gills becoming reddish, or cinereous, or spotted.

659. T. saponaceum Fr. Cke. Illus. no. 88. t. 91. Sapo, soap.

P. 5-10 cm., fuscosus livid, fleshy, convex, then flattened, obtuse, smooth, becoming cracked, and broken up into scales in dry weather, somewhat soapy when moist, margin thin, inflexed. St. 5-10 x 1-5-2 cm., pallid, often becoming reddish, often unequal, curved, base attenuated, often rooting. Gills white with a glaucous tinge, becoming spotted with red, uncinato-emarginate, distant, thin. Flesh white, often becoming reddish, firm. Spores white, elliptical, 5-6 x 3-4 μ, 1-guttulate. Smell soapy. Deciduous, and pine woods. Aug.—Nov. Very common. (v.v.)

var. squamosum Cke. Cke. Illus. no. 89, t. 216, as var. "stipite squamuloso." Squamosum, scaly.

Differs from the type in the st. being covered with darkish scales. Woods. (v.v.)

var. sulphurinum Quél. Sulphurinum, sulphur coloured.

Differs from the type in the canary yellow p. and the pale yellow st. and gills. Woods. Uncommon. (v.v.)

var. atrovirens (Pers.) Quél. Ater, black; virens, becoming green.


T. crassifolium Berk. = Collybia crassifolia (Berk.) Bres.
660. **T. sudum** Fr. Fr. Icon. t. 34, lower figs.  
*Sudum*, dry.

P. 6-9 cm., greyish rufous, or brownish, fleshy, convexo-plane, then reflexed, obtuse, *often rimosely squamulose*; margin paler. St. 6-8 × 1-5 cm., whitish, tinged with reddish, slightly attenuated upwards, *punctate with minute squamules, fibrillosely striate*, apex dilated, base white floccose. Gills whitish, becoming reddish at the edge, deeply emarginate with a decurrent tooth, crowded. Flesh *white*, firm. Spores white, elliptical, 6-7 × 4 μ, *punctate*. Grassy places in woods. Sept.—Oct. Rare.


*Tumidum*, swollen.


var. **Keithii** Phill. & Plowr.

Diffs from the type in the *cinereo-rufescent p.*, *the dirty white st.*, *with brownish innate fibrils*, becoming tinged with red especially near the base, and *in often having a strong smell of new meal*. Pine woods. Oct.

662. **T. hordum** Fr.

*Hordum*, pregnant.


663. **T. virgatum** Fr. Fr. Icon. t. 34, upper figs. *Virgatum*, striped.

P. 5-10 cm., *grey-cinereous*, *umbro often darker*, fleshy, *rigid*, convex, then flattened, subumbonate, very dry, *streaked with fine black innate fibrils*, or *black squamules*; margin *straight*, naked. St. 7-5-10 × 1-1-5 cm., whitish, *or greyish*, firm, equal, or tuberous at the very base, *striate*, *sometimes squamulose*. Gills *white*, then *greyish*, *becoming hoary*, *broadly emarginate*, 6-10 mm. *broad*, crowded. *Flesh greyish white*, *becoming white in the st.*, thin. Spores white, *broadly elliptical*, 6-7 × 4-5 μ, *punctate*. Cystidia “on edge of gill clavate, 45 × 10-13 μ, filled with darkish juice” Rick. Taste very bitter when young, then *mild*. Mixed, and pine woods. Aug.—Oct. Not uncommon. (v.v.)
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664. **T. elytroides** (Scop.) Fr.  
ελυτρον, a cover; ειδος, like.

P. 6–9 cm., mouse grey, or brownish black, slightly fleshy, convex, then plane, obtuse, fragile, very dry, **rough with crowded, erect minute granules**, disc floccosely scaly, becoming hoary when old. St. 7–8 × 1–1.5 cm., **white**, becoming cinereous, attenuated downwards, covered with erect, light grey fibrils. Gills cinereous, then pruinose, deeply emarginate, very broad, somewhat thick, fragile, veined at the base. **Flesh white, sometimes becoming reddish**, thick at the disc. Spores white, 6–7 × 4–5 μ, or “5–6 × 3.5–4 μ”. Sacc. Smell weak, of new meal. Grassy places. Oct. Rare.

665. **T. opicum** Fr.  
Opicum, clownish.

P. 2.5–3.5 cm., grey, or brownish grey, disc blackish, slightly fleshy, convex, then expanded, obtusely, or conically unbonate, at length split, revolute, very dry, smooth, then **minutely squamulose**; margin often white, or whitish. St. 4–7.5 × 5 cm., pallid, becoming cinereous, somewhat shining, equal, fibrillose, becoming smooth. Gills **white**, or **slightly greyish**, becoming hoary, broadly emarginate, ventricose, somewhat thick, scarcely distant. Flesh **greyish**, very thin at the margin. Pine woods. Sept.—Nov. Rare.

D. P. at first slightly silky, soon becoming smooth, very dry.

(a) Gills broad, rather thick, subdistant.

666. **T. sulphureum** (Bull.) Fr. Cke. Illus. no. 96, t. 62.

Sulphureum, sulphur coloured.

P. 4–8 cm., **sulphur yellow**, disc dingy, or rufescent, fleshy, globose, then convexo-plane, subumbonate, at length depressed, unequal, silky, becoming smooth. St. 5–11 × 1 cm., **concolorous**, equal, often curved, striate. Gills sulphur yellow, adfixed, narrowed behind, arcuato-emarginate, **rather thick**, distant. Flesh **yellow**. Spores white, elliptical, 9–10 × 4–5 μ. Smell pleasant, of gas tar. Oak, and mixed woods. Sept.—Nov. Common. (v.v.)


P. 3–7 cm., **umber**, fuscous tan, or tawny, disc rufescent, fleshy, convexo-plane, subumbonate, silky, becoming smooth, rugulose. St. 4–5 cm. × 8–14 mm., **yellow**, or tinged with red, equal, or attenuated at the base, flocculose. Gills **yellow tan**, pallid, arcuato-subdecurrent, subdistant, margin often irregular. Flesh **yellow**. Spores white, elliptical, 7–8 × 5 μ. Smell weak, of gas tar. Pine woods, and pastures. Sept.—Nov. Uncommon. (v.v.)

668. **T. lascivium** Fr. Fr. Icon. t. 38, upper figs. Lascivium, wanton.

P. 5–9 cm., pallid tan, disc darker, fleshy, convex, then plane, obtuse, at length somewhat depressed, delicately silky, then smooth,
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dry; margin at first involute. St. 7.5-11 × 1 cm., whitish, becoming discoloured, rigid, equal, fibrillose, apex white pruinose; base tomentose, white. Gills whitish, arcuate-adnexed, at length arcuato-decurrent, thin, crowded, broad. Flesh white, compact. Spores white, elliptical, 6-7 × 4-5μ. Smell very pleasant, like that of the flowers of *Syringa vulgaris* according to Quélet. Deciduous woods. Sept.—Nov. Uncommon. (v.v.)


Differs from the type in being more robust, in the *p*. being almost white, and in there being scarcely any perceptible odour. Pastures. May.

669. **T. inamoenum** Fr. Fr. Icon. t. 38, lower figs.

*Inamoenum*, unpleasant.

P. 3–6 cm., dingy white, fleshy, convex, then flattened, subumbonate, very dry, slightly silky, then smooth, or cracked. St. 7.5-10 cm. × 6–12 mm., white, firm, equal, pruinose, villous. Gills *shining white*, emarginate with a decurrent tooth, or adnato-decurrent, plane, *rather thick*, very broad, *very distant*. Flesh white, firm, thick at the disc. Spores white, *elliptical*, 9–10 × 6–7μ, with a large central gutta. Cystidia "clavate, with a prominent point, 33–40 × 9–12μ." Rick. Smell "pleasant, like honeysuckle" Quélet. Fir woods. Sept.—Nov. Uncommon. (v.v.)

var. insigne Massee. Insignis, striking.

Differs from the type in the decurrent gills.


(b) Gills thin, crowded, narrow. Small, inodorous.

671. **T. cerinum** (Pers.) Fr. Fr. Icon. t. 39, upper figs.

*Cerinum*, wax coloured.

P. 3–5 cm., *dingy wax colour*, or *becoming fuscous*, fleshy, convex, then flattened, obtuse, at length depressed, very opaque, very dry, silky, then smooth; *margin often paler*. St. 4–6 cm. × 4–8 mm., *light yellow*, often *fuscous at the base*, equal, *fibrillosely striate*. Gills dark yellow, or *wax colour*, sinuato-adnexed, separating, horizontal, plane, *very thin*, *very crowded*, 2 mm. broad. Flesh white, thin, firm. Spores white, "2–3 × 2–3μ." Rick. Taste becoming bitter. Fir woods. July—Oct. Rare.
672. **T. fallax** Peck.

*Fallax*, deceptive.

P. 2-5 cm., *yellow*, disc sometimes *rufous*, thin, convex, then expanded, rarely depressed at the centre, moist, smooth. St. 2-5 cm. × 3 mm., *pale yellow*, base sometimes narrowed. Gills *white, then yellowish*, adnexed, rounded behind, crowded. Flesh thin. Spores white, elliptical, 4-5 × 3 μ. Under firs. Sept. Rare.

673. **T. onychinum** Fr. Fr. Icon. t. 39, lower figs.

*Onychinum*, yellowish marble colour.

P. 4-6 cm., *dingy purple*, or reddish bay, fleshy, convexo-plane and umbonate, then expanded and obtuse, very dry, *opaque*; margin *paler*, somewhat silky, narrowly incurved, *striate*. St. 4-6 cm. × 4-8 mm., *pallid*, or *yellow*, apex becoming purple, then *lilac*, delicately *fibrillosely striate*, equal. Gills dark yellow, adnexed, then free, plane, horizontal, rounded behind, *rather crowded*, 2-4 mm. broad, unequal. Flesh *white*, becoming *yellow*, thin, firm. Spores white, ovoid, 4-5 μ, punctate. Smell and taste pleasant. Under pines, and in fir woods. Sept.—Oct. Rare.


P. 3-6 cm., *deep violet*, becoming paler, fleshy, campanulato-convex, then plane, *often umbonate*, becoming smooth; margin incurved, *pruinose*. St. 3-6 cm. × 7-12 mm., *paler violet*, elastic, attenuated downwards, or thickened at the base, *fibrillosely striate*. Gills *white*, becoming *yellowish*, emarginate with a decurrent tooth, crowded, thin, 6 mm. broad, *edge uneven*. Flesh *white*, tinted *violet* in the p., and at the base of the st. Spores white, elliptical, 5-6 × 3 μ, 1-2-guttulate. Smell and taste pleasant. Edible. Moist woods, especially beech, and open pastures. Aug.—Oct. Uncommon. (v.v.)

var. **pravum** (Lasch) Fr.

Pravum, deformed.

Diffs from the type in being smaller, thinner, and more fragile, and in *its fuscous-reddish, fuscous-purple, lilac-reddish, or vivid colour*. Stoves. July.

675. **T. persicolor** Fr. Boud. Icon. t. 25. *Persicum*, peach; *color*, colour.

P. 1-2 cm., *ochraceous reddish yellow*, convex, then flattened, slightly *umbonate*, *hygrophanous*, smooth. St. 3-4 cm. × 3-6 mm., *concolorous*, equal, smooth. Gills whitish, tinged slightly with the colour of the *p.*, *sinuate*, narrow, not crowded. Flesh *concolorous*. Spores white, elliptical, 4-5 × 3-3-5 μ. Pastures. Sept. Rare. (v.v.)

676. **T. carneum** (Bull.) Fr. (= *Tricholoma carneolum* Fr. sec. Quél.) Fr. Icon. t. 40, fig. 2, as *Tricholoma paeoniae*.

*Carneum*, flesh coloured.

P. 2-3 cm., red, then flesh colour, becoming pale, and *shining*, thin, slightly fleshy, hemispherical, then convex and regular, obtuse, at
length flattened and obtuse, often umbonate, smooth, dry. St. 2-5 cm. × 4-6 mm., flesh colour, becoming pale, attenuated downwards, tough, almost cartilaginous, rigid, apex somewhat pruinose. Gills shining white, rounded, somewhat free, horizontal, very crowded, wider at the base, 2-3 mm. broad. Flesh white, thin. Spores white, elliptical, 5-6 × 2-3μ. Pastures, heaths, and downs. July—Oct. Common. (v.v.)

*Tricholoma carneolum* Fr. = *Tricholoma carneum* (Bull.) Fr.

677. *T. caelatum* Fr. Fr. Icon. t. 37, lower figs. *Caelatum*, engraved.

P. 2-5-3 cm., fuscous, becoming pale grey when dry, slightly fleshy, convex, umbilicate, smooth, becoming flocculose and rimosely cracked. St. 2-5-3-5 cm. × 3-5 mm., concolorous, tough, elastic, equal, or slightly thickened at the pruinose apex. Gills dingy white, or grey, sinuato-adnate, with a small decurrent tooth, slightly arcuate, crowded. Flesh subfuscous, thin. Spores dingy white, elliptical, 8 × 1/μ. Cystidia "subulate, 40-60 × 5-6μ, filled with olive yellow juice" Rick. Woods, and downs. Uncommon. (v.v.)

E. P. fleshy, soft, fragile, spotted, or rivulose. Vernal.

(a) Gills whitish.


P. 7-5-11 cm., ochraceous, or pale tan, fleshy, hemispheric-co-convex, then flattened, obtuse, undulated, repand, even, smooth, spotted as with drops, at length widely cracked; margin at first involute, tomentose. St. 5-10 × 1-3 cm., white, or ochraceous, firm, almost equal, often curved-ascending at the base; apex white, villous, striate from the decurrent tooth of the gills. Gills whitish, rounded, or emarginato-adnexed, with a subdecurrent tooth, sinuato-decurrent when old, ventricose, 4-6 mm. wide, crowded. Flesh white, thick, soft, fragile. Spores white, elliptical, 6-7 × 3-4μ, 2-guttulate. Smell and taste strong, of new meal. Edible. Pastures, often forming large rings. April—June. Not uncommon. (v.v.)


P. 4-6 cm., ochraceous, then white, fleshy, convexo-plane, then somewhat repand, often gibbous, dry, slightly floccose; margin naked. St. 4-6 × 1-5-2 cm., whitish, or tinged yellowish, attenuated downwards, fibrillose. Gills whitish, attenuato-adnexed, narrow, crowded. Flesh white, firm, thick. Spores white, elliptical, 5-6 × 3μ. Taste and smell weak, of new meal. Edible. Woods, and open downs. April—June. Not uncommon. (v.v.)

*Albellum*, whitish.

P. 6–7 cm., yellowish, then whitish, becoming greyish when dry, fleshy, conical, then convex, gibbous when expanded, moist, spotted as with scales; margin thin, naked. St. 5–8 × 1–1.5 cm., concolorous, fibrillosely striate, often incrassated at the base. Gills white, then cream colour, attenuato-adnexed, broad in front, very crowded. Flesh white, thick at the disc, soft, floccose. Spores white, elliptical, 5–6 × 3 μ, 1-guttulate. Smell and taste weak, of new meal. Edible. Woods, and under yews. April–June. Uncommon. (v.v.)

681. **T. boreale** Fr. (= *Tricholoma irinum* (Fr.) Quél.) Fr. Icon. t. 41, upper figs.

*Boreale*, northern.

P. 5–7.5 cm., flesh colour, then whitish tan, fleshy, very variable in shape, convex, umbonate, unequal, often flexuose, smooth, cracked when dry; margin thin, involute, naked. St. 5–7.5 × 1 cm., paler than the p., attenuated downwards, often twisted and incurved, apex obsolescently pruinose. Gills whitish, emarginate with a decurrent tooth, thin, crowded. Flesh white, soft. Spores white, elliptical, 7–8 × 4–5 μ. Smell of new meal. Grassly places in woods. June–July. Uncommon. (v.v.)

(b) Gills discoloured, rufescent, or smoky.

682. **T. amethystinum** (Scop.) Fr. non Quél.

*Amethystinum*, amethyst colour.

P. 3–5 cm., livid, spotted with azure blue, fleshy, convexo-plane, obtuse, repand, smooth, even, moist; margin paler, wrinkled. St. 3–5 × 1–1.5 cm., paler than the p., attenuated at the base. Gills white, then rufescent, subadnate, crowded. Spores white, “ovoid, 7 μ long” Sacc. Pine woods. Sept. Rare.

*T. tigrinum* Fr. Icon. non Schaef. = **Hygrophorus camarophyllus** (A. & S.) Fr.

683. **T. pes-caprae** Fr. (= *Clitocybe conglobata* (Vitt.) Bres.)

*Pes*, foot; *capra*, she-goat.

P. 5–10 cm., grey, becoming fuscous, variegated, fleshy, conical, then expanded, umbonate, unequal, rimosely incised; margin thin, naked. St. 6–7 × 1 cm., white, equal or attenuated downwards, naked. Gills white, becoming cinereous, emarginate, very broad, 12–15 mm., at length distant. Flesh thick at the disc. Spores white, “6 × 4” Sacc. Smell of new meal. Edible. Open places under oaks. Oct.—Nov. Rare.

var. **multiforme** (Schaef.) Cke. Schaef. Icon. t. 14.

*Multiforme*, many shaped.

Differs from the type in its smaller size, and in the irregular thinner p. Lawns. Nov. Rare.
F. P. compact, then spongy, obtuse, even, smooth, moist, but not hygrophanous.

(a) Gills not discoloured.


P. 5–8 cm., cinereous livid, disc darker, becoming paler and whitish, fleshy, convex, then flattened, obtuse, regular, smooth, moist; margin exceeding the gills, inflexed. St. 7–10 cm. × 10–12 mm., white, equal, villous and sometimes ventricoso-bulbous at the base, slightly striate, fibrous. Gills white, or cream colour, emarginate, very crowded, plane, 6–8 mm. broad. Flesh white, pinkish when broken, spongy, compact. Spores "elliptical, 9 × 6–7 μ, minutely punctate, glaucous" Quél. Taste mild. Woods, hot-houses. Sept.—Oct. Rare.

685. **T. amicum** Fr. Fr. Icon. t. 36, upper figs. Amicum, friendly.

P. 5–9 cm., fuscous, disc sometimes darker, not becoming paler when dry, fleshy, convex, then expanded, gibbous, very regular, smooth. St. 7–9 × 1–5 cm., white, attenuated upwards from the subbulbous base, fibrillosely striate, elastic. Gills shining white, deeply emarginate, almost free, distant, 6–8 mm. broad. Flesh white, brownish under the cuticle, thick at the disc, rather soft. Spores "elliptical, 6 × 4 μ" Massee. Pine woods. Sept.—Oct. Rare.


P. 5–8 cm., olive, or dusky, disc tawny, fleshy, convex, very obtusely umbonate, or only obtuse, rarely becoming slightly depressed, cracking slightly when old; margin incurved, tomentose, wavy. St. 3–4 × 1–2 cm., whitish, firm, obclavate, or sometimes attenuated downwards, striate. Gills white, slightly sinuate, adnexed, 3–4 mm. broad, scarcely crowded. Flesh white, thick. Spores white, subglobose, 4–5 μ. Taste pleasant. Bare ground under trees. Sept. Rare. (v.v.)

687. **T. patulum** Fr. Fr. Icon. t. 37, upper figs. Patulum, spread out.

P. 4–12 cm., pallid cinereous, fleshy, firm, convexo-plane, obtuse, often repand, smooth. St. 4–6 × 1–3 cm., white, firm, equal, somewhat elastic, smooth. Gills whitish, emarginate, almost free, crowded, fairly narrow, 4 mm. broad, plane, somewhat veined at the sides. Flesh white, thin, not compact. Spores white, elliptical, 8–9 × 4–5 μ. Woods and pastures. Sept.—Oct. Uncommon. (v.v.)

688. **T. oreinum** Fr. ὀπευώς, hilly.

P. 3–9 cm., fuscous livid, fuliginous grey, or light bistre, becoming darker, convex, slightly gibbous, then globose, and plane; margin at first incurved, prolonged into a narrow membrane along the edge of the gill. St. 5–7 cm. × 4–12 mm., white, rigid, fibrillosely striate, apex floccosely mealy, base bulbous. Gills white, rounded, then free, crowded,

689. **T. album** (Schaeff.) Fr.  Album, white.

**Entirely white, or becoming yellowish at the disc.** P. 5–12 cm., fleshy, convex, then flattened, becoming plane, obtuse, very dry, smooth; margin at first incurved, floccosely striate over the base of the gills. St. 7–8 × 1–1.5 cm., elastic, attenuated upwards, subbulbous, apex slightly mealy. Gills emarginate, somewhat crowded, 8 mm. broad. Flesh white, thick, not compact, fibrous in the stem. Spores white, broadly elliptical, 6 × 4–5 μ, 1-guttulate. Smell pleasant, taste bitter. Poisonous. Mixed woods. Sept.—Nov. Not uncommon. (v.v.)

var. **caesariatum** Fr. Caesariatum, covered with hair.

Differs from the type in being more slender, and in the silky fibrillose p. Shady beech woods. Sept.—Oct. Uncommon.


**λευκός**, white; **κεφαλή**, head.

P. 3–6 cm., white, disc sometimes becoming ochraceous, fleshy, thin, tough, convexo-plane, obtuse, or often umbonate, moist, smooth, when young covered with shining whitish, adpressed silky, at length separating villous down; margin acute, spreading, smooth. St. 4–6 cm. × 5–10 mm., white, subcartilaginous, polished, twisted, smooth, rooting at the attenuated base. Gills shining white, rounded-free, crowded, thin. Flesh watery, becoming whitish, thin, compact. Spores white, ovoid, 6–7 × 4–6 μ, minutely echinulate, 1-guttulate. Smell pleasant, of new meal. Deciduous woods. Aug.—Oct. Uncommon. (v.v.)

(b) Gills discoloured.

691. **T. acerbum** (Bull.) Fr. (= *Tricholoma nictitans* Fr. sec. Quél.)

Barla, Champ. t. 44, figs. 1–5. **Acerbum**, bitter.


**Luteus**, yellow; **citrinus**, citron.

P. 2–7 cm., bright yellow, fleshy, campanulate, then expanded and gibbous, floccose, soon breaking up into adpressed, small squamules,
which become revolute and fibrillose with age; margin citron yellow, involute. St. 6-7 × 1-2 cm., whitish, spotted with yellow, attenuated downwards. Gills whitish, becoming yellowish, sinuato-advolute, 4-5 mm. broad, somewhat crowded. Flesh whitish, citron yellow under the epidermis of the p., and dark yellow at the base of the stem. Spores white, elliptical, 6 × 4μ, 1-guttulate. Taste mild. Under larches. Sept.—Oct. Uncommon. (v.v.)


P. 10-17 cm., reddish cinnamon, fleshy, gibbous, then plane, or depressed, compact, flexuous, rather smooth, viscid; margin involute, white, floccose. St. 7-12 × 2-2.5 cm., pallid, becoming stained with red, fibrillose striate, base subbulbous. Gills whitish, or reddish, then livid-spotted, emarginate, somewhat crowded, torn, margin eroded. Flesh white, brownish under the cuticle of the p. and in the centre of the stem, thick, compact, firm. Spores white, elliptical, 4-5 × 3μ, 1-guttulate. Smell very strong, taste unpleasant. Woods. Oct. Rare. (v.v.)

694. **T. civile** Fr. Fr. Icon. t. 42, upper figs. **Civile**, citizen-like.

P. 6-9 cm., tawny yellow, becoming paler, disc darker, fleshy, fragile, convexo-plane, obtuse, very smooth, moist, pellicle separable. St. 5-8 × 2-3 cm., whitish, fragile, attenuated upwards from the thickened base, fibrillose, or squamulose. Gills whitish, becoming yellowish, deeply emarginate, almost free, crowded, 6 mm. broad, very soft. Flesh whitish, soft, fragile, spongy. Spores white, elliptical, or pip-shaped, 5-6 × 3μ. Smell none, or like hay according to Barla. Taste sweet, then astringent, and bitter. Woods. Oct.—Nov. Rare.


P. 5-12 cm., pale flesh colour, fleshy, convex, then plane, obtuse, moist, glabrous, sometimes obscurely virgate; margin white, incurved, pruinose. St. 6-12 × 2-3 cm., paler than the p., subbulbous, striate, apex whitish, pruinose. Gills pale ochre, becoming somewhat lurid with age, sinuato-advinate, narrow, 5-6 mm. broad, crowded. Flesh tinted pale pink, then white, firm, thick, compact. Spores dirty pink, or yellowish in the mass, hyaline, elliptical, or pip-shaped, 7-9 × 4-5μ, 1-guttulate. Smell very pleasant, like Iris, or Viola, according to Quélet. Taste mild. Edible. Pastures, and orchards. Sept.—Oct. Uncommon. (v.v.)

696. **T. personatum** Fr. (= *Tricholoma amethystinum* Qué. non Fr.) Cke. Illus. no. 113, t. 66. **Personatum**, masked.

P. 6-15 cm., tan colour, fuscous, or whitish, very fleshy, thick, hemispherical, then convex and flattened, very obtuse, regular, at length
also repand, smooth, moist in rainy weather, opaque when dry; margin white, involute at first, exceeding the gills, pruinose. St. 5–9 × 2–3 cm., whitish, covered with evanescent, blue fibrils, equal, base often bulbous, firm, sometimes very short. Gills whitish, becoming discoloured, rounded, then free, broad, 10–15 mm., crowded. Flesh greyish when moist, white when dry, compact, then spongy-soft, thick. Spores white, elliptical, 7 × 5 μ, 1-guttulate. Smell and taste pleasant. Edible. Forming large rings in pastures. Sept.—Dec. Common.


P. 6–9 cm., pale tawny, or tan colour, sometimes tinted with violet, compact, fleshy, convex; margin incurved, exceeding the gills. St. 3–5 × 1:5–2 cm., lilac, or violaceous, apex paler, base white, slightly squamulate, equal. Gills dirty white, or yellowish white, emarginate, narrow, crowded. Flesh whitish, or slightly tinted with violet, thick, spongy. Spores white, elliptical, 7 × 5 μ. Woods, and pastures. Oct.—Nov. Uncommon. (v.v.)


γλαυκός, bluish grey; canum, hoary.


P. 7–10 cm., entirely purple violaceous, or with the disc brownish, or tawny, becoming paler, fleshy, convexo-plane, then depressed, obtuse, even, moist; margin inflexed, thin, naked. St. 5–9 × 2 cm., violaceous, becoming pale, elastic, equal, apex mealy. Gills concolorous, becoming pale, rounded, then decurrent, crowded, narrow. Flesh tinged with violet, becoming whitish when dry, thick at the disc. Spores white, elliptical, 7 × 3–4 μ, 1-guttulate. Smell and taste pleasant. Edible. Coniferous, and deciduous woods, rarely in pastures. Sept.—Dec. Common. (v.v.)

var. majus Cke.

Majus, larger.

Differs from the type in being larger, and more robust. Woods. Sept.—Nov. Uncommon. (v.v.)
var. lilaceum Quél. Quél. Jur. et Vosg. t. 3, fig. 1, as *Tricholoma sordidus* Fr.  
*Lilaceum*, lilac colour.  

Differs from the type in its small size, and the blue violaceous colour of all its parts. Spores white, elliptical, 6 × 3 µ, 1-guttulate. Woods, and pastures. Sept.—Oct. Uncommon. (v.v.)

700. *T. cinerascens* (Bull. non Fr.) Quél. (= *Clitocybe funosa* Fr. sec. Quél.) Boud. Icon. t. 29. *Cinerascens*, becoming ash-colour.

P. 4–10 cm., *fuliginosus fuscous*, or *livid*, becoming grey when dry, fleshy, *firm*, convex, then plane, gibbous, sometimes slightly umbonate, either *circinate* and regular, or *flexuose* and undulated, smooth, somewhat hygrophanous. St. 5–10 cm. × 8–16 mm., *whitish*, often stained *with brown towards the base*, cylindrical, or attenuated at the base, *fibrillosely* apex *pruinose*, often conuate at the base, or branched. Gills *greyish white*, paler than the *p.*, *adnate*, or *emarginate*, *crowded*. Flesh *greyish, white when dry*, thick at the disc, *firm*. Spores white, globose, 5–6 µ, *punctate*. Taste becoming bitter. Woods. Aug.—Oct. Not uncommon. (v.v.)

701. *T. panaeolum* Fr. (= *Tricholoma nimbatum* (Batsch) Quél.) Fr.  
Icon. t. 36, lower figs.  
*παναίδος*, variegated.

P. 5–10 cm., cinereous-*fuliginous*, becoming paler, *pruinose* hoary, and *spotted*, fleshy, convex, then plane, or here and there depressed, *obtuse*, often *repan* and *excentric*; *margin* thin, *involute*, *mealy*. St. 3–7.5 × 1–2 cm., *whitish-grey*, fragile, equal, or attenuated at the base, *fibrillosely striate*. Gills *white*, then *grey*, or *dingy rufescent*, *emarginate*, or rounded, at length *decurrent*, *very crowded*, plane, 4 mm. broad. *Flesh greyish*, becoming *whitish*, with a *horn colour line at the base of the gills*, thick at the disc, soft. Spores *dirty pink* in the mass, elliptical, 4–5 × 3 µ. Smell and taste *pleasant*. Edible. Forming large rings in pastures. Oct.—Nov. Common. (v.v.)

*Caespitosum*, *caespitose*.

Differs from the type in its *caespitose habit*, the *mealy apex of the st.*, and the narrower gills. Hilly pastures, and heaths. Oct. Uncommon. (v.v.)

var. *calceolum* (Sterb.) Fr.  
*Calceolus*, a small shoe.

Differs from the type in the deformed *p.*, the naked, *incised margin*, the *excentric*, short, fusiform st. and the *fuliginous gills*. Under hazels. Oct. Rare.

κνίστα, smell of burnt sacrifice.

P. 5–8 cm., *pale tan*, or *whitish*, *disc* darker, fleshy, convex, then plane, *obtuse*, *smooth*, moist; *margin* incurved naked. St. 3–5 cm. × 8–10 mm., *white*, tough, equal, *smooth*. Gills *white*, *pallid yellow*
when bruised, adnexed, rounded behind, inclined to separate from the p. transversely veined, crisped when dry. Flesh white, rather thick, soft. Spores white, elliptical, 7–10 × 4 μ, "roughish" Rick. Smell of cooked flesh. Amongst grass in open places. Sept.—Oct. Rare.

703. **T. duracinum** Cke. Cke. Illus. no. 1126, t. 640.

*Durus*, hard; *acinum*, berry.


G. P. thin, subumbonate, hygrophanous (*Melanoleuca* Pat.).

(a) Gills whitish, unsotted.

704. **T. grammopodium** (Bull.) Fr. (= *Tricholoma melaleucum* (Pers.) Fr. sec. Dumée.) Cke. Illus. no. 118, t. 98. γραμμόπυθ, a line; πούς, foot.

P. 7–15 cm., pallid-livid, or fuscous rufous, whitish when dry, fleshy, campanulate, then convex, at length flattened, obtusely umbonate, smooth, moist pellicle separable. St. 7–10 × 1–1.5 cm., whitish, longitudinally striate with bistre, or brownish fibrils, elastic, equal, base thickened, firm. Gills whitish, becoming brownish, arcuato-adnate, or broadly, horizontally emarginate, often acute at both ends, very crowded, very many shorter gills, often branched behind. Flesh bistre when moist, becoming white when dry, thick at the disc, spongy. Spores white, elliptical, 7–8 × 4–6 μ, punctate. Smell mouldy. Edible. Forming large rings in pastures and orchards, and solitary, on leaf mould, in deciduous woods. Sept.—Nov. Not uncommon. (v.v.)

705. **T. melaleucum** (Pers.) Fr. (= *Tricholoma arcuatum* Fr. sec. Quél.) Fr. Icon. t. 44, upper figs. μελακ, black; λευκό, white.

P. 4–10 cm., dark fuliginous when moist, then livid fuscous, paler when dry, umbo blackish, fleshy, convex, then flattened, umbonate, smooth, moist. St. 5–8 cm. × 4–8 mm., whitish with darker striae, base fuscous, elastic, thickened at the base, fibrillosely striate. Gills white, emarginato-adnixed, horizontal, straight, broad, more or less ventricose, crowded. Flesh white, becoming fuliginous, soft. Spores white, elliptical, 8 × 5 μ, warted, apiculate at the base. Cystidia on edge of gill lanceolate subulate, 50–60 × 10–15 μ, shaggy at the apex. Taste mild. Edible. Woods, and pastures. Sept.—Nov. Common. (v.v.)

var. **adstringens** (Pers.) Quél.

**Adstringens**, abridged.

Diffs from the type in the rigid, pitch black p. and in the white gills becoming pinkish. Pastures, and downs. Sept.—Oct. Not uncommon. (v.v.)
706. **T. porphyroleucum** (Bull.) Fr. (= *Tricholoma melaleucum* (Pers.) Fr. sec. Dumée.) Cke. Illus. no. 119, t. 119.

πορφύρα, purple; λευκόν, white.

P. 4–6 cm., fuliginous, or fuscous, becoming rufescent, with a darker, evanescent umbo, fleshy, firm, convex, then plane and depressed, smooth. St. 3–5 cm. × 6–9 mm., bistre, equal, striate, apex white mealy. Gills white, often becoming yellowish, sinuato-adnate, attenuated in front, somewhat distant. Flesh white, cinereous under the cuticle of the p., bistre in the st. Spores white, elliptical, 8 × 5 μ. Pastures, and open downs. Sept.—Oct. Not uncommon. (v.v.)


P. 5–7 cm., grey, umbo darker, whitish at the margin, slightly fleshy, convex, then plane and depressed, umbo often evanescent, pruinose, margin often scalloped. St. 4–6 × 1 cm., concolorous, elastic, striate, apex mealy, equal. Gills whitish, or greyish, sinuate, decurrent by a tooth, attenuated in front, edge denticulate, crowded. Flesh greyish, becoming white, thin. Spores white, elliptical, 6–7 × 4 μ, rough. Taste pleasant. Edible. Lawns, and hilly pastures. Aug.—Oct. Not uncommon. (v.v.)


φαιός, dusky; πούς, foot.

P. 3–5 cm., blackish bistre, becoming paler, fleshy, convex, then plane, subumbonate, smooth; margin incurved. St. 5–7 cm. × 4–9 mm., concolorous, equal, striate; base subbulbous, clothed with the white mycelium. Gills white, sinuato-adnate, 7–9 mm. broad, crowded. Flesh dark bistre, very thin at the margin. Spores white, pip-shaped, 8–9 × 5–6 μ, minutely warted. Damp pastures, and woods. Sept.—Oct. Uncommon. (v.v.)


P. 5–10 cm., pale brownish, brownish clay colour, or coffee and milk colour, fleshy, convex, then plane, becoming smooth, moist, hygrophanous; margin at first involute. St. 4–8 cm. × 7–14 mm., concolorous, firm, equal, fibrillose, base thickened. Gills yellowish, tinged with pinkish flesh colour, emarginate, decurrent with a long tooth, broad, moderately crowded. Flesh white, tinged with flesh colour, soft, thick at the disc. Spores white, elliptical, 9–10 × 6 μ, punctate. Cystidia “on edge of gill lanceolate, 40–60 × 10–12 μ” Rick. Taste mild. Heaths, and on twigs, and rotting wood, in coniferous woods. Oct.—Nov. Rare.


P. 5–12 cm., fuscous-cinereous, mouse grey, or bistre, becoming pale, fleshy, convex, soon flattened, somewhat repand, often umbonate, sometimes depressed, pruinose, pulverulent, hygrophanous; margin thin, exceeding the gills, often white. St. 4–9 × 1·5–2·5 cm., white, or becoming greyish, fragile, somewhat equal, villosely pulverulent. Gills white, then greyish, rounded-adnexed, decurrent with a tooth, and often arcuato-decurrent, crowded, narrow, 4–6 mm. broad. Flesh whitish, grey under the cuticle, soft, thick at the disc. Spores white, elliptical, 9 × 6μ, minutely echinulate. Cystidia “on edge of gill lanceolate, pointed, 55–65 × 10–13μ, shaggy at the apex” Rick. Smell of new meal. Edible. Woods, and pastures. April—Oct. Uncommon. (v.v.)


P. 7·5–9 cm., fuscous, becoming pale, plane, then depressed, or concave, smooth; margin entire, not striate. St. 7·5–8 cm. × 8 mm., somewhat fuscous, incrassated at the apex, thickened at the base, fibrous, punctately squamulose, striate, apex white, pulverulent. Gills *pale ochraceous*, sinuate, crowded, thin, edge entire. Flesh pallid. Spores white, oval, 6–7 × 4·5μ. Amongst heaps of leaves. Sept.—Oct. Uncommon.


P. 3–7 cm., mouse grey, or fuscous cinereous, becoming paler and often yellowish, slightly fleshy, campanulate, soon plane, with a prominent umbo, smooth. St. 2·5–5 cm. × 2–8 mm. white, then ochraceous, equal, polished. Gills white, emarginate, linear, narrow, 2–3 mm.
broad, edge uneven. Flesh white, or yellowish, thin. Spores white, broadly elliptical, 10 x 6-7 µ, punctate. Pastures. May—Sept. Uncommon. (v.v.)


Sub, somewhat; pulverulentum, dusty.

P. 4-8 cm., livid, becoming whitish with the innate pruina, fleshy, convex, then plane, or depressed; margin inflexed, exceeding the gills. St. 4-6 x 1 cm., concolorous, equal, smooth, substriate, apex obsoletely pruinose. Gills white, becoming darker, rounded, crowded, narrow. Flesh white, hygrophanous. Spores very pale ochraceous in the mass, elliptical, 6-7 x 4 µ, minutely punctate. Often forming large rings in pastures, and woods. Aug.—Oct. Uncommon. (v.v.)

(b) Gills becoming violet, grey, or fuliginous.


P. 3-8 cm., bistre, or livid-lilac, becoming fuscous and pale when old, somewhat fleshy, campanulato-convex, then plane, or depressed, sub-umbonate, often undulate, or excentric when old, smooth; margin often slightly striate at maturity. St. 4-6 x 1-2-5 cm., concolorous, flexuose, pliant, often thickened at the base, fibrillosely striate. Gills violaceous, becoming pale, or fuliginous, rounded, then sinuato-decurrent, at length distant. Flesh grey, or tinged with lilac, thin. Spores pale ochraceous in the mass, elliptical, 7-8 x 4 µ. Taste mild. Edible. Pastures, hedgerows, and manure heaps. July—Nov. Common. (v.v.)

715. T. paedidum Fr. Fr. Icon. t. 46, upper figs. Paedidum, nasty.

P. 3-5 cm., fuliginous mouse grey, somewhat fleshy, flaccid, campanulate, then convex, flattened, umbonate, at length depressed round the conico-prominent umbo, moist, radiately streaked with innate fibrils, becoming smooth. St. 2-5-4 cm. x 4-6 mm., dingy grey, subcartilaginous, slightly bulbous at the base, substriate. Gills whitish, then grey, sinuate with a small decurrent tooth, narrow, crowded. Flesh becoming white, very thin, very tough. Spores white, "elliptic-fusiform, 10-11 x 5-6 µ" Massee. Grassy places in woods. Aug. Rare.

716. T. lixivium Fr. (= Tricholoma arcuatum (Bull.) Quél.) Fr. Icon. t. 45, lower figs. Lixivium, made into lye.

P. 5-10 cm., cinereous fuscous, then umber, slightly fleshy, convex, then plane, umbonate (the umbo vanishing), sometimes sinuous, smooth; margin flattened, membranaceous, at length slightly striate. St. 5-8 x 5-2 cm., concolorous, at first white-floccoso-pruinose, often flexuose, apex white, fragile. Gills grey, rounded-advanced, truncate-free, distant, soft, 6 mm. broad, sometimes crisped, attenuated from
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the stem towards the margin. Flesh white, thin at the margin. Spores white, elliptical, \(5-6 \times 3\mu\), 1-guttulate. Pine woods, and under conifers. Oct.—Nov. Uncommon. (v.v.)


Putidum, stinking.

P. 3–6 cm., greyish bistre, or olivaceous, becoming hoary when dry, often sprinkled with white silkiness, hygrophanous, slightly fleshy, hemispherical, umbonate, soft; margin straight. St. 4–9 × 5–1 cm., grey, equal, covered with a white, thin, evanescent pruina, fibrillosely striate, somewhat fragile. Gills cinereous, sinuato-adnate, ventricose, crowded, 4–6 mm. broad. Flesh bistre, thin. Spores white, pip-shaped, 9–11 × 4–5 \(\mu\), with a large central gutta. Smell rancid, of new meal. Fir woods, and amongst pine needles. Oct.—Dec. Uncommon. (v.v.)

Spores pink.

Entoloma Fr.

(ἐντός, within; λώμα, a fringe.)

Pileus fleshy, regular, or irregular. Stem central, fibrous, or fleshy. Gills sinuate, sinuato-adnate, or adnexed. Spores pink, angular, globose, elliptical, or verrucose. Cystidia rarely present. Growing on the ground, very rarely on wood; solitary, gregarious, or caespitose.

I. Pileus fleshy, smooth, moist or viscid.

718. E. sinuatum Fr. (=Entoloma lividum (Bull.) Fr. sec. Dumée.)
Cke. Illus. no. 316, t. 310. Sinuatum, waved.

P. 8–25 cm., becoming yellowish white, very fleshy, convex, then expanded, at first gibbous, then depressed; margin repand, sinuate. St. 7–18 × 2–5 cm., shining white, firm, equal, compact, fibrillose, then smooth. Gills pale yellowish-rufescent, emarginate, slightly adnixed, 12–18 mm. broad, crowded. Flesh white. Spores pink, angular, globose, 8–9 \(\mu\). Smell strong, pleasant, almost like burnt sugar. Taste pleasant. Poisonous. Gregarious, in mixed woods. July—Oct. Common. (v.v.)

719. E. lividum (Bull.) Fr. Fr. Icon. t. 90, fig. 3. Lividus, livid.

P. 7–15 cm., livid tan, becoming pale, fleshy, disc somewhat compact, convex, then plane, somewhat gibbous, silky, fibrillose under a lens. St. 7–8 × 2–5–3 cm., shining white, equal, slightly striate, apex pruinose. Gills whithish, then flesh colour, rounded, somewhat free, attenuated in front, 6–10 mm. broad, distant. Flesh white, brownish under the cuticle of the pileus. Spores pink, angular, elliptical, 9–11 × 6–8 \(\mu\), 1–3-guttulate. Smell pleasant, of new meal, then becoming unpleasant. Taste pleasant. Poisonous. Woods, and pastures. April—Oct. Not uncommon. (v.v.)

16—2
var. roseum Cke. Cke. Illus. no. 318, t. 469.

Roseum, rosy.

Differs from the type in the rosy disc, and the whitish margin of the p. On logs.

720. **E. prunuloides** Fr. Fr. Icon. t. 91, fig. 1.

Prunulus, the species prunulus; cīdos, like.

P. 5–7 cm., whitish, becoming yellow, or livid, fleshy, campanulate, then convex, at length flattened, subumbonate, viscid, finally longitudinally rimose; margin at length slightly striate. St. 6–8 cm. × 6–8 mm., white, fibrous-fleshy, even, often slightly striate. Gills white, then flesh colour, somewhat free, emarginate, rarely rounded, slightly adnexed at first, 6–8 mm. broad, crowded, ventricose. Flesh white, yellowish in the centre of the stem. Spores pink, angular, 8–10 × 8μ, 1-multi-guttulate. Smell strong, of new meal. In woods, and pastures. May—Sept. Uncommon. (v.v.)

721. **E. porphyrophaeum** Fr. (= *Entoloma phaeocephalum* (Bull.) Quél., *Entoloma placenta* Batsch sec. Quél.) Fr. Icon. t. 93, fig. 1. πορφύρα, purple; φαιόν, dusky.

P. 4–10 cm., brownish bistre, becoming paler and mouse colour when dry, slightly fleshy, campanulate, then expanded, umbonate, cracking, minutely fibrillose. St. 5–7 cm. × 8–12 mm., greyish, streaked with violet or lilac fibrils, base subbulbose, white villose, attenuated upwards. Gills greyish white, then reddish grey, truncate behind, almost free, ventricose, rather distant, 4–6 mm. broad. Flesh bluish, or brownish, becoming white. Spores pink, angular globose, 7–8 × 7μ, 1-guttulate. Cystidia “inflated, large, flask-shaped, occasionally with a roundish head” Lange. Woods, and pastures. Aug.—Oct. Uncommon. (v.v.)


Repandum, bent backwards.

P. 2.5–5 cm., whitish, or ochraceous, fleshy, conical, then expanded, umbonate, striate with darker spots, somewhat silky when dry; margin incurved, lobed. St. 4 cm. × 5–6 mm., white, silky. Gills flesh colour, broader in front. Spores “substellate, 11 × 6 μ, becoming yellow” Sacc. Smell of new meal. Pastures. June—Oct. Rare.

723. **E. erophilum** Fr. ἦρ, spring; φίλον, loving.

P. 3–4 cm., brownish, or greyish, slightly fleshy, convex, then expanded, obtuse, venosely striate and virgate. St. 3–5 cm. × 4–8 mm., white, becoming greyish, equal, pruinose. Gills greyish, then flesh colour, rounded behind, adnate, wide. Flesh white, yellowish under the cuticle of the p. Spores pink, globose, 7–9μ, 1-guttulate. Woods, and hilly pastures. May—Sept. Uncommon. (v.v.)

P. 4 cm., brown, fleshy, convex then flattened, umbonate, orbicular, moist when damp. St. 5–8 cm. × 4–6 mm., brown, wholly fibrous, equal, fibrilloso-striate. Gills whitish, then pallid flesh colour, emarginato-adnexed, crowded, rather thick. Flesh becoming pale, thin. Spores pink, globose, 8 μ. Taste becoming acrid. Hedgerows, and damp places. April—Oct. Rare.

725. **E. helodes** Fr. Cke. Illus. no. 322, t. 339. ξαος, a marsh.

P. 3–6 cm., varying cinereous, fuliginous, and at the same time becoming purple, slightly fleshy, convex, then rather plane, tough, umbonate, often depressed round the umbo, often as if variegated with tiger-spots; margin spreading, sometimes striate. St. 5–7–5 cm. × 6 mm., cinereous-fibrillose, becoming pallid cinereous, fragile, equal, or slightly thickened at the base, sometimes twisted. Gills white, then flesh colour, obtusely adnate, 6 mm. broad, subdistant. Flesh pallid, thin. Spores pink, subglobose, 10 μ, coarsely warted. Smell of new meal, taste watery. Heathy pastures, and bogs. Sept.—Oct. Uncommon.

726. **E. Batschianum** Fr. Cke. Illus. no. 325, t. 326.

A. J. G. C. Batsch, author of *Elenchus Fungorum*.

P. 1–4 cm., dark fuscous, or fuliginous black, slightly fleshy, viscid, shining when dry, slightly convex, scarcely umbonate, then depressed; margin at first manifestly involute. St. 5–7–5 cm. × 4–10 mm., grey, moderately tough, wholly fibrous, equal, or attenuated at both ends, slightly striate with adpressed fibrils. Gills whitish, then cinereous, or fuliginous, narrowed behind, wholly adnexed at the apex, crowded, becoming subdistant. Flesh yellowish. Spores pink, angular, subglobose, 6–9 × 6–7 μ. On the ground, and among fir needles in damp places. Sept.—Oct. Uncommon. (v.v.)

727. **E. Bloxamii** Berk. (= *Entoloma madidum* (Fr.) Quél.) Cke. Illus. no. 326, t. 327.

Rev. A. Bloxam, a British mycologist.

P. 2–10 cm., blackish-blue, compact, campanulate, very obtuse, somewhat lobed, moist, slightly silky. St. 3–8 cm. × 12–15 mm., concolorous, base white, obtuse, slightly attenuated upwards, fibrillose. Gills yellowish, then pale pink, attenuated behind, or slightly adnexed, moderately broad. Flesh white, bluish under the cuticle, very thick in the centre. Spores pink, subglobose, minutely warted, 8–9 μ. Heaths, and pastures. Sept.—Nov. Not uncommon. (v.v.)

var. **triste** Boud. Boud. Icon. t. 92. Triste, gloomy.

Differs from the type in its blackish grey slate colour.


729. **E. ardosiacum** (Bull.) Fr. (= *Entoloma nitidum* Quél.) Cke. Illus. no. 327, t. 328. *ζρευ, to water.*

P. 2-5 cm., *steel-blue-fuscosus*, becoming blackish when young, and cinereous when older, slightly fleshy, campanulate, then convex, obtuse, often slightly depressed at the disc. St. 5-8 cm. × 4-6 mm., steel-blue, slightly attenuated upwards, easily splitting into fibres. Gills white, or grey, then flesh colour, free, broad, ventricose, attenuated behind, crowded, edge uneven. Flesh white, blueish under the cuticle of the p. Spores pink, angular, subglobose, 8-10 × 6-8μ, 1-guttulate. Moist meadows, and bogs. July—Sept. Not uncommon. (v.v.)

730. **E. madidum** Fr. (= *Entoloma Bloxamii* Berk. sec. Quél.) Fr. Icon. t. 91, fig. 3. *Madidum*, soaked.*

P. 2-6 cm., blackish violet when young, fuliginous when old, fleshy, campanulate, then convex, viscid in wet weather, shining when dry; margin inflexed, thin, slightly striate. St. 5-7-5 cm. × 4-10 mm. at the white base, × 4-6 mm. at the apex, violet, thickened in a clavate manner below, fleshy fibrous, surface fibrillose, apex naked. Gills greyish white, slightly adnexed, almost free, ventricose, watery, soft. Flesh white, darkish under the cuticle of the pileus. Spores pink, globose, angular, 6-8μ. Smell strong, somewhat like that of *Russula foetens*. In pastures, and amongst leaves. Sept.—Oct. Uncommon. (v.v.)


P. 5-6 cm., *yellowish ochre, disc reddish brown*, convex, then plane, broadly umbonate, margin thin, flexuose. St. 5-8 cm. × 4-8 mm., white, equal, flexible. Gills white, then pale dirty lilac, free, crowded, deliquescent. Flesh white, thin. Spores pink, subglobose, irregular, 7-8μ. On the ground under trees. April.


P. 2-5-6 cm., *pale reddish grey*, irregular, broadly campanulate, thin, gibbous, centre polished; margin *white-flocculent*, at length smooth, silky-shining, undulated. St. 3-4 cm. × 5-10 mm., *whitish*,
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compressed, striate, fibrillose, apex flocculent, base villose. Gills greyish, then flesh colour, slightly adnexed, distant, wrinkled. Flesh becoming reddish. Spores pink, angular, oblong, $12-13 \times 9\mu$, 1-guttulate. Smell at first unpleasant, like a mixture of orange-flower water and starch, or of burnt sugar. Pastures. Aug.—Nov. Not uncommon. (v.v.)

*E. frumentaceum* (Bull.) Berk. = *Hygrophorus russula* (Schaeff.) Quél.


II. P. absolutely dry, flocculose, or somewhat scaly.

733. **E. Saundersii** Fr. Cke. Illus. no. 331, t. 306.

W. W. Saunders who collaborated with W. G. Smith in Mycological Illustrations.

P. 4–12 cm., *white, becoming fuscous when old*, fleshy, campanulate, then expanded, obtuse, or umbonate, repando-lobed, *adpressedly tomentose*. St. 3–10 $\times$ 1–1.5 cm., *white*, equal, silky-fibrous, apex furfuraceous. Gills reddish, slightly adnexed, often quite free, broad, distant. Flesh *white*, yellowish under the cuticle of the pileus. Spores pink, elliptical, $4–6 \times 3–4\mu$, 1-guttulate (*‘round, slightly angular, 11–13\mu’* Boud.). On the ground, river-sand, sawdust. June—Oct. Uncommon. (v.v.)

734. **E. fertile** Berk (= *Entoloma lividum* (Bull.) Fr. sec. Big. & Guill.) Cke. Illus. no. 332, t. 316.  

Fertile, fruitful.


E. Roze, the eminent French mycologist.

P. 3 cm., *pearl grey, lilac at the margin*, thin, convex, umbonate, then plane, *velvety with thin, very short, white hairs*. St. 5–6 $\times$ .5 cm., *white*, somewhat silvery, silky-fibrillose, apex *bistre*. Gills *white*, then flesh colour, adnate, emarginate. Spores pink, angular, elliptical, 10\mu.. Amongst *Sphagnum*, and under pines. July—Oct. Uncommon.

736. **E. jubatum** Fr. Fr. Icon. t. 92, fig. 1.

Jubatum, having a mane.

P. 3–8 cm., *mouse colour*, somewhat fleshy, campanulate, then expanded and flattened, umbonate, *floccoso-scaly*, or fibrillose. St. 5–12 cm. $\times$ 4–10 mm., *concolorous*, fleshy-fibrous, though rigid, fragile, equal, *clothed with fuliginous fibrils*. Gills *dark fuliginous*, *then purple fuliginous*, slightly adnexed, somewhat emarginate, easily separating,

737. **E. resutum** Fr. Fr. Icon. t. 92, fig. 2. Resutum, ripped open.

P. 2–3 cm., becoming fuscous, disc darker, slightly fleshy, convex, somewhat obtuse, densely floccoso-scaly, sometimes with darker adpressed scales, sometimes becoming even, longitudinally fibrillose. St. 4–7 cm. × 2–4 mm., somewhat grey, wholly fibrous, soft, equal, polished, slightly striate. Gills grey, at first darker, adnexed, very ventricose, almost free, 4 mm. broad, rather crowded, rather thick. Spores pink, “irregular, globose-elliptical, angular, 9–12 × 7–8 μ”, also subglobose, 7–10 μ” Herpell. Woods, and pastures. May—Dec. (common, v.v.)

738. **E. griseocyaneum** Fr. Fr. Icon. t. 94, fig. 1.

*Griseus*, grey; κυάνος, dark blue.

P. 2–4 cm., grey, or inclining to lilac, thin, campanulate, then convex, obtuse, wholly floccoso-scaly. St. 4–6 cm. × 4–6 mm., pallid, then becoming azure-blue, sometimes white, fibrous, floccoso-fibrillose. Gills whitish, then flesh colour, adnexed, separating-free, ventricose. Flesh bluish, becoming white. Spores pink, angular, elliptical, 9–11 × 7–8 μ, 1-guttulate. Pastures, downs, and woods. June—Oct. Not uncommon. (v.v.)


Differs from the type in the pink stem, and the pink pileus covered with darker scales. Downs, and pastures. Aug.—Oct. Not uncommon. (v.v.)


Mrs Lloyd Wynne, of Coed Coch.

P. 3–4 cm., fuliginous, convex, then plane, more or less umbonate, often wavy, velvety, then squamulose; margin striate, often undulated. St. 3–5 cm. × 3–6 mm., fuliginous-azure-blue, often compressed; base cottony, white. Gills pallid, then flesh colour, almost free, 4 mm. broad, transversely ribbed, edge crenulate. Flesh white, very thin except at the disc. Spores “elliptic-oblong, apiculate, coarsely warted, 10–11 × 7–8 μ” Massee. Smell unpleasant, like bugs. Fir woods. Sept.—Nov. Uncommon.


βολβος, a bulb; γηγυμαι, to be born.

P. 1–4 cm., shining white, campanulate, or hemispherical, minutely tomentosely scaly. St. 6–8 cm. × 3–5 mm., whitish, equal, piloso-
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P. 5–30 mm., fuliginous, thin, campanulate, then expanded and flattened, densely covered with very minute scales which are erect at the centre, striate at first; margin very slightly incurved. Sp. 2.5–5 cm. × 2–3 mm., fuliginous, equal, densely velvety, covered when young with a reddish, rust coloured meal which becomes darker with age. Gills grey, at length dusted with the pinkish ferruginous spores, adnate with a minute sinus, veined, subdistant, exceeding the margin of the p.; edge irregular, thick, pale or pinkish at first then deep rose colour. Spores pink, irregular, angular, 12–13 × 6μ, 1-guttulate. Woods, and pastures. Aug.—Nov. Not uncommon. (v.v.)

742. E. dichroum (Pers.) Fr. Fr. Icon. t. 92, fig. 3.

διξρου, two coloured.

P. 2.5–5 cm., violet, then livid mouse colour, somewhat fleshy, campanulate, then expanded and plane, obtusely umbonate, squamuloso-fibrillose. St. 3–5 cm. × 2–8 mm., blue, becoming paler at the base, wholly fibrous, fibrillosely-mealy, and sublacunose. Gills white, or pallid, then flesh colour, sinuato-adnexed, crowded, 2–3 mm. wide. Flesh white, tinged with blue. Spores pink, becoming fuscous, "longish, 9–11 × 6–7μ, with a few distinct angles" Rick. Woods, and hilly pastures. June—Sept. Uncommon.

E. sericellum Fr. = Leptonia sericella (Fr.) Quél.


P. 2.5–3 cm., grey, convex, then expanded, more or less umbonate, tomentose, adorned with raised, radiating ribs, which form reticulations in the centre. St. 3–5 cm. × 4 mm., paler than the pileus, fibrillose, tomentose. Gills flesh colour, rounded behind, very slightly adnected, 4 mm. broad, rather distant. Flesh mottled, thick at the umbo, thin elsewhere. Spores pink, elliptical, 6 × 3.5μ. Amongst grass in plantations. Rare.

III. P. thin, hygrophanous, rather silky when dry, often irregular and repand.

744. E. clipeatum (Linn.) Fr. Cke. Illus. no. 337, t. 319, as Entoloma clipeatum Fr.

Clipeatum, furnished with a shield.

P. 5–8 cm., lurid when moist, grey when dry, variegated, or streaked with darker spots, or lines, fleshy, campanulate, then flattened, umbonate, fragile. St. 4–8 × 5.5–1.5 cm., whitish, becoming cinereous,

745. E. nigrocinnamomeum Kalchbr. (= Pluteus umbrosus (Pers.) Fr. sec. Quél.) Kalchbr. Icon. t. 11, fig. 1.

Niger, black; cinnamomeum, cinnamon.

P. 5–7 cm., umber brown, becoming blackish, thin, tough, convex, then flattened and depressed round the somewhat prominent umbo, rather silky and shining; margin incurved, often splitting. St. 3–4 cm. × 5–8 mm., grey, becoming tawny, fibrillose, often twisted. Gills reddish cinnamon, adnexed, rounded behind, soon seceding from the stem, 6–8 mm. broad, rather distant. Flesh darkish, becoming yellowish. Spores pink, angular, oblong, 11–13 × 7–8 μ, 1-guttulate. Smell pleasant, of new meal. Pastures, and heaths. Aug.—Oct. Uncommon. (v.v.)


ρόδινος, rose; πολύν, grey.

P. 3–12 cm., fuscous, or livid, becoming pale, isabelline-livid, silky-shining when dry, slightly fleshy, campanulate, then expanded and subumbonate, or gibbous, at length somewhat plane, and sometimes depressed, fibrillose when young, then smooth; margin bent inwards, and when larger undulated. St. 5–10 × 5–1.5 cm., white, equal, or attenuated upwards, slightly striate, apex white pruinose. Gills white, then rose colour, adnate, then separating, somewhat sinuate, flexuose. Flesh white, darkish under the cuticle of the p. Spores pink, angular, elliptical, 8–9 × 7–8 μ, 1-guttulate. Smell like new meal, or burnt sugar, or none. Woods. May—Oct. Common. (v.v.)

747. E. pluteoides Fr. Fr. Icon. t. 91, fig. 2.

Pluteus, the genus Pluteus; εἰδός, like.

P. 2.5–8 cm., whitish grey, becoming dirty yellowish when dry, slightly fleshy, scissile, convex, then expanded, obtuse, slightly fibrillose at first, then smooth. St. 5–8 cm. × 4–8 mm., white, becoming yellow when touched, rigid, equal, straight, or curved and ascending, covered with a white, fibrillose, subtomentose cuticle, base swollen, villose, commonly obliquely and shortly rooting. Gills white, then flesh colour, emarginato-adnexed, crowded, attenuated in front. Flesh dark. Spores pink. Taste mild. On fir stumps and rotten wood. Rare.
748. **Entoloma majus** Fr. Fr. Icon. t. 94, fig. 2. *Majus*, the month of May.

P. 4–6 cm., somewhat cinnamon, ochraceous pale yellow when dry, fleshy-membranaceous, scissile, campanulate, then convex, sub-umbonate, somewhat fragile; margin repand, easily rimoso-incised. St. 7–10 cm. × 4–6 mm., whitish, somewhat compressed, twisted, striate, somewhat fibrillosse, often connate at the thickened, white tomentose base. Gills *pallid*, then flesh-coloured with the rosy spores, free, ventricose, crowded, crenate. Flesh very thin. Spores pink, "sub-spheric, 5–6-angular, 7–10 × 7–8 μ" Lange. Pastures, open woods, and mossy places in fir woods. April–Sept. Rare.


Costatum, ribbed.

P. 3–8 cm., fuscous-livid, becoming grey when dry, or shining black when scorched by the sun, fleshy-membranaceous, convexo-bullate, undulated, irregularly shaped, then rather plane, more or less umbilicate. St. 4–6 cm. × 4–8 mm., grey, often compressed, somewhat striate, apex *white* mealy. Gills *pallid*, or *greyish*, then flesh colour, emarginate, 5–7 mm. broad, transversely veined with raised ribs, undulate. Flesh grey, becoming white. Spores pink, angular, globose, 6–7 μ, or oblong, 9–10 × 7–8 μ. Pastures, and heaths, occasionally in woods. May–Nov. Common. (v.v.)

750. **E. sericeum** (Bull.) Fr. Cke. Illus. no. 340, t. 320, lower figs.

Sericeum, silky.

P. 2–4 cm., umber, becoming pale with a silky appearance when dry, fleshy-membranaceous, convex, then plane, obtuse, often umbonate, somewhat repand; margin involute, striate at first. St. 2.5–5 cm. × 3–6 mm., grey, fibroso-fissile, equal, or thickened upwards, fibrillosse, shining. Gills grey, then rufescent, emarginate, slightly adnexed, equally attenuated from the stem to the margin. Flesh umber, becoming *whitish*. Spores pink, angular, elliptical, 8–9 × 6 μ, 1-guttulate. Smell pleasant, of new meal, or bitter almonds. Pastures, and woods. May–Oct. Common. (v.v.)

751. **E. venosum** Gillet.

Venosum, full of veins.


P. 3–7 cm., *fawn cinereous*, livid, *silky shining* when dry, sub-membranaceous, convex, then expanded, at length often concave,
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and irregularly shaped, rimose. St. 5–13 cm. × 3–15 mm., pale white, equal, or attenuated upwards, apex white pruinose. Gills pallid, then flesh colour, emarginato-free, 6–12 mm. broad, at length distant, sometimes undulato-flexuose. Flesh white. Spores pink, angular, subglobose, 8–10 × 7–9μ, 1–3-guttulate. Smell strong, alkaline, or none. Woods, heaths, and lawns. Aug.—Dec. Common. (v.v.)

753. E. speculum Fr. Fr. Icon. t. 95, fig. 2. Speculum, a looking glass.

P. 2–5 cm., watery, or straw white, silvery when dry, submembranaceous, convex, soon flattened and depressed, obtusely, and obliquely umbroneate; margin thin, bent inwards, flexuose, pellucid-striate. St. 5–8 cm. × 4–8 mm., yellowish, round, often compressed, shining, very fragile. Gills white, then flesh colour, slightly adnexed, broadly emarginate, 6–8 mm. broad, ventricose, the shorter ones narrower, edge becoming fuscose. Flesh brownish. Spores pink, angular, oblong, 12–14 × 7–8μ, 1–2-guttulate. Woods, and pastures. Sept.—Oct. Not uncommon. (v.v.)

754. E. tortipes Massee. Tortus, twisted; pes, foot.

P. 6–7 cm., dark brown, and shining as if oiled when moist, then cinnamon and silky shining when dry, convex and broadly umbroneate, then expanded and depressed round the umbo; margin arched, flexuose, often splitting. St. 5–6 × .5 cm., whitish, tinged with cinnamon, flexuose, or angularly bent, silky-fibrillose. Gills pale dingy pink, broadly adnate with a minute sinus, then free, 8–10 mm. broad behind, tapering towards the margin, crowded. Flesh dark when moist, paler when dry. Spores pink, elliptical, 5 × 3μ. Amongst grass.

Spores ochraceous, or ferruginous.

Hebeloma Fr.

(ηβν, youth; λαμα, a fringe.)

Pileus fleshy, regular, margin incurved. Stem central, fibrous, or fleshy. Gills sinuate, sinuato-adnate, or adnexed. Spores ochraceous, ferruginous, or fuscous, elliptical, pip-shaped, pruniform, almond-shaped, elliptic oblong, or fusiform, smooth, continuous. Cystidia present, or absent. Growing on the ground, solitary, caespitose, or subcaespitose.

I. Furnished with a cortina from the manifest veil, by which the p. is often superficially silky round the margin.

755. H. mussivum Fr. (= Cortinarius percomis Fr. sec. Quél.) Fr. Icon. t. 111, fig. 1. Musso, I mutter.

P. 5–10 cm., yellow, sometimes darker, and brownish at the disc, fleshy, convex, then plane, unequal, very obtuse, viscid, smooth at
first, then generally repand and broken up into squamules. St. 10–13 × 2–5 cm., light yellow, equal, or ventricose, wholly fibrillose, apex pruinose. Veil fibrillose, very fugacious. Gills light yellow, then somewhat ferruginous, emarginate, 6 mm. broad, arid, somewhat crowded. Flesh becoming yellow, compact, firm, very thick in the st. Spores ferruginous, “elliptical, 12 × 6 μ” Massae. Smell weak, not unpleasant. Coniferous woods. Oct. Uncommon. (v.v.)

756. **H. sinuosum** Fr. (= Hebeloma senescens Batsch sec. Quél.)

_Sinousum_, full of curves.

P. 7–5–15 cm., never equalling the length of the st., pale yellow, or brick-red becoming pale, rarely clay colour, fleshy, irregular, convex, then plane, obtuse, smooth, viscid, soon dry, very sinuosely repand; margin whitish, membranaceous, inflexed, exceeding the gills, crenulate, striate. St. 5–15 × 2–5–3–5 cm., white, equal, generally oblique at the very base, fibrillose striate, apex at first floccosely squamulose. Gills dirty white, then becoming ferruginous, slightly adnexed, broadly emarginate and appearing free and distant, but connected with the st. by a slender tooth, 6–12 mm. broad, dry, crowded, often undulate. Flesh white, thick, soft, somewhat fragile. Spores ferruginous, “almond-shaped-oval, 10–12 × 7–9 μ,” slightly rough. Cystidia on edge of gill clavate, 50–60 × 7–9 μ” Rick. Smell fruity. Coniferous woods. Aug. Rare.

757. **H. fastibile** Fr. Fr. Icon. t. 111, fig. 2. _Fastibile_, disagreeable.

P. 4–8 cm., pale yellowish tan, or becoming pale, fleshy, convexo-plane, obtuse, somewhat repand, smooth; margin involute, pubescent. St. 4–8 cm. × 6–12 mm., white, or pallid, fleshy fibrous, somewhat bulbous, often twisted, white silky and fibrillose, white scaly upwards. Cortina white, silky, often in the form of a ring. Gills pale-white, then dingy clay colour, very emarginate, rather broad, subdistant, edge whitish, distilling drops in rainy weather. Flesh white, compact. Spores earth colour, pale under the microscope, pip-shaped, 9–11 × 5–6 μ, “punctate. Cystidia on edge of gill filamentosous-clavate, 50–75 × 6–9 μ” Rick. Smell unpleasant, taste of radish, bitterish. Poisonous. Woods. July—Nov. Common. (v.v.)

**var. album** Fr.

_Album_, white.

Diffsers from the type in the long, equal stem, fibrillose squamose at the apex, and in the distant gills.

**var. sulcatum** Lindgr.

_Sulcatum_, furrowed.

Diffsers from the type in the sulcate, or rugose plicate margin of the p.

**var. elegans** Massee.

_Elegans_, nice.

Diffsers from the type in the purple-brown p.
758. **H. senescens** (Batsch) B. & Br. (= *Hebeloma sinuosum* Fr. sec. Quél.)  

Senescens, becoming old.

P. 5–10 cm., ochraceous tawny, convex, then flattened, slightly glutinous, delicately tomentose, *margin* white. St. 7–12:5 × 1–2:5 cm., fuscous downwards, *apex* shining white, tomentose, at first bulbous, attenuated upwards, covered with *paler*, transversely arranged *squamales*. Gills pallid, *then* cinnamon, adnexed, 4–5 mm. broad, crowded. Flesh *white*, thick at the disc. Spores pale ferruginous, pip-shaped, 8–9 × 5 μ, with a large central *gutta*. Smell strong, acrid. Coniferous woods, and under conifers. Sept.—Oct. Uncommon. (*v.v.*)

759. **H. glutinosum** (Lindgr.) Fr. (= *Flammula lenta* (Pers.) Fr. sec. Quél.) Fr. Icon. t. 112, fig. 1.  

Glutinosum, sticky.


760. **H. testaceum** (Batsch) Fr. Cke. Illus. no. 449, t. 408.  

Testaceum, brick red.

P. 3–5 cm., brick pale, often ochraceous tan, or tan, somewhat opaque, *whitish at the margin*, fleshy, *campanulato-convex*, then flattened, *regular*, obtuse, smooth, obsoletely viscid, or dry. St. 3–7:5 cm. × 6–8 mm., whitish, becoming somewhat tawny at the somewhat thickened, fibrillose base, somewhat fragile, apex white mealy. Cortina thin, fugacious. Gills *pallid, then clay colour*, subferruginous, attenuato-free, lanceolate, *very thin*, at first ascending, very crowded. Flesh *whitish*, *then brownish*, thin at the margin. Spores pale ferruginous, pip-shaped, 8–9 × 4:5–5 μ, multi-guttulate, “*rough*. Cystidia on edge filamentous-clavate, 40–60 × 6–10 μ” Rick. Smell faint, of radish. Woods, and heaths. Sept.—Nov. Not uncommon. (*v.v.*)

761. **H. firmum** Fr. Fr. Icon. t. 112, fig. 3.  

Firmum, hard.

P. 5–7 cm., brick-red, fleshy, convex, then plane, at length depressed, smooth, *viscid*. St. 5–8 cm. × 4–12 mm., whitish, brown and fibrillose at the base, firm, somewhat attenuated downwards, covered with *white*, floccose *squamales*. Cortina *white*, fugacious. Gills *whitish*, then *clay*


Clavus, a nail; caput, head.
P. 2–4 cm., yellowish white, umbo darker, fleshy, convex, then expanded, umbonate, or gibbous, viscid, naked ("more or less scaly, and fibrillose" Gillet). St. 5–7 cm. × 4–6 mm., white, brownish at the base, equal, white mealy. Gills pallid, then ochraceous brownish, emarginate, arid, crowded. Flesh pale, yellowish under the cuticle of the p., thick at the disc. Spores "reddish under the microscope, almond-shaped, 10–12 × 6–7μ, roughish. Cystidia on edge of gill remarkably long, filamentous-clavate, 75–90 × 6–12μ" Rick. Woods, especially beech. Sept.—Oct. Uncommon.

763. H. punctatum Fr. Fr. Icon. t. 113, fig. 1. Punctatum, dotted.
P. 2–5 cm., tan colour, disc umber, becoming pale when dry, fleshy, convex, soon plane, disc obtuse, or gibbous, viscosa-papillose, at length depressed at the centre; margin white, superficially silky with the fibrillose veil. St. 5–10 cm. × 4–8 mm., pallid, equal, flexuose, dry, silky-fibrillose with the adpressed veil, apex white pruinose. Cortina white, fugacious. Gills pallid, then pale ferruginous, or brownish, arcuato-adnate, narrowed behind, slightly ventricose, narrow, 4–6 mm. broad, plane, crowded. Flesh white, thick at the disc. Spores "almond-shaped, 10–12 × 5–6μ, rough, with a thick membrane. Cystidia on edge of gill short, filamentous, 30–36 × 3–4μ, filled with yellow juice" Rick. Smell faint, not unpleasant. Gregarious. Pine woods. Sept. Uncommon.

764. H. versipelle Fr. Versipelle, changeable in appearance.
P. 2–5–8 cm., reddish tan, becoming pale at the disc, then dingy tan and opaque when old, fleshy, convexo-plane, obtuse, at first covered with a tenacious, glutinous pellicle, then becoming dry; margin at first covered with glued white-silky, villose down, then smooth. St. 5–8 cm. × 4–6 mm., white, becoming fuscous at the base, tough, equal, at first remarkably white-silky with the evident cortina, then longitudinally fibrillosely striate, and easily splitting up into fibres, white mealy above the ring formed by the cortina. Gills whitish, then clay cinnamon, rounded, arid, 6–10 mm. broad, crowded. Flesh whitish, becoming fuscous in the st. Spores pale ferruginous, elliptical, 8–12 × 6–7μ, 1–2-guttulate, rough. Smell faint, not unpleasant. Subcaespitose. Grassy places, and among fir needles. Aug.—Oct. Uncommon. (v.v.)
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765. H. strophosum Fr. στρόφος, a belt.

P. 2–4 cm., bay, white and silky from the veil at the margin, fleshy, fragile, convex, then plane, subumbonate, viscid when wet, then dry. St. 2.5–5 cm. × 6 mm., whitish, at length becoming fuscous downwards, equal, fragile, often curved at the base, clothed with the white silky veil which forms an apical ring. Ring white, floccose, reflexed. Gills flesh colour, then clay colour, slightly adnexed, leaving a wide, bare space at the apex of the st., ventricose, 4–8 mm. broad, plane. Flesh watery white, thin at the margin. Spores pale cinnamon, elliptical, 8–9 × 5μ, 1-guttulate. Cystidia “only on the edge of the gill, clavate-filamentous, 40–50 × 5–7μ, thin walled” Rick. Bare soil, and grassy places. Oct. Rare. (v.v.)

 μέσος, middle; φαιόν, dusky.

P. 2.5–4 cm., pale yellowish, or becoming pale, disc date brown, fleshy, conical, then convex, then plane, or depressed and darker at the disc, viscid, smooth. St. 5–7.5 cm. × 4 mm., whitish, then ferruginous, tough, equal, fibrillose, base becoming fuscous, apex pruinose. Cortina manifest, thin, fugacious. Gills clay ferruginous, rounded, or emarginate, thin, plane, arid, crowded. Flesh greyish, becoming white, thin at the margin. Spores pale ferruginous, elliptical, 9–10 × 5–6μ, with a large central gutta, roughish. Cystidia on edge of gill, “clavate-filamentous, rarely fusiform-filamentous, 50–70 × 5–9μ, thin walled” Rick. Smell faint, sometimes of radish. Taste acrid. Woods, especially coniferous woods, and charcoal heaps. Sept.—Oct. Common. (v.v.)

var. holophaeum Fr. Fr. Icon. t. 113, fig. 3.

δόλος, entirely; φαιόν, dusky.

Differs from the type in the umbonate p. being entirely dark fuscous, in the st. becoming fuscous and subannulate with the cortinate veil, and in the gills being slightly sinuate.


Differs from the type in its smaller size. Common along with the type. (v.v.)

 Sub, somewhat; collariatum, having a collar.

P. 2.5 cm., pallid, disc subfuscous, fleshy, convex, then more or less expanded, slightly glutinous, the floccose veil soon vanishing. St. 5 cm. × 4 mm., pale, brown at the base, often flexuose, pulvulent. Gills clay colour, edge shining white, very slightly rounded behind, broadly adnate, soon separating from the st. and forming a short interrupted collar, ventricose, 4–6 mm. broad. Spores pale, ferruginous, elliptical, 12–13 × 6μ, 1-guttulate. On naked soil. May—Oct. Uncommon.
II. P. smooth, at the first with no cortina.

768. **H. sinapizans** (Paul.) Fr. Cke. Illus. no. 455, t. 413.

- **σίναπις**, mustard.

- P. 7-5–20 cm., clay colour, disc sometimes pale yellowish, fleshy, convex, then plane, very obtuse, for the most part repand, often excentric, smooth, slightly viscid when fresh. St. 7·5–12·5 × 2·5 cm., white, rigid, equal, or fusiform rooted, fibrilloso-striate, apex white squamulose. Gills clay cinnamon, opaque, deeply emarginate, sometimes arcuate-decurrent, 6–10 mm. broad, crowded, fragile, arid. Flesh white, compact. Spores ferruginous, almond-shaped, 10–11 × 6 μ. Smell strong, of radish. Woods, and under trees. Sept.—Oct. Uncommon. (v.v.)


- **Crustulum**, a small cake; **forma**, shape.

- P. 5–10 cm., pale whitish tan, pale yellowish, or brick colour, disc deeper coloured, fleshy, convexo-plane, obtuse, or slightly gibbous, rarely repand, smooth, at first viscid. St. 4–7 × 1–2·5 cm., whitish, equal, or subbulbous, firm, apex white squamulose. Gills whitish, then clay colour, at length date brown, rounded-adnexed, almost adnate, narrow, linear, 2–4 mm. broad, crowded; edge unequal, guttate, distilling watery drops in wet weather, spotted when dry. Flesh whitish, watery, thick. Spores ferruginous, elliptical, 10–12 × 5–6 μ, rough. Cystidia “only on the edge of the gill, filamentous-capitate, sometimes also subventricose, 50–60 × 7–10 μ, thin walled” Rick. Smell strong of radish, or like the flowers of the common laurel. Taste acrid. Poisonous. Woods, heaths, and pastures. Aug.—Nov. Common. (v.v.)

- **var. minus** Cke. (= **Hebeloma hiemale** Bres. sec. Big. & Guill.) Cke. Illus. no. 457, t. 414.

- Differs from the type in its smaller size, in the floccose edge of the gill and in its faint smell. Woods, and heaths. Oct.—Nov. Not uncommon. (v.v.)

770. **H. subsaponaceum** Karst. Karst. Icon. t. 44.

- **Sub**, somewhat; **sapo**, soap.

- P. 3 cm., gilvous, then pallid, darker when dry, expanded, obtuse, naked, dry. St. 2–3 cm. × 3–4 mm., pale, becoming umber below when touched, equal, rather wavy, adpressedly fibrillose, apex rather mealy. Gills pale alutaceous, then ferruginous, adnate, 2 mm. broad, crowded, dry. Spores oval oblong, 6–10 × 4–6 μ. Smell strong, of soap. Fir, and mixed woods. Aug. Uncommon.


- P. 2·5–8 cm., tan colour, becoming pale tan when dry, fleshy, convex, then flattened, obtuse, smooth, slightly viscid, opaque, margin very thin. St. 8–10 cm. × 8–12 mm., whitish, equal, cylindrical, tense and

B. B. B.
straight, twisted with spiral fibres, base with an ovately, villose bulb when growing amongst fir leaves, adpressedly fibrillosely, apex white mealy. Gills pale cinnamon, rounded, with a small decurrent tooth, 6 mm. broad, crowded. Flesh whitish, thick at the disc. Spores brownish ferruginous, elliptical, 8–10 × 5 μ. Smell very strong of radish. Woods, especially coniferous woods, and heaths. Sept.—Nov. Uncommon. (v.v.)


Longus, long; cauda, a tail.

P. 4–12 cm., clay colour, becoming whitish, disc sometimes becoming fuscous, fleshy, convex, then expanded, umbонate, at length repand, smooth, viscid; margin whitish, pruinose. St. 8–11 × 1–2 cm., white, at length becoming tawny at the base, fragile, equal, or thickened at the base, obsolesely fibrillosely, apex mealy. Gills white clay, then cinnamon, arcuato-adnate, 6 mm. broad, crowded, edge serrulate, somewhat dotted. Flesh white, soft, watery, thin at the margin. Spores tawny ochraceous, oblong elliptical, 11–12 × 6 μ, minutely verrucose. Cystidia “on edge of gill long, filamentous-clavate, 60–90 × 6–8 μ” Rick. Smell faint, not unpleasant. Taste mild. Edible. Woods, especially coniferous woods. Sept.—Nov. Not uncommon. (v.v.)


P. 3–10 cm., ochraceous flesh colour, whitish at the margin, convex, gibbous, glutinous. St. 7–11 × .5–1 cm., white, becoming brownish, fusiform, rooting, soft, twisted, fibrillosely, villose, mealy at the apex. Gills pale flesh colour, then brownish, adnate by a tooth, undulate. Flesh white, thick, soft. Spores fuscous ferruginous, elliptical, 10 × 5 μ. Smell of radish, or of honey, like that of Pholiota radicosa. Taste bitter. Caespitose. Coniferous woods. Sept. Rare. (v.v.)

774. H. lugens (Jungh.) Fr. Lugens, mourning.

P. 4–7.5 cm., brown, becoming somewhat yellow, fleshy, convex, then plane, gibbous, often repand and irregular, smooth, subviscid. St. 4–7.5 cm. × 6–8 mm., white, shining, subbulbous, fibrillosely striate, apex white mealy. Gills pallid, then ferruginous, somewhat free, fragile, 4 mm. broad, edge crenulate, darker. Flesh white. Spores “10 × 6 μ” Massée. Smell strong. In troops. Woods, especially beech. Sept.—Oct. Rare.

H. truncatum (Schaeff.) Fr. = Tricholoma truncatum (Schaeff.) Quél.

775. H. nudipes Fr. Kalchbr. Icon. t. 14, fig. 3.

Nudus, naked; pes, foot.

P. 4–7 cm., pale tan, or clay colour, fleshy, convex, then flattened, obtuse, unequal, smooth, slightly viscid, scarcely perceptibly streaked;
margin membranaceous, exceeding the gills. St. 5–8 cm. × 8–16 mm., white, equal, fibrillose at the base, smooth above, straight, or curved and ascending, pellicle separable. Gills tan colour, broadly emarginate, crowded, dry. Flesh watery, white when dry, compact at the disc, very thin at the margin. Spores fusaceous, elliptical, 12 × 6 μ. Smell weak, not unpleasant. Taste mild. Edible. Woods. Oct. Uncommon. (v.v.)

776. H. sacchariolens Quél. Quél. Soc. sc. n. de Rouen, 1879, t. 1, fig. 2.

Saccharum, sugar; olens, smelling.

P. 2–6 cm., whitish, disc buff colour, but the whole surface deepens in colour with age, fleshy, campanulate, then convex, smooth, viscid. St. 4–5 × 1 cm., white, streaked with fawn fibrils below, attenuated above and at the base, striate, silky, apex pruinose. Gills whitish, then buff colour, and finally ferruginous, sinuate-adenate, 6–10 mm. broad, crenate, edge whitish. Flesh yellowish, or somewhat buff, thin at the margin. Spores deep ferruginous, almond-shaped, 10–11 × 7–8 μ, with a hyaline basal apiculus. Smell very peculiar and strong, like that of Entoloma ameides or “of burnt sugar, or orange flowers” Quél. Woods, heaths, and pastures. Oct. Uncommon. (v.v.)


vavavia, sea-sickness.

P. 2.5–3.5 cm., ochrey-white, fleshy, convex, gibbous, more or less expanded, smooth, viscid. St. 3–5 cm. × 6–10 mm., concolorous, in decay turning black at the base, equal, or attenuated at the base, faintly striate downwards, mealy above. Gills pallid, then clay colour, and at length ferruginous, sinuate, ventricose, 6–10 mm. broad, sub-distant. Flesh white, thick at the disc. Spores pale ferruginous, elliptical-fusiform (20 × 10 μ Cke.), 12 × 6 μ, 1–2-guttulate. Smell very unpleasant. Woods, and heaths. Sept.—Oct. Uncommon. (v.v.)


ιοχυνός, thin; στυλος, a pillar.

P. 2.5–5 cm., white, or a little pallid at the disc, fleshy, convex, then expanded, broadly umbonate, slightly viscid. St. 5 cm. × 3–4 mm., whitish, equal, or a little thickened at the base, smooth. Gills whitish, then clay colour, rounded behind, adnexed, edge slightly serrate. Flesh white, thin at the margin. Spores fusaceous, elliptical, 12 × 7.5 μ. Smell none, or with a faint odour of Spiraea. Amongst grass under alders. Sept. Uncommon.

779. H. capniocephalum (Bull.) Fr. Cke. Illus. no. 462, t. 419.

καπνός, smoke; κεφαλή, head.

P. 4–7.5 cm., pale yellowish, or reddish, disc darker, margin at length becoming black, fleshy, convex, then plane, obtuse, smooth. St. 5–6 cm. × 4–6 mm., whitish, attenuated downwards, striate with rufescent 17—2
fibrils, becoming pale. Gills ferruginous, emarginate, broad, scarcely crowded. Flesh whitish, thin at the margin. Spores fuscos, elliptical, \(9 \times 5\mu\). “Smell of musk” Secrétan. Mixed woods, and under firs, and pines. Oct.—Nov. Rare.

780. **H. diffractum** Fr. Fr. Icon. t. 114, fig. 1.

*Diffractum*, broken in pieces.

P. 3–5 cm., tan colour, fleshy, thin, convex, then plane, obtuse, smooth, somewhat dry, at length squamosely broken up. St. 2-5–4 cm. \(\times\) 6–8 mm., white, subfusciform, attenuated downwards, hollow, squamulose with white flocci above. Gills pallid, then ferruginous, emarginate, ventricose, broad, crowded, dry. Spores ferruginous, “10–12 \(\times\) 4–5\(\mu\)” Massee. Smell weak, unpleasant, somewhat of radish. Pine needles in woods. Sept. Rare.

III. P. scarcely 2-5 cm. broad. Stature that of the Naucorciae.

781. **H. magnimamma** Fr. Fr. Icon. t. 114, fig. 2.

*Magnus*, large; *mamma*, breast.

P. 1–2-5 cm., brick colour, at length becoming pale yellowish, fleshy, convex, then plane, with a prominent, breast-shaped umbo, smooth, but becoming somewhat streaky towards the margin. St. 2-5–7 cm. \(\times\) 2–3 mm., pale yellowish, becoming pale, equal, or flexuose, often substriate, fibrous, smooth. Gills pallid, then ferruginous, sinuate-adnate, 2–3 mm. broad, crowded. Flesh yellowish, tawny under the cuticle of the p., very thin at the margin. Spores pale ferruginous, broadly elliptical, 9–12 \(\times\) 5–6\(\mu\), with a hyaline basal, or subbasal, apiculus, multi-guttulate. Pastures, under oaks, and apple trees. Sept.—Oct. Uncommon. (v.v.)

*H. petiginosum* Fr. = *Astrosporina petiginosa* (Fr.) Rea.

Spores purple, or fuscos.

**Hypholoma** Fr.

(\(\upsilon\phi\nu\gamma\), a web; \(\lambda\omega\mu\alpha\), a fringe.)

Pileus fleshy, regular, firm, or fragile. Stem central, fibrous, or fleshy. Gills sinuate, sinuate-adnate, or adnexed. Spores purple, fuscos, or cinereous purple; elliptical, subglobose, pip-shaped, or reniform, smooth, rarely verrucose, with an apical germ-pore. Cystidia present, or absent. Growing on wood, more rarely on the ground, often densely caespitose, or fasciculate.

*Colour of the tough, smooth, dry (except *Hypholoma silaceum*) p. bright, not hygrophanous.

782. **H. silaceum** (Pers.) Fr. (= *Flammuloides sublateritia* Schaeff. sec. Quél.)

*Silaceum*, ochraceous.
P. 6–8 cm., orange rufous, fleshy, convex, viscid; margin whitish, silky. St. 7–10 cm. × 6–8 mm., concolorous, bulbous, shining, fibrilloso-striate. Gills grey, then olivaceous, adnate, crowded. Spores pale purplish brown. Smell pleasant, of meal. Solitary, “caespitose from a common tuber” Secrétan. Old pastures, and under firs. Aug.—Nov. Rare.

783. **H. sublateritium** (Schaeff.) Fr. Rolland, Champ. t. 73, no. 162. Sub, somewhat; lateritium, brick colour.


var. **Schaefferi** B. & Br. Schaeff. Icon. t. 49, figs. 4–5. J. C. Schaeffer.


var. **pomposum** Fr. Pomposum, stately.

Differs from the type in the thicker, almost entirely tawny p., the thick stem up to 2.5 cm. broad, becoming pale above, the membranaceous ring, and the gills at length becoming a beautiful olive. Stumps. July—Oct. Not uncommon. (v.v.)


Differs from the type in the p. being spotted with scales, especially towards the margin. Trunks. Oct. Uncommon. (v.v.)

784. **H. capnoides** Fr. Fr. Icon. t. 133, fig. 1. καπνώδης, smoky.

P. 2.5–8 cm., ochraceous-yellowish, fleshy, convex, then flattened, obtuse, dry, smooth, often wrinkled, margin appendiculate with the veil. St. 5–7 cm. × 4–8 mm., pallid, becoming ferruginous under the surface covering when old, apex whitish, equal, often curved and flexuose, becoming silky-even, here and there striate. Cortina white, then

785. **H. epixanthum** Fr. Fr. Icon. t. 133, fig. 2. ἐπιξανθόν, tawny.

P. 5–7.5 cm., light yellow, or becoming pale, disc generally darker, fleshy, convexo-plane, obtuse, or gibbous, sometimes depressed at the disc, slightly silky, then becoming smooth; margin appendiculate with the veil. St. 7–14 cm. × 6–10 mm., yellow, pale ferruginous, or becoming fuscos below, equal, or attenuated from the thickened base, floccoso-fibrillose, apex pruinose. Cortina white, silky. Gills light yellowish white, or citron yellow, then cinereous, adnate, crowded. Flesh yellow, often ferruginous at the base of the st., thin at the margin. Spores cinereous purple, broadly elliptical, 6–7 × 4 μ, 1-guttulate. Cystidia "clavate, with a prominent point, 36–40 × 9–12 μ" Rick. Smell strong. Caespitose. Stumps in frondose, and coniferous woods, hedgerows, and parks. June—Dec. Common. (v.v.)

786. **H. elaeodes** Fr. (= Flammuloides fascicularis Huds. sec. Quél.) ἐλαία, the olive-tree; εἰδός, like.

P. 4–8 cm., brick-red, or tan tinged reddish at the disc, fleshy, convex, then plane, or slightly depressed, obtuse, or subumbonate, dry, smooth, opaque; margin for a long time incurved, undulate, folded. St. 5–9 cm. × 5–10 mm., dirty yellow, more or less ferruginous, equal, or attenuated at the base, incurved, or flexuose, fibrillose. Cortina white, apical. Gills green, or greenish yellow, then olivaceous, and finally brownish purple, adnate, crowded, thin. Flesh yellow, ferruginous in the st., thin at the margin. Spores brownish purple, broadly elliptical, 6–8 × 4–5 μ, 1–2-guttulate. Cystidia "nearly flask-shaped, 30 × 8–10 μ, obtuse, filled with yellow juice" Rick. Smell and taste bitter. Caespitose. On stumps, and on the ground. Woods, and pastures. Aug.—Oct. Uncommon. (v.v.)


Fasciculare, in little bundles.

P. 2–5 cm., light yellow, disc often darker, fleshy, convex, then flattened, obtuse, or subumbonate, smooth, dry; margin often appendiculate with the veil. St. 5–22 cm. × 4–10 mm., concolorous, equal, base attenuated, or thickened, incurved, or flexuose, fibrillose. Cortina yellowish-white, fibrillose, torn. Gills sulphur yellow, then green, adnate, linear, 3–4 mm. broad, very crowded, subdeliquescent
Flesh yellow, thin. Spores purple, elliptical, \(6-7 \times 4.5 \mu\), 1-guttulate. Cystidia clavate, 28–35 \(7-10 \mu\), contents fuscous-olivaceous, 6 mm. broad. Flesh brownish, thin. Spores purple brown, elliptical, \(8 \times 4 \mu\). Caespitose. On stumps. Sept.—Oct. Rare.


Instratum, bare.

P. 2–3.5 cm., dark brown, fleshy, hemispherical, convex, broadly umbonate, radiately rugose, margin appendiculate with the white veil. St. 5–7.5 cm. \(\times 4\) mm., white above, brownish at the base, equal, apex smooth, fibrillose, or squamulose below. Gills brown, then purple brown, adnate, subventricose, 6 mm. broad. Flesh brownish, thin. Spores purple brown, elliptical, \(8 \times 4 \mu\). Caespitose. On stumps. Sept.—Oct. Rare.

779. **H. aellopum** Fr. àελλόπουν, storm-footed.

P. 2–5 cm., rufescent, fleshy, convex, then plane, obtuse, smooth. St. 5–6 cm. \(\times 4-8\) mm., variegated with minute, red squamules, fusiform, rooting, with a separable tube inside. Gills yellowish, then fuscous-olivaceous, adnate. Subcaespitose. Stumps, especially fir, and larch. Sept.—Oct. Rare.

780. **H. dispersum** Fr. Fr. Icon. t. 133, fig. 3. Dispersum, scattered.

P. 2–4 cm., tawny honey colour, not hygrophanous, fleshy, campanulate, then convex, at length expanded, smooth, superficially white silky with the veil round the margin. St. 5–7 cm. \(\times 4-6\) mm., somewhat ferruginous, becoming fuscous at the base, apex pale, equal, tense and straight, tough, fibrillose silky, besprinkled with white, zone-like markings from the remains of the veil. Gills pallid straw colour, at length clouded, absolutely green, adnate, ventricose, 4–8 mm. broad, thin, crowded, edge often white. Flesh yellowish, ferruginous under the cuticle of the p. and in the st., thin. Spores purple, pip-shaped, \(8-9 \times 4-5 \mu\). Cystidia “subclavate, 30–45 \(7-10 \mu\), often drawn out into a point, filled with a yellow juice” Rick. Solitary, rarely caespitose. Amongst coniferous needles and twigs, rarely on stumps, and sawdust. April—Nov. Uncommon. (v.v.)

791. **H. irroratum** Karst. Irroratum, bedewed.

P. 4 cm., tawny honey colour, convex, then plane, gibbous, even; margin silky, pruinose. St. 13 cm. \(\times 5\) mm., pallid, equal, rooting, tough, fibrillose silky, wavy below, and with dense rusty down. Gills straw colour, then darker, and tinged green, adnate, crowded; margin dentate. Spores hyaline under the microscope, elliptical, \(6-9 \times 4-5 \mu\). Smell and taste very sour. Rare.
**P. naked, viscid.**

792. **H. incomptum** Massee. *Incomptum*, unadorned.

P. 7-5—10 cm., *deep bay brown, orange-tawny when dry*, campanulate, then expanded, broadly gibbous, *viscid*, silky when dry; margin usually flexuose. St. 6-7-5 cm. × 16 mm., *pale above, dark ferruginous below*, equal, covered with minute, spreading, ferruginous, fibrillose squamules, mixed with primrose yellow tomentum. Gills pallid, then *deep olive, finally clouded with purple from the spores*, adnate, slightly rounded behind, 3-4 mm. broad, crowded, thin. Flesh *tawny, 2 mm. thick*. Spores purplish, obliquely elliptical, 8 × 3-5μ. Stumps. Sept.—Oct. Rare.


P. 1-2-5 cm., *umber, or brownish olivaceous, paler, and subochraceous at the striate margin, which exceeds the gills*, fleshy, turbinate, or hemispherical, then convex, glutinous, smooth, dull; margin at first appendiculate with the veil. St. 3-5 cm. × 4-6 mm., *pallid, tawny at the base*, attenuated upwards from the *bulbous base*, apex pruinose, fibrillose below the ring. Ring *whitish*, median, torn, fugacious. Gills *whitish, then umbér*, broadly adnate, sometimes with a minute decurrent tooth, plane, edge somewhat granular, or crenulate, *often whitish*. Flesh *brownish, becoming white*, thick at the disc. Spores dark brown, elliptical oblong, 9-10 × 5-6μ. Sticks, and dead leaves. Solitary, or caespitose. Feb. Rare.

***P. silky with innate fibrils, or streaked.***


P. 4-7-5 cm., *whitish, becoming fuscous and pale round the margin*, fleshy, *convex, obtuse, piloso-scaly, the innate scales darker*; margin appendiculate with the veil. St. 5-11 cm. × 6-12 mm., *whitish, then fuscous whitish*, slightly attenuated upwards from the somewhat thickened base, *which is often yellowish*, curved, fibrillose scaly, apex smooth. Cortina *white*, separate, fibrillose. Gills *whitish, then fuscous purple*, adnate, 6 mm. broad, crowded, *edge whitish*, often distilling drops in wet weather. Flesh *white, greyish when moist*, soft. Spores fuscous purple, elliptical, 7-9 × 4-4-5μ. *Cystidia cylindrical, or flask-shaped, base ventricose, apex obtuse, 5-6μ in diam., 28-40 × 8-18μ*. Taste pleasant. Densely caespitose. On stumps, and on the ground. Beech, birch, and coniferous woods. Sept.—Dec. Not uncommon. (v.v.)

795. **H. pyrotrichum** (Holmsk.) Fr. (= *Stropharia pyrotricha* (Holmsk.) Quél.) Cke. Illus. no. 583, t. 564. *pυρ, fire; θρίξ, hair.*
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P. 5–10 cm., fiery tawny, fleshy, hemispherical, obtuse, then expanded, densely clothed with somewhat adpressed, tawny fibrils, which are here and there fasciculate in the form of scales. St. 5–7.5 cm. × 4–15 mm., pallid, becoming tawny, equal, fibrillosely, commonly squarrose with small, fiery tawny scales. Cortina tawny. Gills pallid, then becoming brown, adnate, at length free, 10–12 mm. broad, somewhat crowded, edge white, flocculose. Flesh tawny, deeper coloured in the st., thin at the margin. Spores fuscous purple, pip-shaped, 10–11 × 6.5–7 μ. Cystidia clavate, 12–13 μ in diam. at apex, 44–70 × 7–9 μ, contents often yellowish. Caespitose. Woods, and about roots of trees. Aug.—Oct. Not uncommon. (v.v.)

var. egregium Massee.

Egregium, distinguished.

Differs from the type in the st. below the ring being covered with spreading, squarrose, whitish scales, and in the purple brown, broadly elliptical, or subglobose, apiculate spores, 6 × 4–5 μ. Fasciculate, near to stumps. Fir woods. Oct. Rare.

796. H. velutinum (Pers.) Fr. (= Stropharia lacrimabunda (Bull.) Quél.) Cke. Illus. no. 582, t. 563. Velutinum, velvety.

P. 5–15 cm., lurid, becoming tawny, then clay colour isabelline, hygrophanous, fleshy, campanulate, then expanded, at length obsolescently umbo-nate, adpressedly, tomentosely fibrillosely, becoming smooth; margin appendiculate with the white veil. St. 5–12.5 cm. × 4–15 mm., dingy clay colour, equal, fragile, fibrillosely silky, apex tomentose above the veil. Cortina white, then black, woolly. Gill inclining to fuscous, then date brown fuscous, dotted black, adnexed, easily separating, 8–10 mm. broad, subdistant, edge white, floccose, distilling watery, hyaline drops. Flesh pallid, very thin, fragile. Spores brownish purple, elliptical, 8–10 × 6–7 μ, verrucose, with an apical germ pore. Cystidia capitate-clavate, 50–60 × 12–15 μ. Taste mild. Poisonous. Solitary, or in groups of two or three. Woods, pastures, roadsides, rarely on stumps. May—Nov. Common. (v.v.)

var. leiocephalum B. & Br.

λείος, smooth; κεφάλη, head.

Differs from the type in its smaller size, in the very rugose disc, and pallid p., smooth except at the fibrillosely margin, and the pallid st., farinoso at the apex. Densely caespitose. Old stumps, and in woods. Sept.—Oct. Uncommon. (v.v.)

797. H. melaninum Fr. Fr. Icon. t. 134, fig. 2.

μέλας, black; ἡ, a fibre.

P. 2–6 cm., umber, then pale, fleshy, campanulato-convex, then plane, obtuse, covered with innate, adpressed, hairy, black squamules. St. 4–6 cm. × 4–12 mm., pallid, equal, or slightly attenuated upwards, fibrillosely hispid with whitish, then fuscous fibrils. Cortina
white, tender, fugacious. Gills pallid, then umber, adnexed, almost free, ventricose, crowded. Flesh white, very thin. Spores fuscous purple, reniform, $7-8 \times 3-4\mu$, 1-2-guttulate. Cystidia "on surface of gill sparse, flask-shaped, on edge of gill vesiculose, $45-55 \times 12-15\mu"$ Rick. Solitary. Base of birch, and elm trees. Parks. Sept. Rare. (v.v.)

****P. covered with floccose, superficial, fugacious scales.


P. 4-8 cm., livid grey, tan whitish when dry, fleshy, oval, then expanded, obtuse, covered when young with superficial, white, fugacious scales, then smooth, slightly wrinkled when dry, disc persistently even; margin appendiculate with the white, squamulose veil. St. 7.5-10 cm. $\times$ 4-6 mm., white, equal, fragile, fibrillose, apex white-mealy. Gills grey, then black fuscous, rounded-adnexed, ventricose, 4-8 mm. broad, arid, fragile. Flesh white, thin. Spores purple, elliptical, $7-8 \times 4-5\mu$. Cystidia "fusiform-pointed, 40-50 $\times$ 9-13\mu, somewhat thick walled" Rick. Taste bitter. Coniferous woods, and pastures. July—Oct. Uncommon. (v.v.)

H. punctulatum (Kalchbr.) Cke. = Stropharia punctulata (Kalchbr.) Fr.

****P. smooth, hygrophanous, margin appendiculate with the veil.


P. 3-6 cm., pallid, fleshy, campanulate, then expanded, hygrophanous, squamose with superficial scales arising from the breaking up of the cuticle; margin appendiculate with the fugacious veil. St. 5-7.5 cm. $\times$ 4 mm., white, equal, fragile, subfibrillose, base tomentose. Gills whitish, then purplish brown, reaching the st., crowded. Flesh pallid, thin. Soil in conservatories. Subcaespitose. June—July. Uncommon.


Alphonse de Candolle.

P. 5-10 cm., date brown, then white, disc ochraceous, fleshy acorn-shaped, then campanulate, soon convex, at length flattened, obtuse, unequal, smooth; margin appendiculate with the white, at length fuscous veil. St. 4-7.5 cm. $\times$ 4-8 mm., white, somewhat thickened at the base, fragile, fibrillose, apex striate. Gills violaceous, then fuscous cinnamon, edge at first whitish, rounded-adnexed, then separating, crowded. Flesh white, thin. Spores brownish violet, "elliptical, $8 \times 4\mu"$ Karst. Cystidia "only on edge of gill, subcylindrical or subventricose, 30-45 $\times$ 9-10\mu" Rick. Taste mild. Edible. In troops, or subcaespitose. Woods and stumps. April—Nov. Common.
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*Appendiculatum*, having a small appendage.

P. 5–8 cm., date brown, then tawny, ochrey pale when dry, fleshy-membranaceous, ovate, then expanded, at length flattened, obuse, pruinose, sprinkled with a few, fugacious flecks, then smooth, slightly wrinkled when dry; margin appendiculate with the white, fugacious veil. St. 4–7.5 cm. × 4–6 mm., white, equal, fragile, fibrillose, apex pruinose. Gills white, then flesh colour, at length fuscous, subadnate, crowded. Flesh white, very thin. Spores fuscous purple, elliptical, 7–8 × 4–4.5 μ. Cystidia cylindrical, often slightly constricted below the apex, base subventricose, 35–45 × 10–13 μ. Taste mild. Edible. In troops, or caespitose. Woods, hedgerows, and wood heaps. June—Dec. Common. (v.v.)


Differs from the type in being densely woolly when young, traces of the woolly coat remaining at the apex when the p. is expanded.

var. **flocculosum** Boud. Boud. Icon. t. 137. *Flocculosum*, flocculose.

Differs from the type in the white squamulose, longitudinally striate, or sulcate, somewhat lobed p., and the striate st. often flocculose. Woods. Sept.—Oct. Uncommon. (v.v.)

802. **H. catarium** Fr. Cke. Illus. no. 1180, t. 1176.

*Catarium*, belonging to a cat.

P. 1.5–2.5 cm., ochraceous, then paler, fleshy membranaceous, hemispherical, then expanded, smooth, hygrophanous; margin appendiculate with the white veil. St. 2.5–4 cm. × 2–3 mm., white, rather shining, base incrassated and white floccose, apex striate. Gills white, then fuscous, adnate, narrow, rather crowded. Flesh white, thin. Spores fuscous purple, elliptic-oblong, 6 × 3 μ. Gregarious, or sub-caespitose. Amongst grass in parks, and roadsides. Sept. Rare.


*λευκός*, white; *τεφρόν*, ash-coloured.

P. 3–7 cm., dark grey, whitish when dry, fleshy, somewhat campanulate, then convexo-expanded, wrinkled; margin appendiculate with the white veil. St. 7–10 cm. × 6–10 mm., white, equal, attenuated at the base, silky-fibrillose downwards, apex striate, or sulcate-striate. Gills cinereous whitish, then grey, turning black, slightly adnate, 3–6 mm. broad. Flesh pallid, becoming white, thick at the disc. Spores cinereous purple, elliptical, 8–9 × 5 μ. Cystidia “on edge of gill sub-cylindrical, constricted-capitate, 30–40 × 6–8 μ” Rick. Caespitose. Base of ash trees, and amongst beech leaves, and pine needles. Sept.—Nov. Uncommon. (v.v.)

P. 3–4 cm., watery white, snow white when dry, fleshy, hemispherical, then expanded, unbonate, smooth; margin finely striate, appendiculate with the white veil. St. 4–5 cm. × 3 mm., white, attenuated upwards, or nearly equal, minutely adpressedly scaly. Gills purplish umber, edge white, adnate, with a tooth, slightly ventricose, sub-distant. Flesh white, thick at the disc. Spores brown purple. Solitary. Amongst grass. May. Rare.


*Pilula*, a little ball; *forme*, shaped.

P. 1–2 cm., fuscos, dingy ochraceous when dry, submembranaceous, globose, then convexo-plane, obtuse, smooth; margin pale, striate, slightly appendiculate with the white veil. St. 2.5–5 cm. × 2 mm., white, equal, flexuose, often slightly thickened at the base. Cortina white, membranaceous, often forming a ring, fugacious. Gills white, then cinereous, at length fuscos, adnexed, easily separating, narrow, 2–3 mm. broad, thin, crowded. Flesh yellowish, thin. Spores cinereous purple, elliptical, 6–8 × 4μ. Densely caespitose. On stumps, and buried wood. Woods, and pastures. Sept.—Oct. Not uncommon. (v.v.)

806. **H. hydrophilum** (Bull.) Fr. (= *Bolbitius hydrophilus* (Bull.) Fr. Hym. Eur.) Cke. Illus. no. 606, t. 610, as *Psilocybe spadicea* Fr. *vōwph*, water; *philos*, loving.

P. 3–6 cm., date brown when moist, tawny, or tan colour when dry, fleshy, globose, then convex and expanded, pruinose, striate near the margin when moist, wrinkled when dry; margin often undulate, appendiculate with the white, fugacious veil. St. 5–10 cm. × 4–8 mm., white, becoming somewhat ferruginous downwards, rigid, but fragile, equal, or attenuated slightly upwards, curved, fibrillose at the base. Gills whitish, then date brown fuscos, adnate, ventricose, crowded, often distilling hyaline drops. Flesh pallid, white when dry, very thin at the margin. Spores ferruginous purple, elliptical, 5–6 × 3–3.5μ, 1–2-guttulate. Cystidia cylindric, ventricose, often constricted below the apex, apex obtuse, 8–9μ in diam., 25–28 × 12–14μ. Densely caespitose. Stumps in woods, and on sawdust. Aug.—Dec. Common. (v.v.)


**H. nolitangere** (Fr.) Quél. = *Psathyra nolitangere* Fr.

**H. fatuorum** (Fr.) Quél. = *Psathyra fatua* Fr.

**H. ammophilum** (Mont.) Quél. = *Psilocybe ammophila* (Mont.) Fr.

**H. gossypinum** (Bull.) Quél. = *Psathyra gossypina* (Bull.) Fr.
Hypoloma. Clitocybe

H. pennatum (Fr.) Quél. = Psathyra pennata Fr.
H. bifrons (Berk.) Big. & Guillem. = Psathyra bifrons Berk.
H. Gordonii (B. & Br.) Big. & Guillem. = Psathyra Gordonii B. & Br.

****Gills decurrent, or adnato-decurrent by a tooth.
Spores white; hymenium not waxy, nor pulverulent.

Clitocybe Fr.
(κλίτος, a slope; κύβη, head.)

Pileus fleshy, regular, or irregular; margin incurved. Stem central, externally fibrous. Gills decurrent, rarely adnate, with an acute edge. Spores white, rarely yellowish, or greenish, elliptical, pip-shaped, globose, subglobose, or oblong; smooth, punctate, verrucose, or echinulate, continuous. Growing on the ground, rarely on wood, solitary, caespitose, or forming rings.

A. P. fleshy, often pale and silky when dry, not hygrophanous.
   a. P. convex, then plane, or depressed, regular, obtuse.
   *P. cinereous, or fuscous.

807. C. nebularis (Batsch) Fr. Grev. Scot. Crypt. Fl. t. 9, as Agaricus turigidus.
   Nebularis, clouded.
   P. 7·5–20 cm., fuliginous, or fuscous, then grey, fleshy, somewhat compact, convex, then plane, very obtuse, at length depressed at the disc, dry, at first pruinously grey, becoming smooth, more rarely innately streaked, or shining when scorched by the sun. St. 7–12 × 2–3 cm., whitish, thickened at the base, attenuated upwards, spongy, elastic, fibrillosely striate. Gills whitish, sometimes becoming yellow, shortly and equally decurrent, arcuate, very crowded, thin. Flesh white, thick. Spores white, elliptical, 7–8 × 3–4 μ, 1–2-guttulate. Smell and taste pleasant. Edible. Woods, heaths, and pastures. Aug.—Dec. Common. (v.v.)

808. C. clavipes (Pers.) Fr. Fr. Icon. t. 47, upper figs.
   Clavus, a nail; pes, foot.
   P. 4–6 cm., fuscous, fuliginous, cinereous-livid, sometimes whitish round the margin, very rarely wholly white, fleshy, slightly convex, soon plane, at length almost obconical, very obtuse, sometimes umbo-nate, smooth. St. 4–6 × 1 cm., concolorous, conical, base bulbous, elastic, somewhat fibrillosely striate. Gills white, sometimes yellowish, deeply decurrent, subdistant, flaccid, broad. Flesh cinereous, then white, lax, thin at the margin. Spores white, elliptical, 6–7 × 4–5 μ, 1-guttulate. Smell faint, pleasant. Taste mild. Beech, and coniferous woods. Aug.—Nov. Common. (v.v.)
809. **C. comitialis** (Pers.) Fr. Fr. Icon. t. 47, lower figs.

*Comitialis*, belonging to the comitia.


*Obscurata*, darkened.

P. 5 cm., greyish umber, plane, then infundibuliform, moist, smooth. St. 3–4 cm. × 6–8 mm., concolorous, slightly attenuated downwards, sometimes substriate. Gills *white*, decurrent, rather distant. Spores white, subelliptical, 3 × 1·5–2 μ. Smell of meal. Amongst grass and dead leaves. Sept. Rare.

811. **C. gangraenosa** Fr. γάγγραενά, a gangrene.

P. 4–8 cm., whitish, tinged with bistre, or livid, sometimes green, fleshy, convexo-plane, obtuse, *white*, pulverulent, then covered with brownish hairs especially at the margin, then naked, variegated, or streaked. St. 4–5 × 1 cm., *white*, subbulbous, soft, striate, or slightly sulcate, curved, sometimes excentric. Gills *dingy white*, subdecurrent, arcuate, very crowded. Flesh *white*, becoming blackish or spotted with black. Spores white. Smell stinking, foetid. Woods, and larch plantations. Oct.—Nov. Rare.


Differs from the type in its *whitish* colour, and rather sweet smell. Larch plantations. Rare.

812. **C. polia** Fr. (= *Paxillus inornatus* (Sow.) Quél.) Fr. Icon. t. 48, fig. 1. πολιά, grey.


813. **C. inornata** (Sow.) Fr. (= *Paxillus inornatus* (Sow.) Quél.) Bres. Fung. Trid. t. 155. *Inornatus*, unadorned.

P. 4–8 cm., cinereous grey, then somewhat tan colour, fleshy, convex, then plane and depressed, sometimes slightly gibbous; margin at first involute, pubescent, striate with evanescent veins. St. 4–6 cm. × 8–12 mm., concolorous, subequal, fibrillosely tomentose, base white, floccose. Gills *concolorous*, rounded behind, adnate, or adnato-decurrent,
crowded, easily separable from the hymenophore. Flesh whitish grey, thick at the disc. Spores white, oblong, apiculate at the base, 8–10 × 3μ. Smell rancid, taste insipid. Woods, and pastures. Oct.—Nov. Rare.

_C. nimbata_ (Batsch) Quél. = _Tricholoma panaeolum_ Fr. sec. Quél.

814. **C. luscina** Fr.  
*Luscus*, one-eyed.

P. 2.5–6 cm., brown, then grey, fleshy, convex, then plane, obtuse, sometimes excentric, smooth, moist. St. 5 cm. × 4–6 mm., white, slightly attenuated downwards, entirely white pulvulenter, or only so at the apex. Gills white-hyaline, decurrent, horizontal, straight, crowded, thin, 2–4 mm. broad. Flesh pallid, thin. Spores white. Pastures. Sept.—Oct. Rare.

815. **C. curtipes** Fr. Fr. Icon. t. 48, fig. 5.  
*Curtus*, short; _pès_, foot.

P. 2–7.5 cm., fuscous, then pale and becoming whitish, fleshy, convex, then plane, obtuse, oblique, silky. St. 2.5–5 cm. × 4–6 mm., reddish fuscous, rigid, cartilaginous, attenuated downwards, somewhat fibrillose, apex white pruinose. Gills shining white, adnate, scarcely decurrent, very crowded, 2 mm. broad. Flesh white, firm. Spores white. Amongst grass. Sept.—Oct. Rare.

816. **C. hirneola** Fr.  
*Hirneola*, a small jug.

P. 1–2 cm., cinereous, or grey, becoming pale and hoary, slightly fleshy, plano-convex, then depressed in the centre and umbilicate, very smooth, shining, semi-viscid when fresh, the cuticle as if with a glued silkiness; margin involute, very thin. St. 2.5–5 cm. × 2–3 mm., concolorous, elastic, equal, flexuose, smooth, apex white pruinose. Gills whitish-grey, subdecurrent, crowded, thin, rather broad. Flesh white, often bistre when moist, thin. Spores dirty white in the mass, subglobose, 4–5 × 4μ, multi-guttulate. Edible. Amongst grass, and leaves. Sept.—Oct. Uncommon. (v.v.)

_var. undulata_ (Bull.) Fr. (= var. major Fr. Mon.) _Undulata_, waved.

Differs from the type in its larger size, the _p._ being 3–4 cm., flattened, flexuose, subzonate, grey, becoming whitish.


_ζύγων_, a yoke; _φύλλον_, leaf.

P. 5–10 cm., greyish when moist, pale ochraceous white when dry, fleshy, convex, then expanded, disc often slightly depressed, tough, flaccid, hygrophanous; margin thin, involute at first, rugose, or plicate, as if pinched up at regular intervals. St. 5–6 × 1 cm., white, then pallid, equal, expanding into the _p._, smooth, base with a thin white tomentum. Gills cinereous, deeply decurrent, rather distant, 4 mm. broad, distinctly connected by veins. Flesh white, greyish under the cuticle of the
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P., thick at the disc, thin at the margin. Spores white, elliptical, 8–9 × 4μ, with a large central gutta. Amongst leaves. Oct.—Nov. Uncommon. (v.v.)

**P. violet, or rufescent.

818. C. cyanophæa Fr. Gonn. & Rabenh. Heft. 8–9, t. 17, fig. 3, as Tricholoma nudum. κύανος, dark blue; φαυδός, dusky.

P. 7–10 cm., fuscous, becoming azure-blue, rather fleshy, convex, then plane, obtuse, smooth. St. 7–8 × 1–2 cm., bluish when young, attenuated upwards from the thickened base, apex abruptly white, smooth. Gills violet, then pale, deeply decurrent, crowded. Woods. Rare.


T. W. Pengelly, the geologist.

Differs from the type in having the st. attenuated at the base.

C. opipara Fr. = Tricholoma opiparum (Fr.) Quél.


819. C. socialis Fr. Fr. Icon. t. 49, lower figs. Socialis, sociable.


***P. becoming yellow.

820. C. amarella (Pers.) Fr. (= Paxillus amarellus (Pers.) Quél., Clitopilus populinalis Fr. sec. Quél.) Amarella, bitterish.

P. 4–5 cm., pale yellowish, or pallid fawn colour, fleshy, plane, firm, subumbonate, smooth. St. 5 cm. × 4–6 mm., concolorous, equal, tough, white villous at base. Gills pallid, somewhat shining, subdecurrent, crowded, here and there dichotomous. Spores white, "5–6 × 2–3μ" Rick. Smell strong, like prussic acid, taste very bitter. Woods. Oct. Rare.

821. C. vernicosa Fr. Fr. Icon. t. 50, upper figs. Vernicosa, varnished.

P. 5–6 cm., pale yellowish, shining, fleshy, convex, then flattened or plano-depressed, obtuse, sometimes infundibuliform, smooth, margin involute. St. 2–3 cm. × 6–8 mm., yellow, firm, tough, equal, smooth. Gills light yellow, adnato-decurrent, or deeply decurrent, equally attenuated behind, subdistant. Flesh whitish, firm. Spores white, "subglobose, 3–4μ, nearly spinulose" Rick. Fir and larch woods. Sept.—Oct. Rare.
822. **C. venustissima** Fr. Fr. Icon. t. 50, lower figs.

**Venustissima,** most beautiful.

P. 2–5 cm., rich orange-reddish, becoming pale, slightly fleshy, convex, then expanded, obtuse, or somewhat umbilicate, becoming slightly silky-even; margin even, in large specimens striate, and crenate, or toothed in a crisped manner. St. 3–4 cm. × 4–8 mm., reddish, equal, smooth, base often white villous. Gills concolorous, decurrent, subdistant, 3 mm. broad, subarcuate. Flesh reddish, thin. Spores white, broadly elliptical, 11–16 × 8–10μ, multi-guttulate. Amongst fir and larch leaves. Sept.—Oct. Uncommon. (v.e.)

823. **C. alutacea** Cke. & Massee.

**Aluta,** soft leather.

P. 1–1.5 cm., tan colour, convex, then umbilicate, smooth; margin incurved. St. 3–4 cm. × 1–2 mm., pale, smooth. Gills paler than the p., decurrent, arcuate, narrow, crowded. Spores white, elliptical, 6 × 4μ. Amongst grass and moss. Sept. Uncommon.


**Sub,** somewhat; **aluta,** soft leather.

P. 2–5–5 cm., pale tan, becoming whitish, fleshy, soft, tough, convex, then flattened, obsolescently umbonate, or depressed, smooth. St. 5–8 cm. × 6–8 mm., reddish white, deeper coloured at the base, cylindrical, flexuose, firm, elastic, fibrillose, smooth. Gills pallid, adnate, then subdecurrent, distant, broad. Flesh whitish, soft, tough. Spores white, “subglobose, 3–4 × 3μ” Rick. Smell pleasant of anise, sometimes disagreeable like rancid meal, sometimes obsolete. Woods, and under trees. Nov. Uncommon.

825. **C. aurantiaca** (Wulf.) Studer. ( = Cantharellus aurantiacus (Wulf.) Fr.) Rolland, Champ. t. 53, no. 117, as Cantharellus aurantiacus.

**Aurantiaca,** orange coloured.

P. 2–8 cm., orange-ochraceous, fleshy, soft, depressed, often excentric and undulated, subtomentose; margin involute. St. 5 cm. × 6–8 mm., ochraceous, or bistre, somewhat incurved and unequal. Gills deep orange, decurrent, tense, straight, repeatedly dichotomous, crowded, often crisped at the base. Flesh yellowish, soft, thick at the disc. Spores elliptical, 6–7 × 4–5μ, with a large central gutta. Taste unpleasant. Heaths, and woods, especially coniferous woods. Aug.—Nov. Common. (v.e.)

var. **albida** (Gillet) Rea. Cke. Illus. no. 1057, t. 1104, fig. B, as Cantharellus aurantiacus var. pallidus.

**Albida,** whitish. Differs from the type in the white gills. Heaths, and woods. Sept.—Oct. Uncommon. (v.e.)

var. **lactea** (Quél.) Rea.

**Lactea,** milk white. Differs from the type in being entirely white. Heaths, and coniferous woods. Aug.—Oct. Not uncommon. (v.e.)
var. nigripes (Pers.) Rea.                Niger, black; pes, foot.

Diffs from the type in the st. becoming black towards the base. Boggy places in woods, and on heaths. Sept.—Nov. Common. (v.v.)

826. C. hypnorum (Brond.) Rea.        Hypnum, moss.

P. 3–4 cm., pale primrose yellow, sometimes verging on pale ochre, campanulato-convex, then expanded and slightly depressed; margin incurved, minutely downy, the down sometimes collected in little fascicles. St. 2–3 cm. × 4–6 mm., yellow, sometimes darker than the p. at the base, often slightly flexuose, almost glabrous. Gills yellow, decurrent, branched, thin, somewhat crowded, edge acute. Flesh whitish, thin. Spores white, oblong, 7 × 4 μ, with a minute apiculus. Sept. Uncommon.

****P. greenish.


P. 5–9 cm., greenish, fleshy, convex, then flattened, obtuse, or obsolesly umbonate, then depressed; margin incurved, pubescent. St. 3–5 cm. × 6–8 mm., concolorous, somewhat cylindrical, flexuose, flocculoso-fibrillos, then smooth, white villous at the thickened base. Gills paler than the p., adnato-decurrent, subdistant, broader than the flesh of the p. Flesh dirty white, tough. Spores white, elliptical, 8 × 4–4.5 μ, 1–2-guttulate. Smell pleasant, of anise. Taste pleasant. Edible. Deciduous woods. Aug.—Nov. Common. (v.v.)


P. 3–6 cm., pale greenish blue, fleshy, convex, then expanded, obtuse, smooth; margin naked. St. 3–8 cm. × 3–7 mm., whitish, firm, cylindrical, attenuated at the base, smooth. Gills white, with a tinge of greenish, adnato-decurrent, thin, crowded. Flesh white, thick at the disc, firm. Spores white, elliptical, 7–8 × 4–5 μ, with a large central gutta. Smell and taste pleasant, of anise. Edible. Deciduous woods. Sept.—Oct. Uncommon. (v.v.)

829. C. Trogii Fr. (= Clitocybe subalutacea (Fr. non Batsch) Quél.) Cke. Illus. no. 135, t. 102.

Jacob Gabriel Trog, an eminent Swiss botanist.

P. 6–8 cm., cinereous, then white, fleshy, compact, convex, then expanded, obtuse, smooth, opaque. St. 3–5 × 1 cm., white, thickened and villous at the base. Gills white, subdecurrent, crowded. Flesh whitish, thick at the disc, compact. Spores white. Smell very fragrant, spicy. Woods. Sept.—Nov. Uncommon.
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****P. whitish, white, or becoming white.


P. 2.5–5 cm., flesh colour, becoming whitish, or rarely fuscous, slightly fleshy, convexo-plane, then depressed, undulato-lobed, repand, minutely tomentose, at length rivulosely-streaked; margin at first incurved, villous. St. 3–5 cm. × 4–8 mm., concolorous, tough, elastic, equal, somewhat fibrillose, minutely tomentose. Gills flesh colour, becoming whitish, adnate, then subdecurrent, obliquely acute behind, broad, somewhat crowded. Flesh white, soft, spongy. Spores white, elliptical, 4–6 × 2–3 μ, 1-guttulate. Smell and taste pleasant. Poisonous. Heaths, and pastures. Aug.—Nov. Very common. (v.v.)

var. **Neptunia** (Batsch) Fr. Neptune, god of the sea.

Differs from the type in its smaller size.


Entirely white. P. 5–8 cm., with a white-lead appearance, fleshy, convex, then expanded, obtuse, or gibbous, smooth, at first floccoso-fibrillose; margin involute, villous. St. 5–8 × 5–1 cm., fleshy-fibrous, elastic; base thickened, more or less white tomentose. Gills adnate, then slightly decurrent, very crowded, thin. Flesh white, soft, compact. Spores white, elliptical, 4 × 3 μ. Taste and smell pleasant. Poisonous. Deciduous, and coniferous woods. April—Oct. Not uncommon. (v.v.)

var. **difformis** (Schum.) Fr. Difformis, deformed.

Caespitose, often gigantic. P. 5–18 cm., undulato-lobed, often at first sprinkled with flocci. St. 2.5 × 2.5 cm., sulcate, or longitudinally wrinkled. Gills at length pallid. Spores white, 4 × 3 μ. Rich ground, and gardens. Oct. Uncommon.

var. **obtexta** (Lasch) Fr. Obtexta, covered.

Differs from the type in its snow-white colour, the fibrillose texture of the subviscid p., the tomentose st., and the narrow gills. Heaps of leaves. Rare.

832. **C. phyllophila** Fr. Barla, Champ. Alp. Marit. t. 52, figs. 1–6. φύλλον, a leaf; φίλος, loving.

P. 5–10 cm., tan, or cream colour, becoming pale white, fleshy, convex, then plano-depressed, obtuse, often excentric and repand, hoary with superficial villose down; margin silky. St. 5–8 cm. × 5–8 mm., concolorous, elastic, fibrous, equal, villous at the base, incurved. Gills
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833. C. pitufyphila (Secr.) Fr. (= Clitocybe cerussata Fr. sec. Quél.) Barla, Champ. Alp. Marit. t. 52, figs. 7–10.

πίτυς, pine; φίλος, loving.

P. 5–7·5 cm., dead white when moist, shining whitish when dry, fleshy, thin, rather plane, umbilicate, at length irregularly shaped, repand, undulato-loped, smooth, flaccid; margin slightly striate when old. St. 4–5 cm. × 5–8 mm., white, often compressed, equal, smooth, apex obsolete, or scarcely pruinose, base white tomentose. Gills always white, adnate, subdecurrent, very crowded, plane, 4–6 mm. broad. Flesh whitish, thin. Spores white, elliptical, 6–7 × 4μ. Smell and taste pleasant. Poisonous. Pine woods. Sept.—Nov. Common. (v.v.)

834. C. tornata Fr. (= Clitocybe cerussata Fr. sec. Quél.) Fr. Icon. t. 51, fig. 1.

Tornata, turned in a lathe.

P. 2·5–5 cm., pure white, fleshy, convex, then becoming plane, at length depressed round the gibbous disc, dry, somewhat silky with a glued film, at length delicately rimoso-rivulose. St. 4 cm. × 4–6 mm., concolorous, tough, equal, or attenuated downwards, round, smooth, base pubescent. Gills white, adnate with a small decurrent tooth, horizontal, plane, very crowded, 2 mm. broad. Flesh white, thick at the disc. Spores white, elliptical, 4–6 × 3–4μ. Taste mild. Poisonous. Woods, and amongst grass. Sept.—Oct. Uncommon. (v.v.)

var. opala Fr.

Opala, opal.

Differs from the type in the viscid p. Fir woods. Rare.

835. C. candidans (Pers.) Fr. Fr. Icon. t. 51, fig. 3.

Candidans, shining white.

Entirely white. P. 2·5 cm., slightly fleshy, convex, then plane, depressed, umbilicate, regular, or a little excentric, pruinose, silky, shining. St. 2·5–5 cm. × 2–5 mm., cartilaginous, polished, like an Omphalia, equal, base incurved, villous, rooting. Gills adnate, then decurrent, very thin, crowded, narrow, straight, almost linear. Flesh whitish, thin. Spores white, “elliptical, 4–5 × 2–3μ, smooth” Rick., “ovoid, 6–7μ, minutely rough” Quél. Taste mild. Deciduous woods. July—Nov. Common. (v.v.)

836. C. dealbata (Sow.) Fr. Sow. Eng. Fung. t. 123.

Dealbata, white-washed.

P. 2–3 cm., whitish, with greyish, or flesh coloured zones towards the margin, shining white when dry, slightly fleshy, tough, convex, then


Differs from the type in its smaller size. Woods, and heaths. Sept.—Oct. Not uncommon. (v.v.)


_Gallinacea_, pertaining to domestic fowls.

P. 1–2-5 cm., dingy white, becoming whitish when dry, slightly fleshy, convex, then plane, obtuse, unequal, dry, opaque, pruinose. St. 5–6 cm. × 6–10 mm., white, equal, ascending, or flexuose, excentric, incurved, striate, mealy. Gills white, adnato-decurrent, thin, plane, crowded. Flesh white, thin, compact. Spores white, oblong elliptical, 9 × 4μ, 1–2-guttulate. Smell strong, taste bitter. Woods, and pastures. Sept.—Nov. Not uncommon. (v.v.)

β. P. fleshy at the disc, margin thin, at first umbonate, then expanded, depressed, and irregular; generally caespitose.

_C. ampla_ (Pers.) Fr. = _Tricholoma amplum_ (Pers.) Rea.

_C. molybdina_ (Bull.) Fr. = _Tricholoma amplum_ (Pers.) Rea.

838. C. decastes Fr. (= _Tricholoma decastes_ (Fr.) Quél.) Fr. Icon. t. 52. 

_δέκατος, a company of ten men._

_Caespitose._ P. 10–20 cm., mouse grey, or livid, becoming whitish tan colour when dry, fleshy, fragile, convex, then plane, gibbous, or obtuse, smooth; margin membranaceous, at first incurved, then expanded, very undulate and lobed. St. 7-5–10 × 2-5–4 cm., white, fibrous, connate at the base, attenuated, or curved-ascending, often compressed, smooth, rarely pruinose at the apex. Gills white, adnato-decurrent, or sinuate, 6–8 mm. broad, crowded, or subdistant, attenuated towards the margin, often undulated and crenulate at the edge. Flesh white, fragile, thick at the disc, very thin at the margin, scissile. Spores white, globose, 6–8μ. Taste pleasant. Edible. Woods, pastures, and gardens. Oct.—Nov. Not uncommon. (v.v.)


_Sub, near to; decastes, the species C. decastes._

_Caespitose._ P. 3–6 cm., pale ochraceous, becoming paler, and whitish towards the margin, fleshy, campanulate, or convex, very obtuse,
smooth; margin more or less lobed. St. 8–12 cm. × 12–16 mm., whitish, equal, fibrillose, connate at the base. Gills white, rounded behind, adnate, 4–6 mm. broad, narrower in front, rather crowded. Flesh white, thin. Spores white, globose, 4–5 μ. On the ground. Sept. Uncommon.


_Cartilaginea_, cartilaginous.

_Caespitose or in troops._ P. 4–12 cm., fuliginous black, or chestnut fuliginous, becoming paler, fleshy, convex, then expanded, depressed, or gibbosely-umbonate, cuticle cartilaginous. St. 4–8 × 1–1.5 cm., white, becoming greyish, or horn colour, connate at the ventricose base and somewhat rooting, apex white and villosely-furfuraceous, cuticle cartilaginous. Gills white, then straw-, or horn-colour, adnate, or sinuate-adnate, rarely rounded behind, tough, subcartilaginous, crowded, often undulate. Flesh white, firm. Spores white, globose, 6–8/x, 1-guttulate.


841. C. aggregata (Schaeff.) Fr. (= Tricholoma aggregatum (Schaeff.) Quél.) Schaeff. Icon. t. 305, 306. _Aggregata_, heaped together.

_Caespitose._ P. 7–12 cm., livid-grey, then rufescent, fleshy, convex, then expanded, at first umbonate, then depressed, often excentric, flaccid, somewhat silky-streaked. St. 7–10 × 1.5 cm., white, often rufescent, attenuated downwards, connate at the base, often branched, curved, compressed, subfibrillose. Gills ashy-white, then flesh colour, and becoming light yellow, unequally decurrent, 6–8 mm. broad, thin, crowded. Flesh whitish, thin. Spores white, subglobose, 6–7 × 5–6 μ. Smell strong. Oak woods, sawdust heaps, and garden soil. July—Oct. Not uncommon. (v.v.)

_C. tabescens_ (Scop.) Bres. =_ Armillaria mellea_ (Vahl.) Fr. var. _tabescens_ (Scop.) Rea.


_Not caespitose._ P. 5–8 cm., fuliginous, becoming pale and somewhat silky when dry, fleshy, convex, then flattened, or depressed, umbonate, undulato-repand, delicately virgate. St. 3–5 cm. × 10–12 mm., fuliginous whitish, firm, subequal, apex velvety. Gills white, unequally decurrent, distant, connected by veins, 4 mm. broad. Flesh dingy white, thick at the disc, soft. Spores “white, elliptical, 7 × 4 μ” Massee. Woods. Oct.—Nov. Not uncommon.

_Ag. fumosus_ Pers. = _Collybia fumosa_ (Pers.) Quél.

_C. fumosa_ Fr. = _Tricholoma cinerascens_ (Bull.) Quél.

_Conglobata_, crowded together.

_Caespitose_. P. 5–10 cm., umber, becoming blackish, or spotted with cinereous, or grey, or becoming pale and livid cinnamon, fleshy, fragile at first, then tough, convex, then expanded, plane, or depressed, sometimes umbilicate, often irregular and lobed, dry, margin at first involute, white pruinose. St. 4–9 × 1–2 cm., white, or greyish, equal, or attenuated downwards, connate at the tuberous base, sometimes branched, floccosely pulvcrulent, then smooth. Gills whitish cinereous, or cream colour, crowded, sinuate, adnate, or decurrent. Flesh white, greyish at the circumference, fragile, then tough. Spores white, globose, 5–6 μ (somewhat angular with age according to Bresadola). Smell faint, of new meal. Taste pleasant. Edible. Woods. Sept.—Nov. Not uncommon. (v.v.)

844. **C. tumulosa** (Kalchbr.) Fr. (= Clitocybe conglobata (Vitt.) Bres., Tricholoma humosum Fr. sec. Quélt.) Kalchbr. Icon. t. 5.  

_Tumulosa_, like a mound.

_Caespitose_. P. 2·5–8 cm., dark umber, becoming pale lurid fuscos, conical, then expanded and umbonate, or depressed round the umbo, smooth; margin sometimes repand and torn. St. 2–8 × 5–2 cm., pallid, fleshy, subequal, either attenuated, or ventricosely thickened at the connate, half-buried base, curved, ascending, floccosely pruinose, then smooth. Gills white, then pale cinereous, adnate, or decurrent. Flesh white, livid, or cinereous at the circumference when moist, thick at the disc. Spores white, oval, 6·7 × 4 μ. Smell faint, of new meal. Taste pleasant. Edible. Woods. Aug.—Oct. Not uncommon. (v.v.)


_Connata_, joined together.

_Caespitose_. P. 5–10 cm., white, slightly tinged with ochre, or bistre, convex, pruinose. St. 3–6 × 5–1 cm., white, connate at the swollen base, mealy. Gills glaucous white, then cream colour, adnate, or decurrent, arcuate, distant. Flesh white, firm, elastic. Spores white, globose, 6 × 5 μ, minutely punctate. Smell pleasant. Parks, and woods. Sept.—Oct. Uncommon. (v.v.)


_Pergamenæ_, parchment.

_Caespitose_. P. 3–8 cm., ochraceous, whitish at the margin, subcartilaginous, convex, then plane, obtusely umbonate, smooth. St. 5–12 × 1–2 cm., concolorous, equal, ascending, apex punctate squamose, cuticle cartilaginous. Gills white, broadly adnate with a decurrent tooth, 4 mm. broad, rather crowded. Flesh yellowish, thick at the
disc. Spores white, elliptical, $6 \times 3-4\mu$, 1-guttulate. On the ground, and on stumps. Sept.—Oct. Uncommon. (v.v.)


Caespitose. P. 3–4 cm., brown, somewhat conical, then depressed, spotted, floccose. St. 6–9 × 2 cm., white, attenuated upwards, more or less compressed, somewhat striate, virgate. Gills white, subdecurrent, arcuate, narrow. Flesh of stem mottled. Spores white. Taste insipid. Sawdust. Oct. Rare.


Often caespitose. P. 3–10 cm., white, opaque as if whitewashed, often tinged with ochre, fleshy, convex, umbonate, then waved and lobed; margin incurved. St. 2–6 × 2–2.5 cm., concolorous, compressed, streaked, downy-squamulose above, slightly rooting. Gills white, or cream colour, scarcely rounded behind, not truly decurrent, rather distant, broad, margin waved. Flesh white, thick at the disc. Spores white, elliptical, 7–9 × 5µ. On the ground. Sept.—Oct. Uncommon. (v.v.)


Caespitose, rarely solitary, entirely white. P. 3–7 cm., fleshy, convex, then expanded, umbonate, repand, covered over with a floccose lustre. St. 3–8 cm. × 5–8 mm., unequal, flexuose, connate at the base, subfibrillose. Gills adnato-decurrent, very crowded, 3–4 mm. wide. Flesh white, thick at the disc. Spores white, elliptical, 6 × 4µ, 1-guttulate. Woods, and pastures. Sept.—Nov. Uncommon. (v.v.)


P. 5–7 cm., whitish, disc smoky, fleshy, convex, then plane and depressed, smooth, but innately streaked, or virgate, viscid; margin whitish. St. 4–6 × 1 cm., white, equal, or slightly expanded into the p., often curved, fibrillosely striate. Gills white, adnate, very slightly decurrent, scarcely emarginate, 5 mm. broad, subdistant. Flesh white, thick at the disc, cartilaginous. Spores white. Gregarious. On charred ground. Nov. Rare.

γ. P. attenuated from a fleshy disc towards the margin, at length infundibuliform, or deeply umbilicate.

*P. coloured, or becoming pallid, innately floccose, or silky, bibulous, not moist.

*C. gigantea* (Sow.) Quél. = *Paxillus giganteus* (Sow.) Fr.

851. *C. maxima* (Fl. Wett.) Fr. (= *Clitocybe geotropa* (Bull.) Quél.) Maxima, greatest.
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P. 12-30 cm., tan colour, becoming paler, or whitish, fleshy, somewhat flaccid, broadly infundibuliform, gibbous, umbo central, very dry, becoming silky, or squamulose; margin involute, pubescent. St. 7-10 × 1 cm., whitish, attenuated upwards, fibrillosely-striate, elastic. Gills whitish, deeply decurrent, pointed at both ends, somewhat crowded, soft. Flesh white, thick at the disc, soft. Spores white, elliptical, 4-6 × 3-4μ. Smell and taste pleasant. Edible. Woods, and pastures. July—Nov. Not uncommon. (v.v.)

852. C. infundibuliformis (Schaeff.) Fr. Rolland, Champ. t. 26, no. 51. Infundibuliformis, funnel-shaped.

P. 3–6 cm., flesh colour, then pale tan, fleshy, moderately firm, convexo-depressed, gibbous with an umbo, at length infundibuliform, silky, bibulous; margin at first involute. St. 3–8 cm. × 4–8 mm., concolorous, conico-attenuated, rarely equal, firm, elastic; base swollen, and white tomentose. Gills shining white, very decurrent, somewhat crowded, very pointed at each end, soft. Flesh white, thick at the disc, soft. Spores white, ovoid, 6–7 × 6μ, pointed at the base, punctate, 1-guttulate. Smell and taste pleasant. Edible. Woods, heaths, and pastures. June—Dec. Very common. (v.v.)

var. membranacea (Fl. Dan.) Fr. Cke. Illus. no. 1135, t. 646. Membranacea, skinny.

Differs from the type in being thinner in all its parts, in the equal st., and the brighter coloured, and not umbonate p. Pine woods, and pastures. June—Dec. Not uncommon. (v.v.)

853. C. trullaeformis (Fr.) B. & Br. Trullaeformis, ladle-shaped.


854. C. incilis Fr. Incilis, incised.

P. 2-5–5 cm., brick-red, fleshy, plano-umbilicate, then infundibuliform, silky-flocculose, obtuse; margin involute, crenate. St. 1–2 cm. × 4–6 mm., concolorous, attenuated downwards, often compressed, tough, at first covered with an evanescent, flocculose pruina. Gills white, becoming pale, decurrent, arcuate, 4–6 mm. broad, distant, often reticulated with veins. Flesh whitish, thin at the margin. Spores white, elliptical, 8–9 × 5–6μ, 1-guttulate. Smell of new meal, sometimes absent. Coniferous woods. March—Nov. Uncommon. (v.v.)
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855. **C. sinopica** Fr. *Sinopica*, of Sinope, where red lead is found.

P. 3-5 cm., brick-red, becoming paler, fleshy, plano-depressed, slightly or deeply umbilicate, then repand, flocculose and bilobate, then *rimosely rivulose* and broken up into squamules; margin undulate, silky. St. 3-5 × 5-1 cm., concolorous, equal, firm, *fibrillosely striate*. Gills white, becoming yellow, decurrent, arcuate, very crowded, 3-4 mm. broad. Flesh white, reddish under the cuticle, thick at the disc. Spores white, subglobose, 8-9 × 6-7 μ. Smell strong, of new meal. Heaths, woods, and burnt ground. May—Oct. Uncommon. (v.v.)

856. **C. parilis** Fr. Fr. Icon. t. 48, fig. 6. *Parilis*, equal.

P. 1-5-3 cm., fuscos, then greyish white, slightly fleshy, convex, then plane and depressed at the disc, or umbilicate, disc *atomate*, or *flocculose*; margin involute, deflexed. St. 2-5 cm. × 3-6 mm., fuliginous, becoming *fuscos grey*, tough, equal, smooth. Gills grey, becoming *whitish*, deeply decurrent, *very crowded*, narrow. Flesh greyish, becoming *white*. Spores white, oblong, 9 × 3 μ, 1-2-guttulate; “greyish in the mass, subglobose, 6 × 5 μ” Rick. Woods, and hilly pastures. Sept.—Oct. Uncommon. (v.v.)

**P. coloured, or pallid, glabrous, moist in wet weather.**

857. **C. gilva** Fr. (= *Clitocybe subinvoluta* Batsch sec. Quél.)

*Gilva*, pale yellow.

P. 4-10 cm., pale yellowish, fleshy, compact, convex, then depressed, very obtuse, smooth, dull, moist, polished and shining when dry, often spotted as with drops; margin very involute, swollen, villose. St. 2-5-5 × 1-2-5 cm., paler than the p., fleshy, subequal, smooth, base villous. Gills pallid, then ochraceous especially at the edge, decurrent, thin, narrow, arcuate, often branched and anastomosing. Flesh *concolorous*, compact, at length fragile. Spores white, globose, 4-6 μ, punctate. Pine woods. Oct. Uncommon. (v.v.)

858. **C. subinvoluta** W. G. Sm. non Batsch. Saund. & Sm. t. 36.

*Subinvoluta*, somewhat rolled in.

P. 5-10 cm., *creamy flesh colour*, fleshy, convex, then plane, or depressed, gibbous, or umbonate, leathery, margin incurved. St. 5-10 × 1-5-2 cm., *pinkish flesh colour*, *zoned with spots*, attenuated upwards from the subbulbous base, fibrillose. Gills white, then *yellowish*, deeply decurrent, broad, rather crowded. Flesh *buff-white*, darker below, thick, firm. Spores white, pip-shaped, 6-7 × 4-5 μ, 1-guttulate. Smell and taste pleasant. Edible. Pastures, and under firs. Oct.—Nov. Not uncommon. (v.v.)

*Ag. subinvolutus* Batsch = **Paxillus involutus** (Batsch) Fr. var. *subinvolutus* (Batsch) W. G. Sm.
C. spinulosa Stev. & Sm. = Clitocybe subinvoluta W. G. Sm.  
"Saunders wrongly described the spores as echinulate"  
W. G. Sm. in litt.

γη, earth; τρόπος, turned.

P. 3–20 cm., tan flesh colour, very fleshy, convex, then plano-depressed, generally gibbous, very smooth, moist in wet weather, when young spotted as with drops, the spots vanishing with age; margin involute, thin, pubescent. St. 5–12 × 2–3 cm., white, becoming yellow, fleshy, slightly attenuated upwards, subfibrillose. Gills white, becoming pale, deeply decurrent, 4–6 mm. broad, somewhat crowded. Flesh white, thick, firm. Spores white, subglobose, 5–7 μ. Smell and taste pleasant. Edible. Woods, and pastures, often forming large rings. Sept.—Dec. Common. (v.v.)

860. C. splendens (Pers.) Fr. Fr. Icon. t. 55, upper figs.  
Splendens, shining.

P. 5–8 cm., pale yellowish, becoming yellow, somewhat fleshy, convex, then plano-depressed, at length infundibuliform, smooth, shining; margin reflexed, white, mealy. St. 4–5 × 1–2 cm., white, becoming light yellow, or ochraceous, equal, or attenuated upwards, elastic, smooth. Gills white, becoming light yellow, deeply decurrent, thin, crowded, often forked at the base. Flesh white, becoming concolorous, thin at the margin. Spores white, subglobose, 4–6 × 4–5 μ, 1-guttulate, punctate. Smell and taste pleasant. Woods. Sept.—Nov. Uncommon. (v.v.)

861. C. inversa (Scop.) Fr. Barla, Champ. Alp. Marit. t. 60, figs. 6–8.  
Inversa, inverted.

P. 5–8 cm., brick colour, or liver-rufescent, fleshy, somewhat fragile, convexo-plane, obtuse, then infundibuliform and undulated, very smooth, moist when fresh, sloping towards the margin, sometimes excoriating. St. 4–6 × 1–1.5 cm., whitish, compressed, cuticle rigid, somewhat rooted and white villous at base. Gills whitish, becoming reddish at the edge, decurrent, 3–4 mm. broad, crowded. Flesh of the same colour as the p. but paler, thin, rigid, fragile. Spores white, globose, 4 μ, minutely echinulate, 1-guttulate. Smell and taste acid. Coniferous woods. Aug.—Dec. Common. (v.v.)

862. C. flaccida (Sow.) Fr. Sow. Eng. Fung. t. 185.  
Flaccida, flabby.

P. 5–8 cm., tawny ferruginous, shining, not becoming pale, slightly fleshy, tough, orbicular, flaccid especially when dry, umbilicate, then infundibuliform, smooth, rarely rimuloso-squamulose; margin spreading, slightly convex. St. 2.5–5 × 5–1 cm., rubiginous ferruginous,
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clastic, tough, subequal, polished, base thickened and villous. Gills whitish, becoming yellow especially at the edge, deeply almost obconico-decurrent, very arcuate, very crowded, narrow, 1–2 mm. broad. Flesh pallid, thin, fragile when fresh, flaccid when dry. Spores white, globose, 3–4 μ, minutely warted, 1-guttulate. Woods, and heaths, often forming rings. Sept.—Dec. Common. (v.v.)


Differs from the type in its more caespitose habit, in the darker colour, the lobed, or contorted margin of the p., and the st. thickened upwards. Woods, and heaths. Sept.—Nov. Common. (v.v.)


Vermicularis, belonging to a little worm.

P. 2–4 cm., deep flesh colour, then tan flesh colour, slightly fleshy, umbilicato-convex, then expanded and infundibuliform, undulatolobed, smooth, moist, slightly hygrophanous; margin involute, pruinose tomentose. St. 3–5 cm. × 3–6 mm., whitish, equal, often compressed and curved, fibrillosely striate, apex mealy and often surrounded by a floccose zone, base white tomentose and arising from stout, palmately branched, stigrose mycelia. Gills white, then cream colour, edge ochraceous, slightly decurrent, attenuated, or obtuse at the base, very crowded, easily separating from the hymenophore, thin. Flesh concolorous, thin. Spores white, elliptical, 5 × 3 μ. Smell slight, of new meal. Taste somewhat acid. Edible. Coniferous woods. Sept.—Oct. Uncommon.

864. C. senilis Fr. Fr. Icon. t. 56, fig. 1. Senilis, aged.

P. 4–8 cm., dingy fuscous tan, or brown becoming paler, fleshy-membranaceous, flaccid, disc depressed, soon infundibuliform, smooth, concentrically cracked; margin spreading. St. 4–5 × 5–1 cm., whitish, equal, often ascending, smooth. Gills whitish, then concolorous with the p., deeply decurrent, linear, narrow, very crowded. Flesh white, thin, flaccid. Spores white, pip-shaped, 6 × 3–4 μ, 1-guttulate. Woods, and lawns. Sept.—Oct. Uncommon. (v.v.)

***P. shining white.

865. C. catinus Fr. Fr. Icon. t. 51, fig. 4. Catinus, a bowl.

P. 5–8 cm., white, becoming discoloured with age, fleshy, plane, then infundibuliform, always obtuse, smooth. St. 5–8 × 5–1 cm., white, elastic, tough; base thickened and tomentose. Gills white, decurrent, straight, descending, broad, not much crowded. Flesh white, thin, flaccid. Spores white, pip-shaped, 4–5 × 3 μ, minutely punctate. Smell and taste pleasant. Edible. Woods, and among dead leaves. Aug.—Oct. Not uncommon. (v.v.)
866. **Clitocybe** tuba Fr. Cke. Illus. no. 164, t. 112.  
*Tuba*, a trumpet.

Entirely white. P. 5–8 cm., fleshy, thin, convexo-plane, umbilicate, dead white when moist, shining whitish when dry, smooth, slightly silky when young. St. 2.5–5 cm. × 5–6 mm., very tough, equal, at length compressed, smooth. Gills becoming pale, deeply decurrent, horizontal, very crowded, 6 mm. broad. Spores white, elliptical, 4–5 × 2–3 μ, "punctate" Quél. Smell none, or of new meal. Coniferous woods. Oct.—Nov. Uncommon.

*Ericetorum*, of heaths.

P. 2–5 cm., shining white, becoming slightly yellowish with age, somewhat fleshy, convex, then umbilicate and cup-shaped, smooth, at length striate; margin undulate, or lobed. St. 2–3 cm. × 4–5 mm., white, attenuated downwards, sometimes compressed, pubescent. Gills white, more or less decurrent, subdistant, often connected by veins. Flesh white, thin, firm. Spores white, oval, 4–5 × 2·5–3 μ, sparsely and minutely rough. Smell pleasant, like Anthoxanthum odoratum. Taste somewhat acrid. Edible. Heaths, and lawns. Sept.—Nov. Rather uncommon. (v.v.)

B. P. fleshy-membranaceous, truly hygrophanous.

δ. P. thin, depressed, then cup-shaped. Colour dingy when moist.

868. **C. cyathiformis** (Bull.) Fr.  
κύαθος, a cup; forma, shape.

P. 2–7 cm., fuscous cinereous, or dark bistre, becoming paler when dry, slightly fleshy, plano-depressed, then cup-shaped, often undulated, somewhat shining when moist, opaque when dry, very hygrophanous; margin persistently incurved. St. 5–10 cm. × 6–9 mm., concolorous, or paler, elastic, attenuated upwards, fibrillosely-reticulated, base white villous. Gills cinereous fuscous, adnate, or decurrent, connate at the base, distant, sometimes branched. Flesh concolorous, watery, thin. Spores white, elliptical, 10–11 × 5–6 μ, punctate. Smell pleasant, or none. Edible. Woods, pastures, rarely on rotten wood. Aug.—Feb. Common. (v.v.)

var. cinerascens (Batsch) Fr.  (= Clitocybe cinerascens (Batsch) W. G. Sm.)  
*Cinerascens*, becoming ash-coloured.  

Differs from the type in its smaller size, in the plane then depressed p., and yellowish gills. Autumn. Uncommon.

869. **C. expallens** (Pers.) Fr.  (= Clitocybe vibecina Fr. sec. Quél.)  
*Expallens*, becoming pale.

P. 2–5 cm., cinereous fuscous, becoming whitish, at first sprinkled with white-silky dew, slightly fleshy, convexo-plane, obtuse, then plano-infundibuliform, somewhat zoned when dry; margin mem-
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Albus, white; cinerea, ash-coloured.


871. C. obbata Fr. Fr. Icon. t. 57, fig. 1. 

Oubbata, a kind of cup.

P. 2–3 cm., fuscous blackish, or cinereous, becoming very pale when dry, submembranaceous, convexo-plane, with a broadly umbilicate disc, smooth, striate to the middle. St. 4–5 cm. × 2–4 mm., fuscous cinereous, equal, often compressed, ascending, or flexuose, striate with white, base often subbulbous. Gills dark cinereous, slightly decurrent, distant, broad. Flesh ochraceous, thin. Spores white, broadly elliptical, 9–10 × 6–7 μ. Taste mild. Edible. Woods, and pastures. Sept.—Jan. Uncommon. (v.v.)

872. C. pruinosa (Lasch) Fr. (= Omphalia litua Fr. sec. Quél.)

P. 2.5–5 cm., brown, becoming cinereous, hygrophanous, fleshy-membranaceous, umbilicate, and covered with a lead-grey pruina, then broadly infundibuliform and smooth, sometimes squamulose. St. 2.5–5 cm. × 2–4 mm., concolorous, or paler, equal, often ascending, or curved, fibrillose. Gills white, then dingy, or bistre, decurrent, crowded, narrow, arcuate, then scythe-shaped. Flesh becoming cinereous, thin. Spores “6–8 × 2–4 μ” ex Britz. in Sacc. (1915). Taste mild. Edible. Pine woods, and on rotten wood. Nov.—Dec. Rare.

873. C. concava (Scop.) Fr. Fr. Icon. t. 57, fig. 2.

Concava, hollowed out.

P. 3–5 cm., fuliginous, then cinereous, or hoary-clay, hygrophanous, slightly fleshy, very thin, flaccid, plano-convex, widely and deeply umbilicate, then wholly concave, the convexo-plane border undulated, smooth; margin even. St. 3–6 cm. × 3–8 mm., cinereous, tough, equal, smooth, base attenuated. Gills dark fuliginous, then greyish, decurrent, arcuate, very crowded, 2–4 mm. broad. Flesh pallid, tough, very thin. Spores “greenish, ovoid, 8–12 × 6–8 μ” Sacc. Coniferous woods. Sept.—Oct. Rare. (v.v.)
874. **C. suaveolens** (Schum.) Fr. (= *Clitocybe fragrans* Sow. sec. Quél.)

Suaveolens, sweet smelling.

P. 2–3 cm., white when moist with the disc darker, becoming pure white when dry, fleshy, thin, convexo-plane, then depressed, often umbilicate and somewhat infundibuliform, discoid, smooth; margin pellucidly striate, at length reflexed. St. 4–5 cm. × 2–4 mm., white, becoming pinkish, elastic, base swollen and villous. Gills whitish, then discoloured, adnato-decurrent, crowded, thin. Flesh white, thin. Spores white, “elliptical, 6–7 × 3–4 μ” Rick. Smell very pleasant, of aniseed. Taste pleasant. Edible. Woods, especially coniferous. Sept.—Dec. Uncommon.

875. **C. brumalis** Fr. Cke. Illus. no. 170, t. 114.

Brumalis, pertaining to winter.

P. 3–5 cm., livid when moist, becoming whitish, and at length yellowish when dry, disc generally darker, fleshy-membranaceous, convex, umbilicate, reflexed at the circumference, then infundibuliform, often irregular and undulated, smooth. St. 3–6 cm. × 3–8 mm., greyish, then whitish, equal, or slightly thickened at the apex, at length compressed, somewhat incurved, smooth, elastic, base white-villous. Gills livid, becoming yellowish, or whitish, decurrent, arcuate, then descending, 2 mm. broad, crowded. Flesh whitish, thin. Spores white, elliptical, 5–6 × 3 μ, 1-guttulate. Smell faint, pleasant. Taste pleasant. Edible. Woods, and pastures. Aug.—Jan. Common. (v.v.)

e. P. rather fleshy, convex then flattened, or depressed, polished. Colour dingy, or becoming pale.

*Gills becoming cinereous.*

876. **C. orbiformis** Fr.

Orbiformis, round-shaped.

P. 4–5 cm., greyish fuliginous, slightly fleshy, convexo-plane, very obtuse, orbicular, scarcely depressed, smooth, hygrophanous; margin spreading, finally striate. St. 6–8 cm. × 8–10 mm., grey, attenuated upwards from the villous, thickened base, elastic, fibrilloso striate. Gills whitish, then greyish, adnate, subdecurrent, plane, horizontal, little crowded. Flesh thin. Spores white, ovoid, “6–7 × 3–4 μ” Sacc. Pine woods. Sept.—Nov. Rare.

877. **C. metachroa** (Fr.) Berk.

μέτα, change; χρώς, colour of the skin.

P. 2–8 cm., fuscous cinereous, then livid, whitish when dry, slightly fleshy, convex, and subumbonate, soon plane, or depressed; margin finally slightly striate. St. 3–4 cm. × 4–6 mm., grey, equal, often compressed, tough, cuticle horny, fibrous, apex white-mealy. Gills whitish cinereous, adnate, scarcely decurrent, crowded, linear, plane, thin.
Flesh greyish, becoming whitish, thin. Spores white, elliptical, or pip-shaped, $6 \times 3\mu$, 1-guttulate. Pine woods. Aug.—Nov. Common. (v.v.)


P. 3–5 cm., mouse grey, margin white, convexo-plane, then depressed, hygrophanous, pruinose. St. 4–6 cm. × 4–6 mm., pearl grey, straight, or slightly curved, base white floccose. Gills greyish, becoming somewhat ochraceous, decurrent with a tooth, 2–4 mm. broad. Flesh greyish, soft, thin. Spores white, globose, 3µ. Amongst fir needles. Oct.—Nov. Uncommon. (v.v.)

879. **C. pausiaca** Fr. Fr. Icon. t. 58, fig. 2. *Pausiaca*, olive colour.

P. 2.5–4 cm., cinereous, then olivaceous, becoming somewhat ochraceous when dry, fleshy, thin, convex, sometimes umbonate, then plane and depressed, hygrophanous, silky hoary when young, then smooth. St. 5–7 cm. × 3–6 mm., concolorous, tough, equal, striate, often undulated, apex white pruinose. Gills olivaceous, or brownish, obtusely adnate, very broad behind, very crowded, semicircular. Flesh ochraceous, thin. Spores white, globose, 3–4µ, 1-guttulate. Smell weak, frumentaceous. Pine woods. Oct. Uncommon. (v.v.)

880. **C. ditopus** Fr.

$\delta\upsilon\tau\rho\nu\sigma$, double; $\pi\omega\upsilon\sigma$, foot.

P. 5–6 cm., cinereous, drying deep ochre from the centre outwards, somewhat fleshy, tough, convexo-plane, obtuse, then inverted, infundibuliform, and often undulato-lobed. St. 3–5 cm. × 5–15 mm., pale cinereous, compressed, equal, naked, often very white floccose at the basal half of the st. Gills dark cinereous, adnate, crowded, thin, at length turned upwards, and divergent in the lobes, often undulate. Flesh greyish, then white, thin. Spores white, globose, 3–4µ. Smell strong, of new meal. Woods, and amongst dead leaves. Sept.—Nov. Common. (v.v.)

**Gills whitish.**


$\delta\iota\alpha\tau\rho\nu\eta\tau\gamma\tau\omicron\sigma$, pierced through.

P. 2–3 cm., flesh colour, then tan colour, slightly fleshy, tough, convex, regular, obtuse, then plano-depressed, often flexuose, becoming flaccid, smooth, hygrophanous; margin white, incurved, pruinose. St. 3–5 cm. × 4–8 mm., pallid, elastic, flexible, equal, round, smooth, villose at the base. Gills whitish flesh colour, then whitish, adnate, sharp pointed behind, decurrent with a tooth, 2 mm. broad, crowded. Flesh concolorous, becoming whitish, thin. Spores white, elliptical, 7–8 × 6µ, often pointed at one end, 1-guttulate. Coniferous woods. Oct.—Nov. Uncommon. (v.v.)
882. **C. fragrans** (Sow.) Fr. (= *Clitocybe suaveolens* (Schum.) Fr. sec. Qué.) Sow. Eng. Fung. t. 10.  
**Fragrans**, scented.  

883. **C. angustissima** (Lasch) Fr. Fr. Icon. t. 59.  
**Angustissima**, very narrow.  

884. **C. obsoleta** (Batsch) Fr.  
**Obsoleta**, worn out.  
P. 2–3 cm., grey, or *cream colour*, *soon turning* whitish, *clay white when dry*, sometimes inclining to flesh colour, somewhat fleshy, soft, convex, or gibbous, then plane, or depressed, *hygrophanous*, smooth. St. 5 cm. × 6–8 mm., *whitish*, elastic, tough, round, often compressed, equal, smooth, *apex pruinose*. Gills *greyish*, *then whitish*, *obtusely adnate*, *almost rounded behind*, then *adnato-decurrent*, *broad*, crowded. Flesh *whitish*, thin, soft. Spores white, elliptical, 7 × 4–5 μ. Smell faint, pleasant. Coniferous woods, and amongst grass and leaves. Oct.—Nov. Uncommon.

ζ. P. *deformed*, more or less *squamulose*.

885. **C. ectypa** Fr. (= *Collybia ectypa* (Fr.) Qué.) Fr. Icon. t. 59, fig. 1.  
**Ectypus**, wrought in relief.  
P. 4–7.5 cm., dingy, or *light yellow* honey *colour*, then *rufescent*, or brownish, fleshy, somewhat thin, convex, then rather plane, or depressed, disc streaked with *innate fibrils* radiating from the centre, as if sprinkled with *suet*, or *squamulose*; margin very thin, *striate*. St. 5–10 × 5–1 cm., *dingy light yellow*, then *olivaceous*, becoming *black at the often bulbous base*, elastic, equal. Gills *white*, *soon pale*, then *spotted rufous*, somewhat *mealy*, adnate, or *decurrent* with a rather delicate tooth, *distant*, often connected by veins. Flesh *pallid straw colour*, *thin at the margin*. Spores white, elliptical, 9 × 6–7 μ, 1-guttulate. Smell

C. Sadleri B. & Br. = **Hypholoma fasciculare** (Huds.) Fr.

Spores white; hymenium pulvulcent.

**Laccaria** B. & Br.

(*Lac*, a resinous excretion left by the lac insect.)

Pileus fleshy, regular, or irregular. Stem central, externally fibrous. Gills adnate with a decurrent tooth, pulvulcent. Spores white, globose, or elliptical, echinulate, or verrucose. Growing on the ground, and on wood.

886. **L. laccata** (Scop.) B. & Br. (= **Clitocybe laccata** (Scop.) Fr.; *Collybia laccata* (Scop.) Quéf.) Cke. Illus. no. 179, t. 139, figs, coloured red, as *Clitocybe laccata* Scop.

*Lac*, the exudation from the lac insect.

P. 3–5 cm., *rufous flesh colour when moist, ochraceous when dry, fleshy, convex, then rather plane, more or less umbilicate-depressed, dry, very hygrophanous*, becoming pale in drying, the cuticle often breaking up into mealy squamules, or somewhat silky, sometimes undulato-crisped and irregularly shaped. St. 7–10 cm. × 6–10 mm., *concolorous, tough, fibrous, equal, often flexuose, or twisted, fibrillose, base white villous*. Gills *flesh colour, then white mealy*, adnate with a decurrent tooth, very broad, distant, plane, thick. Flesh *concolorous, somewhat thin, firm in the st*. Spores white, globose, 8–9 µ, echinulate. Cystidia "on edge of gill clavate-vermiform, 50–60 × 9–12 µ" Rick. Taste mild. Edible. Heaths, and woods. June—Dec. Very common. (v.v.)

var. **proxima** (Boud.) Maire. Boud. Icon. t. 60, as *Laccaria proxima* Boud.

Differs from the type in its brighter colour, and the larger elliptical spores, 10–15 × 6–7 µ, minutely echinulate. Heaths, and woods. Sept.—Nov. Not uncommon. (v.v.)

var. **amethystina** (Vaill.) B. & Br. *Amethystina*, amethyst colour.

Differs from the type in the whole of the plant, including the flesh, *being of a beautiful deep violet colour, becoming paler when dry*. Woods, and pastures. June—Dec. Common. (v.v.)


P. 1–2.5 cm., *pale rose, or slightly yellowish, striate to the deeper coloured disc, membranaceous, thin, convex, then plane and depressed*;

1 Both elliptical and globose spores have been found on the same plant.
margin often undulate. St. 1-2.5 cm. × 2-3 mm., reddish yellow, or pale, equal, or attenuated downwards, slightly fibrillose. Gills colororous, becoming white mealy, adnate, with a very slight tooth, broad, often connected by veins. Flesh pinkish, very thin. Spores white, globose, 8-10μ, echinulate. Charcoal heaps, roadsides, and bare soil in woods. Aug.—Sept. Not uncommon. (v.v.)

888. L. bella (Pers.) B. & Br. (= Clitocybe bella (Pers.) Fr.; Collybia bella (Pers.) Quél.) Bella, lovely.

P. 3-5 cm., dark yellow, or golden, sometimes rufescent, sprinkled with darker, or orange coloured squamules, becoming pale, somewhat fleshy, pliant, convex, then expanded, depressed at the disc, then undulato-repand. St. 5 cm. × 4-6 mm., bright yellow, or becoming yellow, tough, equal, fibrous, rivulose with the fibrils. Gills yellow, then rufescent and white mealy, adnate, then decurrent with a tooth, very broad, distant, connected by veins, sometimes branched. Spores white, subglobose, 7 × 5-7μ, minutely warded. Smell foetid. On decaying coniferous stumps. Sept. Rare.


P. 1 cm., vivid cinnamon, becoming paler, somewhat fleshy, hemispherical, then plane and concave, smooth; margin at first covered with white meal. St. 1 cm., white, fibrillose. Gills pale, at length white mealy, adnate, attenuated at the base, rather distant. Spores white, globose, 15-16μ, echinulate. Naked soil under trees.

Spores white; hymenium waxy.

Hygrophorus Fr.

(υγρός, moist; φέρω, I bear.)

Pileus fleshy, regular, viscid, or dry. Stem central, fleshy. Gills decurrent, or adnato-decurrent. Spores white, very rarely slightly coloured, elliptical, oval, globose, clavate, pip-shaped, or oblong-elliptical, smooth, continuous. Cystidia present, or absent. Growing on the ground, very rarely on wood.

I. Universal veil viscid, with occasionally a floccose partial one, which is annular, or marginal. St. clothed with scales, or more frequently rough with dots above. Gills adnato-decurrent.

*White, or yellowish white.

890. H. chrysodon Fr. Cke. Illus. no. 872, t. 885. χρυσός, gold; ὀδούς, a tooth.

P. 5-7 cm., white, or yellowish, covered with evanescent, yellow, floccose squamules, which are more permanent at the involute margin,
convex, then plane, viscid. St. 5-7-5 × 1-1.5 cm., white, covered with minute, light yellow squamules, which form a zone at the apex. Gills white, somewhat yellowish at the edge, adnate, or decurrent, broad, distant, sometimes crisped. Flesh white, sometimes reddish. Spores white, elliptical, 6-7 × 3 μ. Smell pleasant, taste mild. Edible. Oak, and beech woods. Aug.—Nov. Not uncommon. (v.v.)

var. leucodon (A. & S.) Fr.

 différences from the type in having white squamules.

891. H. ebuneus (Bull.) Fr. Cc. Illus. no. 873, t. 886.

Ebuneus, ivory white.

Entirely shining white, becoming yellowish with age. P. 3-10 cm., convexo-plane, somewhat repand, very glutinous, margin involute, at first pubescent. St. 3-8 × 1-1.5 cm., glutinous, rough at the apex with dots in the form of squamules, unequal. Gills decurrent, distant, veined at the base. Spores white, elliptical, 8 × 4 μ. Smell not unpleasant, taste mild. Woods, and pastures. Aug.—Nov. Common. (v.v.)

892. H. cossus (Sow.) Fr. Boud. Icon. t. 30.

Cossus ligniperda, the Goat moth.

P. 4-8 cm., white, disc ochraceous, convexo-plane, then expanded and depressed, umbonate, very viscid. St. 5-10 cm. × 5-12 mm., white, or becoming tinged with yellow, viscid, equal, or slightly attenuated at the base, furfuraceous and granular at the apex. Gills white, decurrent, distant, thick, connected by veins. Spores white, oval, 8-9 × 5-6 μ, 1-guttulate. Smell strong, like that of the larva of Cossus ligniperda. Woods, and under conifers. Aug.—Nov. Common. (v.v.)

893. H. melizeus Fr. Fr. Icon. t. 165, fig. 3.

μέλι, honey.

Internally and externally becoming yellowish tan. P. 2.5-4 cm., disc fleshy, convex, then plane, obtuse, often repand, viscid; margin thin, at first pubescent. St. 7-8 cm. × 6-10 mm., attenuated downwards, subfusiform, apex rough with innate, floccose, white granules. Gills deeply decurrent, distant, connected by veins. “Spores elliptic-oblone, apiculate, creamy-white, 10 × 5 μ.” Mass. & Crossl. Smell pleasant. Woods. Nov. Uncommon.


δισκός, disc; ἕανθος, yellow.

P. 4-6 cm., white, then yellowish, deeper coloured at the centre, the extreme margin becoming brownish with age, viscid, convex, then expanded and revolute, disc depressed. St. 3-4 cm. × 6-12 mm., soon becoming reddish brown, apex white farinaceous, viscid, gradually attenuated downwards, often curved. Gills white, then yellowish,
edge turning reddish when bruised, and then finally reddish brown, especially towards the margin of the pileus. Flesh white, becoming reddish in the stem. Spores white, pruiniform, apiculate, 6–7 × 4μ, 1-guttulate. Smell pleasant, like aniseed. Parks, and pastures. Sept.—Oct. Uncommon. (v.v.)

895. **H. penarius** Fr. Sverig. ätl. Svamp. t. 48.

*Penarius*, for provisions.

P. 7–10 cm., white, then tan colour, opaque, umbonate, then obtuse, hemispherical, then flattened, generally dry, hard; margin at first involute, exceeding the gills, undulate when flattened. St. 4 cm. × 12 mm. at apex, pale white, often yellowish at the base, compact, hard, attenuated at the base into a fusiform root, ventricose to the neck, then attenuated upwards, or wholly fusiform-attenuated, smeared with tenacious easily dried slime, scabrous. Gills white, or tan, adnate-decurrent, distant, thick, 6–8 mm. broad, rigid, veined. Flesh white, compact, thick. Spores white, "ovate-spherical or ovate-oblong, 7–8 × 3–4μ" Sacc. Smell pleasant, taste sweet. Edible. Oak woods. Oct. Uncommon. (v.v.)

896. **H. pulverulentus** B. & Br. Quél. Soc. sc. n. de Rouen (1879), t. 3, fig. 9.

*Pulverulentus*, dusted.

P. 8–18 mm., shining white, pulvinate, viscous; margin involute, tomentose. St. 18 × 2–4 mm., white, wholly powdered with rose-coloured meal, nearly equal, attenuated at the extreme base. Gills whitish, decurrent, thick, obtuse at the edge. Spores white, globose, 7μ. Amongst pine leaves. Nov.—Dec. Rare.

**Reddish.**

897. **H. russula** (Schaeff.) Quél. (= *Tricholoma russula* Fr.) Cke. Illus. no. 1116, t. 926, as *Tricholoma russula* Schaeff.

*Russula*, reddish.

P. 10–20 cm., flesh colour, or purplish with deeper coloured streaks, paler and whitish at the tomentose margin, viscid, gibbous, convexo-plane, then depressed. St. 6–12 × 1–2 cm., white, stained reddish, apex white, farinaceous. Gills whitish, then spotted with bright red, sinuate, or emarginate, thin, rather crowded. Flesh white. Spores white, elliptical, 7–8 × 4–5μ or 6–7 × 4–5μ, slightly depressed on one side, with a large central gutter. Taste sweet, or slightly bitter. In deciduous woods. Sept.—Oct. Uncommon. (v.v.)


*Erbescens*, becoming red.

P. 5–10 cm., whitish, spotted with rose, slightly viscid, gibbous, then convexo-plane. St. 5–8 × 2 cm., whitish stained reddish, tinged yellowish
when bruised, or rubbed, equal, or attenuated at the base. Gills whitish, washed with flesh colour, decurrent, somewhat distant. Flesh yellowish. Spores white, elliptical, $8-11 \times 6\mu$, with a large central gutta. Taste bitter, then sometimes slightly acrid. Coniferous woods. Sept.—Oct. Uncommon. (v.v.)

899. **H. pudorinus** Fr. Cke. Illus. no. 877, t. 911.

_Pudorinus_, modest.

P. 5–9 cm., bright reddish flesh colour, disc deeper coloured, convex, then depressed, viscid; margin white, pubescent. St. 5–8 × 1.5–3 cm., white, or flesh colour, firm, viscid; apex contracted, rough with floccose granules. Gills white, flesh colour near the edge, adnate, wide, thick, often crisped. Flesh white, rose colour under the cuticle of the pileus. Spores white, elliptical, $6-7 \times 4-5\mu$. Smell very pleasant, taste sweet. Edible. Coniferous woods. Sept.—Oct. Uncommon. (v.v.)

900. **H. glutinifer** Fr. Cke. Illus. no. 878, t. 889.

_Gluten, glue; fero, I bear._

P. 5–9 cm., rufescent, whitish round the margin, convexo-expanded, thin with the exception of the gibbous disc, pellicle glutinous, disc wrinkled dotted. St. 7–10 × 1–1.5 cm., concolorous, apex white-squamulose, somewhat elastic, ventricose downwards, with a viscid veil. Gills shining white, or pale grey, arcuato-decurrent, rather thick. Spores white, clavate, $9-10 \times 7\mu$, 3-guttulate. Taste mild. Woods. Sept.—Oct. Uncommon. (v.v.)

901. **H. persicinus** Beck.

_Persicinus_, pertaining to a peach.

P. 5 cm., peach colour, or somewhat orange, conical, then hemispherical, shining, even; margin incurved. St. 10 × 2 cm., pale lilac-peach colour, base yellowish, constricted below the gills. Gills fuscescent, adnato-decurrent, edge very obtuse. Spores 15–20 × 5–6\mu. Amongst grass in woods. Rare.

***Tawny, or light yellow.

902. **H. arbustivus** Fr. Cke. Illus. no. 879, t. 896, fig. A.

_Arbutivus_, belonging to plantations.

P. 3–10 cm., slightly tawny-brick colour, paler round the pubescent margin, convexo-plane, obtuse, umbonate, somewhat repand, viscid, disc streaked with innate fibrils. St. 4–9 cm. × 6–15 mm., pale white, elastic, cylindrical, viscid, apex covered with white, free, mealy granules. Gills white, adnate, scarcely decurrent, distant, thick. Spores white, elliptical, $8 \times 4-5\mu$, 2-guttulate. Smell and taste pleasant. Edible. Woods. Sept.—Dec. Not uncommon. (v.v.)
**HYGROPHORUS**

903. *H. discoideus* (Pers.) Fr. Gonn. & Rabenh. vii—ix, t. 10, fig. 4. 

\[\delta\iota\kappa\omicron\sigma\omega\], disc; \[\epsiloni\delta\iota\sigma\omega\], like.

P. 2·5—6 cm., pale yellowish inclining to pale, disc darker, somewhat ferruginous, campanulate, then plane, obtusely umbonate, very glutinous. St. 4—6 cm. \(\times\) 6—10 mm., pale white, viscid, flocculose, apex with white dots. Gills pale yellowish white, or flesh colour, adnate, decurrent, distant, soft. Flesh under the cuticle of the umbo ferruginous, yellowish white, or flesh colour elsewhere. Spores white, elliptical, 6—9 \(\times\) 5 \(\mu\), 1-guttulate. Woods. Oct.—Nov. Not uncommon. (v.v.)

904. *H. aureus* (Arrh.) Fr. Fr. Icon. t. 166, fig. 2. *Aureus*, golden.

P. 2—4 cm., bright golden yellow, becoming reddish, convex, then plane, glutinous. St. 4—6 cm. \(\times\) 6 mm., becoming tawny, apex white pruinose above the glutinous, ring-like, fugacious, tawny-reddish veil. Gills white, or yellowish, adnato-decurrent, distant. Flesh white, or pale ochraceous. Spores white, elliptical, 8—10 \(\times\) 5—6 \(\mu\). Woods. Nov. Rare.


\[\alpha\rho\omicron\mu\omicron\alpha\tau\omicron\mu\iota\kappa\omicron\omicron\dot\iota\kappa\omicron\dot\iota\sigma\omicron\], fragrant.

P. 5—8 cm., cinnamon, convex, then expanded and plane, very fragile, glutinous, the gluten in drying sometimes contracting and forming raised, anastomosing ribs. St. 3—5 cm. \(\times\) 4—8 mm., concolorous, sub-equal. Gills white, with a pink tinge, slightly decurrent, 2—3 mm. broad. Flesh bruising blackish. Smell spicy, taste like peppermint, acrid. Amongst grass. Rare.

****Olivaceous umber.


P. 4—6 cm., disc umber, then fuliginous, margin paler, convex, then plane, obtuse, viscid. St. 5—8 \(\times\) 1—1·5 cm., white, greyish, or bistre, firm, ventricose, viscid, flocculose, fibrilloso-striate, apex squamulose. Gills white inclining to cinereous, or yellowish, adnate, then decurrent, subdistant. Flesh firm, white. Spores white, elliptical, 12 \(\times\) 8 \(\mu\). Amongst leaves in woods. Oct.—Nov. Uncommon. (v.v.)


*Squamulosus*, covered with little scales.

P. 5—7 cm., yellow olivaceous, disc fuscous, convex, then expanded, subumbonate, glutinous, floccosely squamulose beneath the gluten, tomentose at the incurved margin over the base of the gills. St. 6—8 \(\times\) 1·5—2 cm., concolorous, apex white, mealy, equal, or enlarged downwards, glutinous. Gills white, 5—10 mm. wide, sinuato-adenate,
margin irregular, somewhat crowded. Flesh whitish, becoming yellowish towards the lower half of the stem. Spores white, globose, 3·5–4 × 3·5 μ. Smell and taste pleasant. Amongst short grass. Oct. Uncommon. (v.v.)

908. **H. olivaceo-albus** Fr. Boud. Icon. t. 31.

Olivaceus, olivaceous; albus, white.

P. 3–10 cm., olivaceous-fuscous, becoming pale especially towards the margin, at first acorn-shaped, then expanded, umbonate, at length depressed round the umbo, glutinous and often forming tear-like drops at the margin, which becomes striate when old. St. 5–13 cm. × 6–15 mm., white, sheathed with the squamulose, spotted, fuscous, viscid veil which terminates at the apex in the form of a ring, equal, or attenuated at the base, apex shining white. Gills white, or olivaceous from the gluten, decurrent, distant, broad, connected by veins at the base. Flesh white. Spores white, elliptical, 7–8 × 4–5 μ, 2-guttulate. Woods, especially of conifers. Aug.—Nov. Common. (v.v.)


Differs from the type in having a thick, squat stem. Pine woods. Sept.—Oct. Not uncommon. (v.v.)

909. **H. hypothejus** Fr. Boud. Icon. t. 32.

ὑπόθες, under; θέο, brimstone.

P. 3–6 cm., at first covered with olivaceous gluten, cinereous when the gluten disappears, becoming pale and yellowish, orange, or rarely (when rotting) rufescent, convex, then depressed, obtuse, somewhat streaked. St. 5–10 cm. × 4–10 mm., whitish, becoming yellowish, equal, viscid, rarely spotted with the veil; partial veil floccose, at the first cortinate and annular, soon fugacious. Gills pallid, soon yellow, sometimes flesh colour, decurrent, distant. Flesh white, then light yellow. Spores white, elliptic-oblong, 10–11 × 4–5 μ, 1-many-guttulate. Woods, and heaths, under conifers. Sept.—Jan. Common. (v.v.)

var. **expallens** Boud. Boud. Icon. t. 33. Expallens, becoming pale.

Differs from the type in its smaller size, paler colour, and decreased viscosity. Under pines. Nov.—Jan. Uncommon. (v.v.)


P. 4–6 cm.; pale umber, then grey, convex, broadly umbonate, often more or less undulate, sometimes depressed, viscid, shining when dry; margin minutely tomentose. St. 2·5–8 × 1 cm., white, attenuated below, sometimes ventricose, punctato-squamulose above. Gills
white, tinged with pink, decurrent, broad, sometimes forked, very distant. Spores white, elliptical, $8 \times 4\mu$. Smell like that of cherry laurel leaves. Fir woods. Sept.—Oct. Uncommon. (v.v.)

*****Fuscous cinereous, or livid.

911. H. fusco-albus Fr.  

**Fuscus, dark; albus, white.**

P. 4–8 cm., fuscous, then cinereous, convexo-plane, then depressed, moderately firm, viscid; margin white-floccose. St. 5–12 cm. $\times$ 8–15 mm., white, equal, when dry white-floccose at the apex. Gills snow-white, decurrent, broad, rather thick. Flesh greyish white. Spores white, pip-shaped, $7–8 \times 5\mu$, 1-guttulate. Woods, and amongst grass under conifers. Sept. Uncommon. (v.v.)

912. H. agathosmus Fr.  

(= Hygrophorus cerasinus Berk. sec. Quél.) Gonn. & Rabenh. viii–ix, t. 11, fig. 4.

$\gamma\alpha\theta\omicron\upsilon$, good; $\delta\sigma\mu\eta$, scent.

P. 4–7 cm., livid grey, unicolorous, dotted with minute, raised, crowded, viscid, pellucid, whitish papillae, convex, then plane, gibbous, viscid; margin at first involute, villose, at length reflexed, and undulated. St. 5–12 cm. $\times$ 6–15 mm., white, equal, or slightly thickened downwards, somewhat fibrillosely striate, granularly farinose at the apex, the squamales at length becoming cinereous. Gills shining white, decurrent, distant, 6–8 mm. wide, soft, somewhat veined at the base. Flesh watery whitish, soft. Spores white, pip-shaped, $8–9 \times 4–5\mu$. Smell very pleasant. Coniferous woods. Sept.—Nov. Not uncommon. (v.v.)


**Pustulatus, blistered.**

P. 2–5 cm., livid grey, disc fuscous, broken up into papillae, convex, then expanded, umbonate, viscid. St. 3·5–4·5 cm. $\times$ 5–13 mm., white, rough with black points, equal, or fusiform. Gills white, sometimes glaucous, adnato-decurrent, 5–6 mm. wide, distant, soft. Spores white, ovoid pruniform, $8–9 \times 5\mu$. Fir woods. Sept.—Oct. Uncommon. (v.v.)

914. H. mesotephrus B. & Br.  

$\mu\epsilon\sigma\omicron\upsilon$, middle; $\tau\epsilon\phi\rho\omicron\upsilon$, ash-coloured.

P. 2–3 cm., white, disc brown, convex, somewhat hemispherical, viscid, striate, the extreme margin often remaining quite even. St. 5 cm. $\times$ 4–6 mm., white, often stained yellowish, flexuose, attenuated at the base, viscid, floccoso-granulated at the apex. Gills pure white, shortly decurrent, moderately broad, ventricose, rather distant. Flesh white, hygrophanous. Spores white, elliptical, somewhat pointed at the one end, $9 \times 6\mu$. Woods. Oct. Uncommon. (v.v.)
915. **H. livido-albus** Fr. Cke. Illus. no. 888, t. 915.

* Lividus, livid; albus, white.

P. 4–7 cm., livid, umbo bistre, with darker streaks, convex, viscid. St. 6–10 cm. × 6–10 mm., grey, becoming yellowish downwards, equal, or attenuated at the base, fibrillosely striate. Gills shining white, decurrent, distant. Flesh greyish when moist, white when dry, often tinged with yellow in the stem. Spores white, elliptical, 10–11 × 5–6μ, multi-guttulate. Woods. Oct.—Nov. Uncommon. (v.v.)

II. Veil none. St. even, smooth, or fibrillose, not rough with dots.

P. *firm*, opaque, moist in rainy weather, not viscous. Gills distant, arcuate.

*Gills deeply, and at length obconically decurrent.

916. **H. camarophyllus** (A. & S.) Fr. (= *Hygrophorus caprinus* (Scop.) Fr.) Cke. Illus. no. 889, t. 916, as *Hygrophorus caprinus* Scop.

Καμάρυ, a vault; (π)ύλλων, a leaf.

P. 3–10 cm., blackish-fuliginous, or blackish, at length cinereous-fuliginous, but varying azure-blue, convex, then plane and depressed, sometimes more or less umbonate, especially when young, firm, moist, or dry, more or less radiately streaked with innate fibrils, pellicle hardly separable; margin at first white, pruinose, incurved, then expanded, revolute, concolorous and undulating. St. 4–8 × 1–1.5 cm., fuliginous, equal, or attenuated downwards, longitudinally fibrillose, apex finally whitish, base white, pubescent. Gills white, becoming glaucous, or grey, deeply decurrent, distant, 5–8 mm. wide, thick, connected by veins. Flesh white. Spores elliptical, slightly apiculate at the one end, 6–9 × 4–5μ, multi-guttulate. Smell strong, like that of *Cortinarius purpurascens*, taste mild, slightly sweet. Heaths and pastures under firs. Oct. Uncommon. (v.v.)

917. **H. leporinus** Fr. Cke. Illus. no. 891, t. 931, as *Hygrophorus nemoreus* Fr.

* Leporinus, belonging to a hare.


918. **H. nemoreus** (Lasch) Fr. 

* Nemoreus, belonging to a wood.

P. 3–8 cm., somewhat orange, equally fleshy, convex, then expanded, gibbous, at length depressed. St. 4–6 × 1–1.5 cm., pale, firm, squamu-


P. 2·5–8 cm., tawny yellow, or buff, compactly fleshy especially at the disc, thin towards the margin, convex, then flattened, gibbous, almost turbinate from the stem being thickened upwards, moist, rimosely incised when dry. St. 4–6 × 1·5 cm., concolorous but paler, attenuated downwards, dilated into the pileus. Gills concolorous, or white, deeply decurrent, at first arcuate, then extended in the form of an inverted cone, very distant, thick, firm, brittle, connected by veins. Flesh ochraceous. Spores white, elliptical, 7–8 × 5μ. Smell and taste pleasant. Edible. Pastures, and heaths. Aug.—Dec. Common. (v.v.)

var. cinereus Fr. Cke. Illus. no. 893, t. 932, fig. B.

Cinereus, ash colour.

Differs from the type in the thinner, cinereous p., at length striate at the margin, the white st. sometimes yellowish at the base, and the cinereous gills. Heaths and downs. Sept.—Oct. Not uncommon. (v.v.)

var. pallidus B. & Br. Cke. Illus. no. 893, t. 932, fig. A.

Pallidus, pallid.

Differs from the type in the pallid, infundibuliform p., with undulate, deflexed margin, the dilated, fibrillosely striate st., and the pallid, decurrent, branched, distant gills. On downs and hillsides. Sept.—Oct. Uncommon. (v.v.)

var. umbrinus W. G. Sm.

Umbrinus, umber.

Differs from the type in the umber p., substriate at the margin, the white, equal st., and the flesh being coloured umber under the cuticle of the p. Hilly pastures. Sept.—Oct. Uncommon. (v.v.)

var. meisneriensis Fr. Meisneriensis, belonging to Mount Meisner.

Differs from the type in the much smaller p., at length striate at the margin, the white st., and the easily separable pellicle of the p.


P. A. Karsten, the eminent Finnish mycologist.

P. 5–8 cm., white, or whitish, convexo-plane, at length often depressed, disc compact. St. 8–14 × 1·5–2 cm., white, or whitish,

921. H. foetens Phill. Cke. Illus. no. 904, t. 903, fig. B.

Foetens, stinking.

P. 1-5-2-5 cm., dark brown, convex, then plane, at length broken up into squamules. St. 2-5-7-5 cm. x 4 mm., paler than the pileus, attenuated downwards, shining, clothed with transversely arranged fibrous scales. Gills somewhat of the same colour as the pileus, or paler, somewhat glaucous-pruinose, decurrent, distant, rather thick. Flesh dark coloured. Spores white, globose, 4-5µ. Smell very foetid, nauseous.

Grassy places. Sept.—Nov. Uncommon. (v.v.)

922. H. virgineus (Wulf.) Fr. (= Hygrophorus ericeus (Bull.) Schroet.) Boud. Icon. t. 37.

Virgineus, maidenly.

Entirely white. P. 3-7 cm., convex, then plane, obtuse, subumbonate, moist, at length depressed, cracked into patches, floccose and becoming yellowish when dry. St. 5-11 cm. x 5-10 mm., firm, attenuated at the base, pruinose, striate. Gills decurrent, distant, rather thick, veined at the base. Spores white, oblong elliptic, 9-12 x 5-6µ. Smell and taste pleasant. Edible. Pastures, heaths, and woods. Aug.—Dec. Common. (v.v.)

var. roseipes Massee. Cke. Illus. no. 895, t. 893.

Roseus, rose-coloured; pes, foot.

Differs from the type in the stem being rose-coloured externally, and internally towards the base. Woods, and pastures. Sept.—Nov. Not uncommon. (v.v.)


Ventricosus, ventricose.

Entirely white. P. 5-7-5 cm., convex, unequal. St. 6 x 1-1-5 cm., ventricose, attenuated at both ends. Gills deeply decurrent, narrow, sometimes forked. Spores white, elliptical, 7 x 4µ. Pastures, and amongst grass. Sept.—Oct. Uncommon.

924. H. niveus (Scop.) Fr. Cke. Illus. no. 896, t. 900, fig. A.

Niveus, snow-white.

Entirely white. P. 1-5-3 cm., submembranaceous, campanulate, then convex, umbilicate, striate and viscid when moist. St. 4-6 cm. x 2-4 mm., equal. Gills decurrent, distant, thin. Spores white, elliptical, 7-8 x 4-5µ. Smell and taste mild. Edible. Heaths, and pastures. Sept.—Dec. Common. (v.v.)

925. H. russocoriaceus Berk. & Miller. Cke. Illus. no. 896, t. 900, fig. B.

Russus, Russian; coriaceus, leathery.

P. 1-2 cm., ivory-white, convex, slightly viscid. St. 1-5-4 cm. x 2-6 mm., pure white, thickened upwards. Gills concolorous, decurrent,

**Gills ventricose, sinuato-arcuate, or plano-adnate.

926. H. fornicatus Fr. Fornicatus, arched.

P. 2.5–5 cm., white, or pallid livid, campanulate, then expanded, obsoletely umbonate, subrepend, viscid. St. 5–8 cm. × 5–13 mm., shining white, firm, tough, equal, subundulate. Gills white, almost free, or sinuato-adnexed, thick, ventricose, distant, exceeding the margin. Spores white, elliptical, 6 × 3–4µ. Pastures. Oct.—Nov. Uncommon. (v.v.)

927. H. clivalis Fr. Cke. Illus. no. 898, t. 933, as Hygrophorus fornicatus Fr. Clivalis, belonging to hills.

P. 3–4 cm., whitish, disc yellowish, campanulate, silky, umbonate, becoming split, scalloped, thin, striate. St. 4–6 × 1 cm., white, fragile, attenuated at the base. Gills pale ochraceous, sinuato-arcuate, or plano-adnate, distant, wide. Spores white, elliptical, 6 × 3µ. Parks, and pastures. Sept.—Oct. Uncommon. (v.v.)


P. 3–5 cm., white with a silky lustre, here and there stained with brown, plane, or depressed, often umbilicate, viscid. St. 3–4 cm. × 5–6 mm., white above, cinereous below and attenuated. Gills pure white, then tinged with cinereous, decurrent, few, very distant, subventricose, interstices obscurely rugose. Spores white, broadly elliptical, 10 × 8µ. Smell sometimes pleasant, like the essence of almonds. Woods. Oct. Rare.


P. 9–10.5 cm., opaque ambar, or livid cinereous, margin white, obtuse, convexo-plane, viscid. St. 4–7 × 2–3 cm., white-squamulose above, pale umber-scaly below, equal, or attenuated downwards, viscid. Gills ivory-white, adnate, distant, broad, thick, veined. Spores white, elliptical, 10 × 6µ. Woods, and pastures. Sept.—Oct. Rare.

930. H. metapodius Fr. Cke. Illus. no. 901, t. 918. μετά, reversed; πόδος, foot.

P. 4–8 cm., cinereous-fuscous, convex, then plane, obtuse, at first viscid and slightly shining, then silky and squamulose, irregular. St. 4–10 × 1–2 cm., concolorous, attenuated downwards, sometimes swollen at the base, fibrillosely striate. Gills dark grey, becoming
stained with red, adnate, or arcuate-decurrent, distant, thick, veined, broad. Flesh pallid grey, reddish when broken and at length becoming black. Spores white, broadly elliptical, 7–8 × 6\(\mu\), with a large central gutta. Smell of new meal, taste mild. Old mossy pastures. Oct.—Jan. Not uncommon. (v.v.)


*Ovinus*, belonging to sheep.

P. 4–5 cm., fuscous, campanulate, then expanded, somewhat umbonate, at first slightly viscid, then dry and squamulose, at length revolute, undulated, rimose, incised. St. 3–4 × 5–1 cm., pallid, or greyish, subequal, or slightly thickened at both ends, curved, or twisted, fibrillosely striate. Gills grey, then rufescent, arcuate-adnate, decurrent with a tooth, thick, broad, connected by veins. Flesh fragile, grey, then tinged reddish, and finally black. Spores white, subglobose, 6 × 4–5\(\mu\). Smell strong, of new meal, taste mild. Pastures, and hillsides. Sept.—Dec. Not uncommon. (v.v.)

932. **H. connatus** Karst.

*Connatus*, born together.

P. 3–4 cm., grey, margin submembranaceous, convex, then plane, unequal, dry, silky, then smooth. St. 6–7 cm. × 4–5 mm., concolorous, equal, silky fibrillosely, apex farinose. Gills dark grey, decurrent, somewhat thick, distant, branched. Spores white, pip-shaped, 7–8 × 4–5\(\mu\). Caespitose. Woods. Oct. Uncommon. (v.v.)

933. **H. subradiatus** (Schum.) Fr. Cke. Illus. no. 902, t. 935, fig. A.

*Sub*, somewhat; *radiatus*, rayed.

P. 3–4 cm., white, livid, grey, or flesh colour, disc fuscous, submembranaceous, convex, then expanded, slightly umbonate, radiato-striate from the translucent gills. St. 4–5 cm. × 4–5 mm., pale, equal, twisted, attenuated at the white base. Gills white, deeply decurrent with a tooth, plane, ventricose, somewhat thin, distant, connected by veins. Spores white, subglobose, 7–8 × 6\(\mu\), with a large central gutta. Heaths, and pastures. Sept.—Oct. Not uncommon. (v.v.)

var. *lacmus* Fr. Kalchbr. Icon. t. 25, fig. 3, as *Hygrophorus lacmus*.

*Lac*, varnish.

P. 2–5 cm., lilac, then becoming pale, convex, umbonate, unequal at the circumference, radiato-striate when moist, even when dry, shining, disc often fibrillosely, or squamulose. St. 3–5 cm. × 7–15 mm., white, or greyish, often tinged with yellow at the base, narrowed at the base and apex. Gills cinereous, plano-decurrent, thin, connected by veins, subdistant. Flesh tinged with grey, yellowish at the base of the stem. Spores white, subglobose, 7–8 × 6\(\mu\), with a large central gutta. Heaths, and pastures. Sept.—Oct. More common than the type. (v.v.)
934. **H. irrigatus** (Pers.) Fr. Fr. Icon. t. 168, fig. 3.

*Irrigatus*, bedewed.

P. 2·5–5 cm., livid, becoming dingy white as the gluten separates, fragile, campanulate, expanded, obtuse, viscid, margin striate. St. 5–8 cm. × 2–4 mm., livid, very viscid, equal, tough. Gills white, or grey, adnate with a decurrent tooth, subdistant, wide, fragile, rather thick, connected by veins. Spores white, “elliptical, 6–7 × 4 μ.” Massee. Fir woods, grassy places, and pastures. Oct.—Nov. Uncommon.

III. Veil none. Whole fungus thin, watery, succulent, fragile.

P. viscid when moist, shining when dry, rarely floccosely squamose. St. hollow, soft, not punctate. Gills soft. Most of the species brightly coloured, and shining.

*Gills decurrent.

935. **H. Colemannianus** Blox. Cke. Illus. no. 904, t. 903, fig. A.

W. H. Coleman.

P. 2·5–5 cm., reddish umber, paler when dry except in the centre, subcampanulate, then expanded, strongly umbonate, striate when moist, and slightly viscid. St. 2·5–4 cm. × 2–4 mm., white, very slightly tinged with umber, nearly equal, brittle, fibrous, somewhat silky. Gills umber, paler than the pileus, deeply decurrent, rather broad, distant, interstices veined and rugose. Flesh white, tinged with umber under the cuticle of the pileus. Spores white, broadly elliptical, 6–8 × 6 μ. Pastures, and hillsides. Oct.—Nov. Not uncommon. (v.v.)

936. **H. sciophanus** Fr. Fr. Icon. t. 167, fig. 1.

σκιά, shade; φαῖνω, I appear.

P. 1–4 cm., deep tawny, or brick colour, becoming paler when dry, opaque, hemispherical, then expanded, obtuse, slightly viscid, somewhat fleshy; margin paler, striate. St. 3–7·5 cm. × 2–6 mm., tawny yellowish, or paler, equal, flexuose, viscid. Gills of the same colour as the pileus, or yellowish, attenuato-adnate, distant. Flesh yellowish, reddish near the cuticle. Spores white, elliptical, 8–9 × 4–5 μ. Amongst grass. Sept.—Oct. Uncommon. (v.v.)


*Sciophanus*, the species *H. sciophanus*; εἰδος, like.

P. 1–3 cm., rosy pink, campanulate, then expanded, striate to the disc, interstices paler, subumbonate, or papillate, membranaceous, fragile. St. 2–5 cm. × 2–3 mm., concolorous, equal, base white. Gills pale pink, uncinato-adnate, broadest in front. Flesh pale yellow, becoming white. Spores white, elliptical, 6–7 × 4 μ. Heaths, and hilly pastures. Sept.—Oct. Uncommon. (v.v.)
938. **H. laetus** (Pers.) Fr. (= *Hygrophorus Houghtoni* Berk. sec. Quél.)
Fr. Icon. t. 167, fig. 2. *Laetus*, cheerful.

P. 2–3 cm., tawny, shining, convex, then flattened, obtuse, viscid; margin almost membranaceous and slightly pellucid-striate. St. 3-5–7-5 cm. × 4 mm., concolorous, apex externally and internally bluish green, equal, tough, viscid. Gills flesh colour, whitish, or fuliginous, subdecurrent, distant, thin, somewhat connected by veins. Flesh of the same colour as the pileus but paler. Spores white, elliptical, 7–9 × 4–5 μ, 1–2-guttulate. Heaths, and hilly pastures. Sept.—Dec. Common. (v.v.)

939. **H. vitellinus** Fr. Fr. Icon. t. 167, fig. 3. *Vitellinus*, of yolk of egg.

P. 1–2-5 cm., citron-egg-yellow, becoming white when dry, very thin, convex, umbilicate, viscid; margin plicato-striate. St. 5 cm. × 2 mm., pallid light yellow, becoming white when dry, equal, flexuose, fragile. Gills yellow, then egg-yellow, deeply decurrent, subdistant. Spores white, broadly elliptical, with an apiculus at one end, 8–9 × 6 μ, with a large central gutta. Woods, and pastures. Sept.—Dec. Uncommon. (v.v.)


P. 1–2 cm., citron yellow, convex, then plane, viscid; margin striate. St. 1–2 cm. × 2–3 mm., citron yellow, apex white, base attenuated, viscid. Gills whitish citron yellow, adnato-decurrent, somewhat crowded, 2–3 mm. broad. Flesh concolorous. Spores white, elliptical, apiculate at the one end, 7–7-5 × 5 μ, 1-guttulate. Roadside, and hilly pastures. Sept.—Oct. Uncommon. (v.v.)


P. 2–4 cm., waxy-yellow, shining, viscid, convexo-plane, obtuse; margin slightly striate, pellucid. St. 3–5 cm. × 4 mm., concolorous, often unequal, flexuose, at length compressed, base attenuated, white. Gills yellow, adnato-decurrent, broad, connected by veins, almost triangular. Flesh concolorous. Spores white, elliptical, 6–8 × 4 μ. Woods, and pastures. Sept.—Dec. Common. (v.v.)

942. **H. coccineus** (Schaeff.) Fr. (= *Hygrophorus miniatius* (Scop.) Schroet.) Boud. Icon. t. 38. *Coccineus*, scarlet colour.

P. 2–6 cm., bright scarlet, soon changing colour and becoming yellowish, convex, then plane, often unequal, obtuse, at first viscid. St. 5–7 cm. × 6–8 mm., concolorous, becoming yellowish, compressed, base always yellow. Gills purplish at the base, light yellow in the middle, glaucous at the edge, adnate, decurrent by a tooth, distant, broad, con-

943. H. miniatus Fr. (= Hygrophorus flammans (Scop.) Schroet.) Cke. Illus. no. 910, t. 921, fig. A.

Miniatus, coloured with red-lead.

P. 0.5–2 cm., vermillion, then becoming pale, and opaque, convex, often umbonate, then umbilicate, glabrous, or squamulose. St. 3–5 cm. × 2–4 mm., vermillion, shining, equal, round. Gills yellow, or yellow-vermillion, adnate. Flesh reddish, then yellow. Spores white, elliptical, 6–7 × 4–5 μ, 1-guttulate. Heaths, pastures, and peat bogs. June—Oct. Common. (v.v.)


Carleton Rea.

P. 1.5–2.5 cm., scarlet, fleshy, thin, convex-campanulate, then plane; margin orange yellow, or yellow, slightly striate when moist; no separable pellicle. St. 3–6 cm. × 2–3 mm., orange scarlet to yellow, base whitish, viscid, shining, somewhat tough. Gills flesh colour, then orange, edge whitish, then yellow, broadly adnate with a decurrent tooth, broad, thin, unequal. Flesh orange. Spores white, elliptical, apiculate, 7–8 × 3.5–4.5 μ, 2-guttulate. Cystidia none. Taste bitter. In woods, and pastures. Aug.—Nov. Not uncommon. (v.v.)

945. H. turundus Fr. Turunda, a kind of sacrificial cake.

P. 1–2.5 cm., yellow, or tawny, variegated with cinereous-fuscous squamules, slightly fleshy, sometimes viscid at first, convex, then expanded, umbilicate, or depressed; margin often elegantly crenate. St. 3–5 cm. × 2–4 mm., tawny-reddish, rigid-fragile, attenuated at the base. Gills white, then cream colour, decurrent, narrow, 1–2 mm. wide, distant. Flesh yellowish, or reddish. Spores white, elliptical, 8–11 × 5–6 μ, 1–2-guttulate. Heaths, pastures, and peat-bogs. July—Oct. Uncommon. (v.v.)


P. 12–18 mm., nearly plane, at length depressed, clad with soft, short, radiating hairs of the same colour. St. 2.5–3 cm. × 2–4 mm., equal. Gills whitish, decurrent, narrow, distant. Flesh yellow. Spores white, elliptical, 8 × 4 μ. Woods, and pastures. July—Oct. More common than the type. (v.v.)

var. sphaerosporus Rea. σφαῖρα, a ball; σπορά, seed.

P. 18 mm., reddish, covered with golden yellow fibrils, plane, then depressed. St. 3–4 cm. × 3–5 mm., reddish, base white, slightly incaressed upwards. Gills white, decurrent, distant. Flesh bright

var. lepidus Boud. Bull. Soc. Myc. Fr. xiii, t. 1, fig. 2, as *Hygrophorus lepidus* Boud.

P. 1.5–4 cm., brilliant golden orange, becoming paler, disc deeper colour, convex, umbilicate, minutely squamulose, or hirsuto-tomentose. St. 5–7 cm. × 2–3 mm., concolorous, slightly incrassated upwards. Gills pallid, slightly tinged with the colour of the pileus at the base, deeply and abruptly decurrent, thick, distant. Flesh of stem orange, paler elsewhere. Spores white, oblong-elliptic, 9–10 × 5–6μ. Woods, and bogs. Aug.—Oct. Uncommon. (v.v.)

946. *H. mucronellus* Fr. Cke. Illus. no. 905, t. 937, fig. B.

*Mucronellus*, having a little sharp point.

P. 2–8 mm., scarlet, or yellow, then pale, becoming hoary, acutely conical when small, when larger campanulate, obtuse, then expanded, pellucidly striate when moist, somewhat silky when dry. St. 2–4 cm. × 1–2 mm., concolorous, white at the base, flexuose, subattenuated downwards, somewhat silky. Gills yellow, decurrent, thick, triangular. Flesh concolorous. Spores white, globose, 3 × 2–3μ. Amongst moss and short grass in pastures, and heaths. Aug.—Oct. Uncommon. (v.v.)


*Micaceus*, like mica.

P. 8–12 mm., light yellow, becoming cinereous, hemispherical, like a small *Leotia lubrica*, glittering with micaceous granules, wrinkled. St. 18–20 × 2–3 mm., light yellow, then brown towards the base, granulated. Gills pallid umber, decurrent. Flesh yellowish, somewhat brownish under the cuticle of the pileus. Spores white, subglobose, 4 × 3μ, 1-guttulate. On bare earth, and clayey soil. Oct. Rare. (v.v.)

948. *H. Wynniae* B. & Br. (= *Omphalia bibula* Quéél.) Cke. Illus. no. 911, t. 905, fig. A. Mrs Lloyd Wynne, of Coed Coch.

Entirely lemon-yellow, hygrophanous. P. 1–2.5 cm., thin, hemispherical, umbilicate, or somewhat infundibuliform, pellucidly striate. St. 3–4.5 cm. × 1–3 mm., attenuated upwards from the white, swollen, strigose base. Gills decurrent, narrow, thin. Spores white, broadly elliptical, 7–8 × 6μ. Smell foetid when decayed. On fir needles, twigs, chips, and stumps. Sept.—Nov. Uncommon. (v.v.)

**Gills adnexed, somewhat separating.**


*Puniceus*, blood-red.

P. 5–11 cm., blood-red scarlet, becoming pale with age especially at the fleshy disc, campanulate, obtuse, generally repand, or lobed, very
irregular, viscid. St. 7–11 × 1–2·5 cm., concolorous, or light yellowish, base always white, attenuated at both ends, often incurved, striate, apex often squamulose. Gills white-light-yellow, or yellow, often reddish at the base, ascending, appearing free, ventricose, broad, thick, distant. Flesh concolorous. Spores white, broadly elliptical, 6–7 × 5 μ, with a large central gutta. Taste mild. Edible. Woods, heaths, and pastures. July—Dec. Common. (v.v.)

950. **H. nigrescens** Quél. (= *Hygrophorus puniceus* Fr. var. nigrescens (Quél.) Massee.)

*Hygrophorus nigrescens* is a species of fungus. It is often found in woods, heaths, and pastures. It is characterized by its white to yellowish, often reddish at the base, ascending, appearing free, ventricose, broad, thick, distant. The flesh is concolorous. The spores are white, broadly elliptical, 6–7 × 5 μ. It is known for its mild taste. It is edible and commonly found from July to December.

951. **H. obrusseus** Fr.

*Hygrophorus obrusseus* is another species of fungus. It is characterized by its golden sulphur-yellow with a tinge of green, campanulate, then expanded and somewhat revolute, lobed and often splitting at the margin, obtuse, fragile, shining. It is concolorous, with a length separating, free, very broad, 10–12 mm., distant, thick. The flesh is concolorous. The spores are white, elliptical, 8–9 × 5–6 μ. It is found in woods and pastures from August to October. It is uncommon. (v.v.)

952. **H. intermedius** Pass.

*Hygrophorus intermedius* is a species of fungus. It is characterized by its golden yellow, becoming greyish, or bright orange, very thin, campanulate, then expanded, obtuse, or subumbonate, fibrillosely-silky; margin often wavy. It is concolorous, with a length separating, free, very broad, 6–9 mm., at length separating, free, very broad, 10–12 mm., distant, thick. The flesh is concolorous. The spores are white, elliptical, 8–9 × 6 μ. It is found in woods and pastures from August to October. It is uncommon. (v.v.)

953. **H. conicus** (Scop.) Fr. Boud. Icon. t. 40, as var. nigrescens Boud.

*Hygrophorus conicus* is a species of fungus. It is characterized by its scarlet, yellow, tawny, sulphur-greenish, livid, or fuliginous-light yellow, becoming black, submembranaceous, campanulate, conical, acute, often lobed, then expanded and cracked, viscid when moist, shining when dry. It is concolorous, with a length separating, free, very broad, 6–9 mm., concolorous, or yellow, becoming black, cylindrical, tense and straight, fibrillosely-striate. The flesh is concolorous, or yellow, sometimes reddish at the base, becoming black when bruised, attenuato-free, ventricose, thin, somewhat

954. H. calyptraeformis Berk. (= Hygrophorus amoenus (Lasch) Quél.) Cke. Illus. no. 916, t. 894.

καλύπτρα, a woman's veil; forma, shape.

P. 3–10 cm., pink, becoming pallid, thin, campanulate, acutely conical, lobed below, then expanded and revolute, minutely innato-fibrillose, moist. St. 6–12 × 1 cm., white, often with a rosy tinge within the p., striate, brittle, often splitting longitudinally, easily separating from the pileus. Gills rose coloured, at length pallid, acutely attenuated behind, distant. Flesh of pileus pink, of stem white. Spores white, elliptical, 10–11 × 7–8μ, 1-guttulate. Pastures, heaths, and woods. Aug.—Oct. Not uncommon. (v.v.)


Differs from the type in being entirely snow-white. Pastures, and lawns. Aug.—Oct. Uncommon. (v.v.)

955. H. chlorophanus Fr. Boud. Icon. t. 41.

χλωρός, pale green; φαινω, I appear.

Entirely rich yellow, becoming pale, rarely scarlet, fragile. P. 3–5 cm., submembranaceous, convex, then plane and depressed, obtuse, orbicular, lobed, at length cracked, viscid, often striate. St. 3–8 cm. × 4–8 mm., equal, often compressed, viscid, sometimes sulcate in the middle. Gills white, then sulphur yellow, emarginato-adnexed, very ventricose, thin, distant. Flesh yellow, deeper coloured under the cuticle. Spores white, broadly elliptical, 7–8 × 5–6μ. Taste mild. Edible. Pastures, heaths, and woods. July—Nov. Common. (v.v.)

956. H. psittacinus (Schaeff.) Fr. Boud. Icon. t. 42.

ψίττακος, a parrot.

P. 2–5 cm., green at first from the gluten, then yellowish, whitish, or brick colour, and finally purplish, campanulate, then expanded, umbonate, striate. St. 4–7 cm. × 4–7 mm., green at first from the gluten, which is persistent at the apex, then yellowish, equal, often bent, toughish. Gills yellow, greenish at the base, adnate, ventricose, thick, broad, subdistant. Flesh white, tinged with green and yellow. Spores white, elliptical, 8–9 × 4–5μ. Taste mild. Edible. July—Nov. Common. (v.v.)

957. H. spadiceus (Scop.) Fr. Fr. Icon. t. 168, fig. 1.

σπάδιξ, date-brown.

P. 1–6 cm., olivaceous date-brown, black and shining when dry, fragile, campanulate, then expanded, obtuse, or acute, very glutinous,
HYGROPHORUS. CLITOPILUS


958. **H. unguinosus** Fr. Fr. Icon. t. 168, fig. 2. Unguinosus, oily.

P. 3–6 cm., smeared with dense fuliginous gluten, slightly fleshy, campanulate, then convex, obtuse, very fragile, even, or at length rimosely incised. St. 5–9 cm. x 5–10 mm., concolorous, glutinous, attenuated at the base and apex, unequal, somewhat compressed. Gills shining white becoming glaucous, adnate, very ventricose, distant, thick, broad, connected by veins. Flesh greyish. Spores white, broadly elliptical, 9 x 7μ, with a large central gutta. Woods, and pastures. Aug.—Oct. Common. (v.v.)

959. **H. obscuratus** Karst. Obscuratus, darkened.

P. 3–4 cm., sooty, or livid blackish, mouse colour when dry, fragile, convex, obtuse, dry, squamulose. St. 4–6 cm. x 4–8 mm., pallid, centre often tinged smoky, unequal, usually inflated below, wavy, glabrous. Gills whitish, or glaucous, sinuato-adnate. Spores white, elliptical, 7–10 x 3–5μ. Pastures. Sept. Rare.


P. 1–6 cm., fuscous-cinereous, becoming pale, scarcely fleshy, very fragile, convex, obtuse, dry, squamulose. St. 2.5–10 cm. x 2–12 mm., whitish, grey, or yellowish, equal, often twisted, fragile, sometimes compressed, base attenuated. Gills whitish, then becoming glaucous, broadly emarginate, broad, distant, thick, mucid-soft, connected by veins. Flesh grey, darker under the cuticle of the pileus. Spores white, pip-shaped, 6–7 x 4–5μ, 1-guttulate. Smell strong, nitrous. Pastures, and heaths. Aug.—Nov. Not uncommon. (v.v.)

var. glauco-nitens Fr. γλαυκός, pale green; nitens, shining.


Spores pink.

**Clitopilus** Fr.

(κλίτος, a slope; πίλος, cap.)

Pileus fleshy, regular, or irregular. Stem central fleshy. Gills decurrent. Spores pink, elliptical, fusiform, globose, oblong, angular, smooth, or verrucose, continuous. Growing on the ground.
1. P. irregular; margin at first flocculose. Gills deeply decurrent.

961. **C. prunulus** (Scop.) Fr. (= *Clitopilus orcella* (Bull.) Fr.) Cke. Illus. no. 343, t. 322. **Prunulus**, a little plum.

P. 3–11 cm., white, or yellowish, or more rarely becoming cinereous, fleshy, compact, convex, then flattened, at length depressed and repand or unequal, viscid when moist, delicately pruinose, often spotted, or zoned; margin involute, thin, mealy. St. 2–6 × 1–1.5 cm., white, ventricose, or thickened upwards, pruinose, or villose, often striate, cottoony at the base. Gills white, then flesh colour, deeply decurrent, attenuated at both ends. Flesh white. Spores pink, fusciform, 11–13 × 5μ, 1–2-guttulate. Cystidia none. Smell and taste of new meal. Edible. Woods, and pastures. June—Nov. Common. (v.v.)

962. **C. mundulus** (Lasch) Fr. (= *Clitopilus pseudo-orcella* Fr. sec. Quél.) Cke. Illus. no. 345, t. 375, fig. A. **Mundus**, neat.

P. 3–5 cm., becoming pale white, then spotted cinereous, at length becoming black, fleshy, thin, convex, gibbous, soon flattened and depressed, unequal repand, often excentric, rivulose, or even, floccoso-soft; margin involute. St. 2–3 cm. × 4 mm., white, subequal, floccosovillose, base white-villose. Gills pallid, deeply decurrent, very crowded, narrow, thin, with many shorter ones intermixed. Flesh white, soft, becoming black in the stem. Spores elliptical, 8–11 × 4–5μ. Taste bitter. Woods, amongst leaves. Aug.—Oct. Uncommon. (v.v.)

var. **nigrescens** (Lasch) Fr. **Nigrescens**, becoming black.

Differs from the type in the whole of the flesh becoming black.

963. **C. popinalis** Fr. (= *Paxillus amarellus* (Pers.) Quél.) Fr. Icon. t. 96, fig. 1. **Popinalis**, belonging to a cook-shop.

P. 2–5 cm., cinereous, here and there mottled with guttate spots, slightly fleshy, flaccid, convex, then depressed, somewhat repand; margin thin, inrolled, pruinose, grey. St. 2–5 cm. × 5–12 mm., paler than the p., subequal, often flexuose, attenuated, or somewhat bulbous at the white, cottoony base. Gills ochraceous, then grey, deeply decurrent, thin, narrow. Flesh grey, becoming white. Spores pink, globose, 4–6μ, warded. Cystidia none. Smell of new meal, or rancid. Downs, fields, and sandy sea-shores. Aug.—Oct. Uncommon. (v.v.)

964. **C. undatus** Fr. (= *Eccilia undata* (Fr.) Quél.; *Clitopilus vilis* Fr. sec. Quél.) Fr. Icon. t. 96, fig. 4. **Undatus**, waved.

P. 2–4 cm., fuliginous cinereous, becoming pale, membranaceous, convex, then depressed, umbilicate, sometimes infundibuliform, unequal, undulated, often somewhat zoned, pruinose, silky. St. 2–3 cm. × 2–4 mm., concolorous, entirely fibrous, unequal, compressed,
mealy; base cottony, white, and attenuated. Gills dark cinereous, deeply decurrent, 4 mm. broad, thin, entire, or undulate. Spores "distinctly rusty-brown, pure yellow under the microscope, elliptical, 7–8 × 4–5 μ" Rick. Downs, and hilly pastures. Sept.—Oct. Uncommon. (v.v.)

var. viarum Fr.

Via, a way.

Differs from the type in the greyish hoary, smooth, shining, zoned p., and glabrous stem.

965. C. cancrinus Fr. (=Eccilia cancrina (Fr.) Quél.) Fr. Icon. t. 95, fig. 4.

Cancer, a crab.

P. 2–3 cm., whitish tan, or wholly white, becoming pale, slightly fleshy, submembranaceous, convex, then plane, very irregularly shaped, at length broken into cracks, becoming flocculoso-even. St. 2–2.5 cm. × 2–4 mm., white, round, or compressed, equal, or enlarged upwards, base white-villose, the mycelium often gathering the soil into a ball. Gills white, then flesh colour, truly decurrent, distant, 3 mm. broad, rather thick, arcuate when young then straight. Flesh white, hyaline near the gills. Spores pink, angular, oblong, 9 × 5–6 μ, multi-guttulate. Pastures, and roadsides. July—Oct. Not uncommon. (v.v.)

966. C. cretatus B. & Br. Cke. Illus. no. 345, t. 375, fig. B.

Cretatus, marked with chalk.

P. 6–18 mm., dead white, but shining, membranaceous, convex, then umbilicate, margin involute. St. 4–6 × 1–2 mm., white, often curved at the base, sometimes thickened, tomentose, especially below. Gills rose colour, very decurrent, narrow. Flesh white. Spores pink, elliptical, 7–8 × 3–4 μ. Woods, and pastures. Aug.—Oct. Uncommon. (v.v.)

II. P. regular, silky, or hygrophanous-silky; margin naked.

Gills adnate, slightly decurrent.

967. C. carneo-albus (With.) Fr. (= Eccilia carneo-alba (With.) Quél.) Cke. Illus. no. 349, t. 324, upper figs.

Caro, flesh; albus, white.

P. 1.5–3 cm., white, disc often becoming reddish, or yellowish, convex, then expanded and depressed, slightly silky. St. 2–3 cm. × 4–6 mm., white, unequal, fibroso-striate, silky. Gills white, then flesh colour, adnato-decurrent, narrow. Flesh white, thin. Spores pink, angular, "10×6 μ" Sacc. Woods, and heaths. Sept.—Oct. Uncommon. (v.v.)

968. C. angustus (Pers.) Fr. Fr. Icon. t. 96, fig. 3. Angustus, narrow.

P. 1–2 cm., bluish-grey-cinereous, somewhat fleshy, convexo-plane, subumbonate, hygrophanous, silky-shining when dry. St. 7–8 × 1–

969. **C. Sarnicus** Massee. Sarnicus, belonging to Guernsey.

P. 2–3 cm., mouse colour, paler with a ruddy tinge when dry, campanulate, then quite plane, subumbonate, often more or less depressed round the umbo, slightly striate when moist, minutely silky flocculose. St. 2–3 cm. × 2 mm., white, equal, slightly flexuose. Gills pinkish salmon colour, plane nearly up to the stem then suddenly decurrent, 3–4 mm. broad, rather crowded. Flesh very thin. Spores pink, nodulose, with an apiculus, 7–8 × 6 μ. Amongst grass. Rare.

970. **C. vilis** Fr. (= Eccilia undata (Fr.) Quél.) Cke. Illus. no. 351, t. 487.


P. 2–6 cm., yellowish white, or greyish, sparkling with atoms, whitish and rather silky when dry, campanulate, obtuse, sometimes umbonate, hygrophanous; margin straight. St. 5–8 cm. × 3–8 mm., white, or greyish, somewhat equal, undulato-fibrillose. Gills salmon colour, adnate, sometimes emarginate behind, 3–5 mm. broad, veined. Flesh whitish. Spores pink, angular, oblong, 9–12 × 6–9 μ, 1-guttulate. Smell pleasant of new meal. Pastures. Aug.—Sept. Uncommon. (v.v.)


Worthington G. Smith, the eminent mycologist.

P. 2–4 cm., whitish, or with a dingy yellow tinge, soon becoming plane and orbicular, sometimes undulated, atomate. St. 5–7-5 cm. × 3–4 mm., pallid, with a reddish tinge below, tapering very slightly upwards, undulated, base white, downy. Gills salmon colour, broadly adnate with a slight decurrent tooth, 4 mm. broad. Flesh white, rather thick except at the margin. Spores pink, globose, 4 μ. Oct. Rare.

*Stramen, straw; pes, foot.*


Spores *ochraceous*, or ferruginous.

**Flammula** Fr.

*(Gymnophilus (Karst.) Murr. sec. Maire.)*

*(Flammula, a little flame.)*

Pileus fleshy, regular, viscid, or dry. Stem central, fleshy, or fibrous. Gills decurrent, or adnate with a decurrent tooth. Spores *ochraceous*, ferruginous, or fuscous, elliptical, oblong elliptical, globose, or navicular; smooth, punctate, or verrucose; continuous, or with a germ-pore. Cystidia present, rarely none. Growing on the ground, or on wood; solitary, gregarious, fasciculate, or caespitose.

I. Veil *none*; p. dry, most frequently squamulose. Spores ferruginous, in *Flammula decipiens* fuscous ferruginous.

974. **F. gymnopodia** (Bull.) Fr. (= *Armillaria mellea* (Vahl.) Fr. var. tabescens (Scop.) Rea sec. Quél.) *γυμνός*, naked; *πονή*, foot.


975. **F. Aldridgei** Massee. (= *Flammula veluticeps* Cke. & Massee.)

Miss Emily Aldridge.

P. 2–5 cm., *brick red with a tinge of orange*, or *tawny orange*, fleshy, convex, *then infundibuliform*, with a subinvolute margin, *minutely velvety*. St. 7–10 cm. × 6–8 mm., *concolorous*, equal, flexuose, smooth, base with a white floccose mycelium. Gills *golden yellow*, *then ferruginous-orange*, deeply decurrent, lanceolate, 3 mm. broad, rather crowded. Spores ferruginous orange, elliptical, slightly apiculate at the base, 16 × 5 μ. Gregarious. Amongst moss on the ground in woods. Sept. Rare.

976. **F. vinosa** (Bull.) Fr. Cke. Illus. no. 466, t. 437.

*Vinosa, full of wine.*

P. 2–4 cm., *ferruginous fawn*, fleshy, expanded, at length depressed, dry, *delicately flocculose*. St. 2–3 cm. × 6 mm., *pale*, firm, somewhat thickened at the base, *delicately flocculose*. Gills *ferruginous*, decurrent,
simple, narrow, crowded. Spores "pale brown, 5μ long, ovate” Sacc. On the ground. Rare.

_F. paradox_ = _Paxillus parado_ (Kalchbr.) Quél.

_F. Tammi_ Fr. = _Paxillus paradox_ (Kalchbr.) Quél.

977. _F. clitopila_ Cke. & Sm. Cke. Illus. no. 468, t. 500.

κλιτός; a slope; πίλος, cap.

P. 2·5–5 cm., purplish brown, or madder brown, fleshy, convex, then expanded, disc depressed and umbilicate, smooth, dry. St. 5·7–5·1–5·5 cm., fuliginous, ventricose, erect, with a few scattered fibrils towards the base. Gills pallid, or yellowish, slightly adnexed, ventricose, scarcely crowded. Flesh white, brown in the st., fairly thick. Spores brown, elliptical, 10 × 4μ. Amongst firs. Nov. Rare.


P 2·5–5 cm., purple, or purple brown, fleshy, convex, then expanded, obtusely umbonate, clad with minute, floccose, concolorous scales, dry. St. 2·5–5 cm. × 4–6 mm., pallid above, purple below, equal, curved, ascending, apex smooth, granular downwards. Ring imperfect, fibrillose. Gills lemon yellow, at length bright ferruginous, adnate, somewhat rounded behind, subdistant, narrow. Flesh purplish, yellow at the apex of the st., thick at the disc. Spores ferruginous, elliptical, 8 × 5μ. Taste very bitter. Tree-fern stems. May. Rare.

979. _F. floccifera_ B. & Br. Cke Illus. no. 467, t. 438, upper figs.

Floccus, a flock of wool; fero, I bear.

P. 4–5 cm., tawny, fleshy, convex, then expanded, sprinkled with snow-white fibrils, becoming somewhat zoned in drying. St. 3–4 cm. × 6 mm., white, attenuated downwards, silky scaly, apex furfuraceous. Gills ferruginous, edge white, adnate, rounded behind, scarcely ventricose, moderately broad, wrinkled transversely. Flesh white, tawny at the edge, and beneath the cuticle of the p., umber in the st., fleshy at the disc. Spores ferruginous. Caespitose. On lime stumps. Oct. Rare.

980. _F. decipiens_ W. G. Sm. Cke. Illus. no. 467, t. 438, lower figs.

Decipiens, deceiving.

P. 2·5–3 cm., rich brown, becoming pale, and almost white at the disc, fleshy, convex, very obtuse, or umbonate, at length sometimes depressed round the umbo, dry, minutely squamulose. St. 3–6 cm. × 4–6 mm., rich tawny, attenuated downwards, often twisted, striate. Gills orange brown, decurrent, 4 mm. broad, crowded. Flesh golden yellow, bright brown at base of st., thick at the disc. Spores orange brown, elliptical, apiculate at the base, 6–7 × 4μ. Inclined to be fasciculate. Charcoal heaps, and burnt earth. June—Oct. Uncommon. (v.v.)

    *Nitens*, shining.

    P. 2-5 cm., *dark purple brown*, fleshy, hemispherical, convex, then expanded, obtuse, shining, dry, somewhat silky. St. 4-7.5 x 1 cm., *flesh colour*, or *pale pinkish brown*, equal, fibrillose, incurved. Gills *pallid*, then *umber*, adnate, 4-6 mm. broad, crowded. Flesh *white*, thin at the margin. Spores pale brown, almond-shaped, 10 x 5-7 µ. Caespitose. On the ground. Aug.—Sept. Rare.

II. P. covered with a continuous, somewhat separable, smooth, viscid pellicle; cortina manifest fibrillose. Spores ferruginous, not tawny; fuscous ferruginous in *Flammula carbonaria*. *Gregarious*, growing on the ground, rarely on wood.

**F. lenta** (Pers.) Fr. = *Hebeloma glutinosum* (Lindgr.) Fr.

982. **F. lubrica** (Pers.) Fr. Fr. Icon. t. 116, fig. 1.  

    *Lubrica*, slimy.

    P. 5-10 cm., *brick-red tawny*, or *bright cinnamon*, sometimes pallid with the disc tawny, fleshy, convex, then flattened, obtuse, or slightly umbонate, sometimes depressed and repand, *viscid*, smooth, sometimes spotted with glued down scales; margin sometimes striate. St. 5-10 cm. x 6-10 mm., *whitish*, at length *becoming fuscous*, equal, or slightly attenuated upwards, dry, *laxly fibrillose*, base pubescent. Gills *pallid*, then *clay colour*, adnate, subdecurrent, 6 mm. broad, crowded. Flesh *white*, thick at the disc, tough. Spores *pale rusty brown*, “cylindrical-elliptical, nearly reniform, 5-6 x 3-3.5 µ, smooth.


983. **F. lupina** Fr.

    *Lupina*, pertaining to a wolf.

    P. 7-10 cm., *brown*, *tan fuscous*, or *tawny*, fleshy, convex, obtuse, then plano-depressed, *smooth*, covered with a viscid, easily separable pellicle. St. 2.5 cm. x 12 mm., *whitish at the apex*, elsewhere *ferruginous with dense adpressed fibrils*, sometimes *light yellowish*, firm, thickened either upwards or downwards. Gills *clay colour*, or *light yellowish*, adnato-decurrent, broad, moderately crowded. Flesh *white*, becoming *ferruginous in the st.*, soft. Spores “nearly elliptical-oval, 9-10 x 5-6 µ, smooth, almost colourless under the microscope. Cystidia on edge of the gill ventricose-fusiform, with a long pointed clavate apex, 50-60 x 9-12 µ” Rick. Smell very strong or mild. Taste very bitter. Pastures. Aug.—Oct. Uncommon.

984. **F. mixta** Fr. Cke. Illus. no. 474, t. 476.

    *Mixta*, mixed.

    P. 2.5-5 cm., *dingy tan*, fleshy, convexo-plane, obtuse, disc unequal, *darker*, *rugulose*, smooth; margin sloping, paler. St. 2.5-7.5 cm. x 6-


*Juncina*, pertaining to a rush.

P. 3–4 cm., sulphury yellow, *disc rich brown*, fleshy, hemispherical, convex. St. 8–10 cm. × 4–6 mm., sulphur yellow, base *tawny*, attenuated downwards, clothed with a few fibres. Gills red brown, decurrent, 4–6 mm. broad, very thin. Flesh sulphur *whitish*, brownish towards the base of the st., thin at the margin. Taste nauseous and disagreeable, somewhat bitter. Dead bulrushes in an old clay pit. Nov. Rare.

986. **F. gummosa** (Lasch) Fr. Fr. Icon. t. 116, fig. 2.

*Gummosa*, sticky.

P. 3–6 cm., pallid light yellow, or becoming green, at length *ferruginous with the spores*, paler at the circumference, fleshy, regular, campanulate, then soon flattened, obtuse, or depressed, covered with a separable, viscid pellicle, *sprinkled with superficial floccose scales*, then smooth. St. 4–7.5 cm. × 4–6 mm., ferruginous, rubiginous at the base, paler upwards, equal, tense, straight, rigid, silky fibrillose. Gills pale yellowish white, *then cinnamon*, adnate, narrow, crowded. Flesh *becoming yellow*, thin. Spores yellow, elliptical, 5–7 × 3–4µ, smooth. *Cystidia* on the surface of the gill sparse, subulate-fusiform, 30–40 × 7–8µ, on edge of the gill cylindrical, capitate, flexuose, apex 6–7µ in diam., 40–45 × 4–5µ. On and about old stumps, and in grassy places. Oct.—Dec. Uncommon. (e.v.)

987. **F. decussata** Fr. (=*Flammula carbonaria* Fr. var. decussata Fr. sec. Quél.) Kalchbr. Icon. t. 15, fig. 1.

*Decussata*, divided crosswise.

P. 3–4 cm., crust *colour*, fleshy, convex, then plane, viscid, virgate with innate, radiating, darker fibrils; disc gibbous, darker. St. 3–5 cm. × 4 mm., pallid above, elsewhere becoming fulvous, equal, adpressedly fibrillose. *Cortina* manifest. Gills yellowish, *then clay colour*, adnate, narrow, crowded. Flesh *white*, becoming yellowish under the separable pellicle. Spores “7–8 × 3µ” Sacc. Beech woods. Rare.

988. **F. spumosa** Fr. Fr. Icon. t. 116, fig. 3. *Spumosa*, full of foam.

P. 3–5 cm., pallid light yellow, *disc often darker*, fleshy, convex, then plane, subumbonate, *very viscid*, pellicle separable, *naked*. St. 5–
10 cm. × 4 mm., light yellow, or concolorous, sometimes olivaceous fusous, attenuated downwards, more or less fibrillose, remarkably cortinate. Gills light yellow, then ferruginous, adnate, crowded. Flesh light yellow, becoming green, watery, thin. Spores pale ferruginous, bluntly elliptical, 8–9 × 4–5 μ, 2-guttulate. Cystidia “flask-shaped, 50–60 × 10–15 μ, long-necked” Rick. Gregarious, or subcaespitose. Woods, especially fir, sawdust, pastures, and rarely on trunks. Sept.—Dec. Rare. (v.v.)

989. **F. carbonaria** Fr. Cke. Illus. no. 475, t. 442

*Carbonaria*, pertaining to charcoal.


III. Cuticle of the p. continuous, not distinct, nor separable, smooth (here and there with a superficial covering), *moist*, or a little *viscid in wet weather*. Cortina manifest, appendiculate. Spores not tawny, nor ochraceous. Caespitose, growing on wood.

990. **F. filia** Fr. Fr. Icon. t. 117, fig. 1. **Filia**, a daughter.


991. **F. fusus** (Batsch) Fr. **Fusus**, a spindle.

P. 5–9 cm., *somewhat brick colour*, fleshy, convex, then plane, obtuse, smooth, slightly viscid. St. 4–6 × 1–1:5 cm., *pallid*, firm, attenuated downwards in a fusiform manner, rooting, *fibrillosely striate*. Cortina manifest, appendiculate. Gills *pallid*, or light yellow, then ferruginous, sometimes becoming green grey, subdecurrent, not very crowded. Flesh *pallid*, becoming *yellowish*, compact, firm. Spores dingy ferruginous, subelliptical, 8–9 × 4–5 μ. Cystidia “flask-shaped or clavate with a


Differs from the type in the bright deep orange p. with darker disc, the pale orange st., the bright yellow gills, and the reddish tinge of the flesh. On the ground. Nov. Rare.

992. F. astragalina Fr. Fr. Icon. t. 117, fig. 2.

\[\text{áστραγαλίνος, a goldfinch.}\]

P. 3–8 cm., blood saffron, or golden flesh colour, darker at the disc, pale at the circumference, fleshy, convex, or lens-shaped, then flattened, obtuse, somewhat moist in rainy weather, smooth, at first superficially-silky round the margin with the very thin, adpressed, whitish veil. St. 5–10 cm. × 4–6 mm., concolorous, or paler, equal, or attenuated downwards, flexuose, floccosely fibrilllose. Cortina white, manifest, appendiculate. Gills pallid light yellow, concolorous with the p. at the base, adnate, broad, crowded, edge obtuse, flocculose when young. Flesh concolorous, becoming black when wounded, or bruised, firm. Spores pale ferruginous, broadly elliptical, 6 × 3–4 μ, 1-guttulate. Cystidia “clavate-lanceolate, 50–75 × 12–15 μ, filled with olive brown juice” Rick. Taste bitter. Subcaespitose. Pine and fir stumps, and dead branches. Aug.—Oct. Uncommon.

993. F. rubicundula Rea. Grevillea, xxii (1894), t. 185, fig. 2.

Rubicundula, somewhat ruddy.

P. 4–6 cm., yellow, then tinged with red, at length tawny orange, fleshy, convex, then plane, often splitting at the margin, viscid at first and innately fibrilllose, soon becoming smooth; margin at first veiled. St. 5–6 × 1:5–2:5 cm., whitish, then tinged with red and becoming red at the base, equal, or attenuated downwards, fibrilllose below the veil, apex white mealy. Veil white, then yellowish and at length reddening. Gills light ochre, then ferruginous, adnate with a sinus, or adnato-decurrent, often forming a ring-like zone at the apex of the st., often separating, 3–4 mm. broad, crowded; edge unequal, tinged red with age or when bruised. Flesh bright yellow, then lighter. Spores ferruginous, elliptical, 9–10 × 4–5 μ, 1–2-guttulate. Taste acrid. The whole plant becoming reddish with age, or when touched. Woods, under scrub oak. July—Sept. Uncommon. (v.v.)

994. F. alnicola Fr. Cke. Illus. no. 480, t. 443.

Alnus, alder; colo, I inhabit.

P. 3–8 cm., yellow, at length becoming ferruginous, and sometimes green, fleshy, convex, then flattened, obtuse, slimy when moist, at first superficially fibrilllose towards the margin. St. 4–9 cm. × 6—

var. salicicola Fr. Salix, willow; colo, I inhabit.

Differs from the type in the glabrous, rarely at the first fuscocesely squamulose, gibbous p., and the gills being at first yellowish pallid. On willow. Sept. Rare.

995. F. flavida (Schaeff.) Fr. Cke. Illus. no. 481, t. 444.

Flavida, light yellowish.

P. 2·5–12·5 cm., bright light yellow, fleshy, convex, then expanded, obtuse, smooth, moist, generally regular. St. 4–9 cm. × 6–10 mm., light yellow, becoming ferruginous towards the base, either attenuated, or thickened downwards, subflexuose, fibrillose. Cortina white, manifest, woven, adhering to the margin of the p., rarely almost forming a ring. Gills whitish, then light yellow, at length tawny ferruginous, adnate, not much crowded. Flesh white, becoming light yellow, thin at the margin. Spores ferruginous, broadly elliptical, 5–8 × 4 μ, 1–2-guttulate. Cystidia "clavate, 36–40 × 8–9 μ, filled with golden yellow juice" Rick. Caespitose. On trunks, stumps, and buried wood. Aug.—Nov. Common. (v.v.)


Inaurata, gilded.

Entirely sulphur yellow. P. 2–3 cm., fleshy, convex, then expanded, moist, smooth, furnished with a distinct veil. St. 2·5–3·5 cm. × 4 mm., incurved, clothed with innate scales. Veil slight, fibrillose, fugitive. Gills pale yellowish clay colour, adnate with a decurrent tooth, broad. Flesh yellowish, ferruginous at base of the st. Taste mild. Single, or caespitose. Willows. Nov. Rare.


kusus, dust.

P. 1–7·5 cm., light yellowish tan, fleshy, hemispherico-expanded, obtuse, or umbilicate, moist, smooth. St. 5–8 cm. × 4–10 mm., becoming light yellow white, equal, or attenuated downwards, often compressed, irregular, twisted, silky, base white-villose. Cortina white, silky-fibrillose, appendiculate. Gills whitish, then fuscous clay colour, adnate with a decurrent tooth, linear, 3–4 mm. broad, very crowded. Flesh white, or pale yellow, equal, 2 mm. thick. Spores dark ferruginous, elliptical, 8 × 4 μ. Cystidia "on edge of gill

998. **F. inopus** Fr. (= *Flammula fusus* (Batsch) Fr. sec. Quél.) Fr. Icon. t. 118, fig. 1. 

P. 3–10 cm., *honey tan*, or *reddish tan*, paler round the margin, fleshy, convex, then expanded, obtuse, slippery (almost viscid) when moist, and *smooth* when dry. St. 7–25 cm. × 2–10 mm., *pallid*, brick colour downwards, equal, or slightly enlarged before continuing into the long, tapering, rooting base, tough, flexuose, adpressedly fibrilloose. Cortina fugacious. Gills *pale yellowish white*, sometimes *green*, then becoming purplish, adnate, margined, 4–6 mm. broad, thin, crowded. Flesh *concolorous*, becoming *whitish*, *ferruginous* in the st., thin at the margin. Spores purple, broadly elliptical, 8 × 5 μ, 1-guttulate. Solitary, or caespitose. Pine trunks, and stumps. May—Dec. Not uncommon. (v.v.)

999. **F. apicerea** Fr. (= *Flammula alnicola* Fr. var. *salicicola* Fr. sec. Quél.) Cke. Illus. no. 485, t. 436. 

P. 3–7·5 cm., *dingy orange*, or *deep tawny*, disc darker, fleshy, convex, then expanded and almost plane, gibbous, or obtusely umbonate, smooth, moist; margin often splitting. St. 5–10 cm. × 4–10 mm., *pallid*, ferruginous downwards, equal, or attenuated downwards, covered with ferruginous fibrils, somewhat striate. Gills ferruginous, *shining*, adnate, or sinuate, 4–5 mm. broad, thin, crowded, edge often uneven. Flesh *yellow*, tawny under the cuticle of the p., and ferruginous in the base of the st., thin at the margin. Spores ferruginous, elliptical, 8 × 5 μ, 2–3-guttulate. Taste *mild*. Subcaespitose. Stumps, base of trees, and deal boards. Sept.—Dec. Uncommon. (v.v.)

1000. **F. carnosa** Massee.

Carnosa, fleshy.

P. 2–3·5 cm., *dull tawny orange*, very fleshy, soon expanded, broadly gibbous, edge remaining more or less incurved for some time, even, smooth. St. 5–7·5 cm., *concolorous*, subequal, fibrous. Gills *rust coloured*, powdered with the spores, slightly decurrent, thin, somewhat crowded. Flesh *yellowish*, compact, 1 cm. or more thick at the disc, thin at the extreme edge. Spores brown, elliptical, 7 × 5 μ. Tufted in small clusters. On wood. Sept. Rare.

1001. **F. azyma** Fr. 

*άζυμος*, unleavened.

P. 2–3 cm., *ferruginous*, *tan colour when dry*, fleshy, convex, then plane, obtuse, smooth when in full vigour, becoming silky and rimosely squamulose when dry. St. 2·5–4 cm. × 4–6 mm., *concolorous*, or *paler*, firm, somewhat equal, often curved, or flexuose, *slightly fibrilloose*, base white woolly. Cortina fugacious, sometimes forming a ring-like

IV. P. scarcely pelliculose, flesh scissile, or torn above into scales, not viscid, at first somewhat hoary. Veil fibrillosely adpressed to the st., not furnished with an appendiculate cortina, almost none, or forming an annular zone on the st. Gills light yellow, or yellow, then tawny. Spores ochraceous, or tawny. Subcaespitose, always on conifers, or on the ground amongst conifer branches.

1002. **F. penetrans** Fr. Fr. Icon. t. 118, fig. 2. **Penetrans**, penetrating.

P. 5–8 cm., yellowish tawny, or golden, becoming pale and yellowish, fleshy, convex, then plane, obtuse, often irregular, dry, smooth, hoary under a lens when young. St. 5 cm. × 6–10 mm., pallid, or yellowish becoming pale, firm, somewhat equal, base white villous and often rooting, sometimes fusiform when on the ground, silky, striate with tawny fibrils. Cortina white, flocculose, submembranaceous, very fugacious. Gills whitish, then pale yellow, spotted tawny when old, adnate, emarginate, 4–6 mm. broad, crowded. Flesh whitish ("pale sulphur yellow" Quél.), thick at the disc. Spores ochraceous, elliptical, “8–9 × 4–5μ” Sacc. Taste bitter. Gregarious. Coniferous stumps, and humus. Oct. Uncommon.

1003. **F. hybrida** Fr. **Hybrida**, a mongrel.

P. 4–5 cm., tawny cinnamon, then tawny orange, fleshy, hemispherical, with the margin involute, then expanded, obtuse, regular, well formed, smooth, moist. St. 5–7·5 cm. × 5–10 mm., becoming tawny, equal, or attenuated upwards, somewhat striate, apex often somewhat mealy, base white villous. Cortina white, at length coloured with the ferruginous spores, manifest, forming a ring at the apex of the st. Gills light yellow, then tawny, adnate, somewhat crowded. Flesh pallid, or yellow, moderately compact. Spores ferruginous, oblong-elliptical, 9 × 4μ, “roughish. Cystidia on edge of gill filamentous, subcapitate, 45–50 × 4–6μ” Rick. Taste bitter. Growing in troops. On fir stumps, and fallen branches. Aug.—Dec. Uncommon. (v.v.)

1004. **F. sapinea** Fr. Fr. Icon. t. 118, fig. 3. **Sapínea**, pertaining to a fir tree.

P. 2·5–10 cm., golden tawny, opaque at the disc, paler and shining towards the margin, fleshy, hemispherical, then convexo-plane, very

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obtuse, dry, covered with thin, squamulose, adpressed floccules, often rimosely scaly, with a few remnants of the yellowish cortina at the margin. St. 4–6 cm. × 4–12 mm., becoming yellow pallid, turning fuscous when bruised, irregularly shaped, often compressed, very fleshy, fibrous, sulcate, or lacunose, naked, often rooting at the base. Gills golden, at length tawny-cinnamon, adnate, plane, 8 mm. broad, crowded. Flesh becoming yellow, thick, firm, but at length soft, not scissile. Spores deep ochraceous, elliptical, 7–8 × 4–5 μ, "roughish. Cystidia ventricose-fusiform, 36 × 9 μ" Rick. Smell strong, taste often bitter. Subcaespitose. Coniferous stumps, branches, and saw-dust. Aug.—Nov. Common. (v.v.)

var. terrestris Fr. Terrestris, pertaining to the earth.

Differs from the type in the long, fusiform st. Growing on coniferous humus.

1005. F. liquiritiae (Pers.) Fr. Fr. Icon. t. 119, fig. 1.

Liquiritia, liquorice.

P. 2·5–7·5 cm., bay brown, or orange tawny, becoming pale, fleshy, convex, then flattened, subumbonate, very smooth, moist; margin at length flaccid, slightly striate. St. 4–5 cm. × 4–6 mm., tawny, then ferruginous, attenuated upwards, often unequal, curved, striate, somewhat naked, or obsolescent pruinose at the apex, base thickened and villose. Cortina none. Gills golden, then tawny, obtusely adnate, sometimes rounded, separating, 6 mm. broad, plane, crowded. Flesh yellow, yellow tawny in the st., thin, scissile. Spores ochraceous, "sub-elliptical, 8–9 × 5–6 μ. Cystidia on edge of gill subcylindrical, slightly ventricose-capitate, 30–40 × 6–9 μ" Rick. Taste slightly bitter, then sweet like liquorice. Subcaespitose. Fir stumps, rarely pine. Oct. Uncommon.

1006. F. picrea Fr. Fr. Icon. t. 119, fig. 2. πικρός, bitter.

P. 2–3 cm., rufous, or bay brown cinnamon, becoming pale and tawny, fleshy, campanulate, then convex, obtuse, regular, smooth, rarely rimuloso-papillate, moist in rainy weather. St. 5–7·5 cm. × 2–4 ·mm., umber, slightly attenuated upwards, tense and straight, white-pulverulent when young. Cortina none. Gills yellow, then ferruginous, adnate, or decurrent and separating, ascending, narrow, 1–2 mm. broad. Flesh concolorous, very thin, not easily scissile. Spores ferruginous, "elliptical, 8–10 × 5–6 μ" Schroet. Taste acid. Caespitose. Pine stumps, and old deal boards. Sept.—Dec. Uncommon. (v.v.)

V. Furnished with a cortina. Cuticle of the p. slightly silty, dry, or at the first viscid.

P. 1–4 cm., *whitish*, fleshy, orbicular, rather plane, depressed in the centre, *fibrilloso with white*, adpressed, fugacious hairs, viscid when moist, shining when dry; *margin fringed with strigose hairs*. St. 2.5–7.5 cm. × 4–5 mm., *whitish*, slightly attenuated upwards, *fibrilloso-even* at the apex, often becoming reddish in places. Gills *whitish*, becoming *pallid fuscous*, then *clay fuscous*, decurrent, 1–2 mm. broad, thin, crowded. Flesh *white*, thin at the margin. Spores pale ochraceous, globose, 3–5 μ, minutely verrucose. Cystidia none. Woods. Sept.—Nov. Not uncommon. (v.v.)

1008. **F. strigiceps** Fr. (= *Paxillus tricholoma* (A. & S.) Quél.)

*Strix*, a furrow; *caput*, head.


1009. **F. helomorpha** Fr. (= *Paxillus helomorphus* (Fr.) Quél.) Fr. Icon. t. 120, fig. 4. 

ηλος, a nail; μορφη, form.

P. 1–3 cm., *white*, fleshy, convexo-plane, gibbous, or with a broad, obtuse, prominent umbo, often angular, viscid, becoming adpressedly *fibrilloso-even when dry*; margin thin, unequal, inflexed, naked. St. 2–3 cm. × 4–6 mm., *whitish*, equal, or not perceptibly attenuated from the base, sometimes enlarged upwards, ascending from the incurved base, adpressedly silky, or pruinose upwards under a lens, smooth. Gills *whitish*, scarcely *clay colour*, plano-decurrent, 1–2 mm. broad, very crowded. Flesh *whitish*, thick at the disc. Spores pale ochraceous, globose, 4–5 μ, minutely verrucose. Fir woods. Oct.—Nov. Uncommon. (v.v.)

1010. **F. scamba** Fr. (= *Paxillus scambus* (Fr.) Quél.) Fr. Icon. t. 120, fig. 3.

σκαμβος, crooked.


1011. **F. ochrochloria** Fr. Fr. Icon. t. 120, fig. 2.

ὀξρος, pale; χλωρος, green.

P. 2.5–5 cm., *straw colour*, becoming *greenish*, fleshy, convex, then
plane, obtusely umbonate, dry, silky, squamulose. St. 5–6 cm. × 4–10 mm., yellowish, becoming ferruginous towards the base, attenuated upwards, often curved, or flexuose, squamuloso and white floccose. Cortina white, manifest, Hypholoma-like. Gills whitish, then becoming greenish, and at length olivaceous, adnate, or somewhat sinuate, 2–4 mm. broad, crowded. Flesh whitish, becoming greenish, and ferruginous at the base of the st. Spores pale ferruginous, elliptical, 6–7 × 4 μ, 1–2-guttulate. Caespitose. On old trunks, and buried wood. Aug.—Nov. Common. (v.v.)


P. 2–4 cm., deep yellow, disc tawny orange, fleshy, convex, then plane, or slightly depressed, minutely squamuloso-fibrillose. St. 3–5 cm. × 3 mm., sulphur yellow, base often tawny, equal, almost smooth. Veil reddish, adhering to the st. and the margin of the p. in fugacious fragments. Gills sulphur yellow, then tawny cinnamon, adnate, 3 mm. broad, crowded. Flesh sulphur yellow, thin. Old tree fern stems. Spring and summer. Rare.

**F. chrysophylla** (Fr.) Quél. = **Omphalia chrysophylla** Fr.

Spores greenish fuscous, or blackish; gills mucilaginous.

**Gomphidius** Fr.

(*γόμφιδιος*, a large wedge-shaped nail.)


1013. **G. glutinosus** (Schaeff.) Fr. Rolland, Champ. t. 74, no. 165. *Glutinosus*, glutinous.

P. 5–12–5 cm., purple fuscous, or fuscous, often mottled with black spots, fleshy, convex, obtuse, at length plane, smooth, very glutinous. St. 5–10 × 1–2 cm., whitish, yellow at the base, equal, thickened, or attenuated at the base, glutinous, fibrillose, sometimes with black scales. Cortina annular, fugacious. Gills whitish, then cinereous, deeply decurrent, forked, distant, mucilaginous, 6–8 mm. broad. Flesh white, yellow towards the base of the stem, thick. Spores deep olivaceous, spindle-shaped, 18–24 × 5–6 μ, 4–5-guttulate. Cystidia "cylindrical, 130–160 × 12–16 μ" Rick. Taste bitter. Coniferous woods. July—Nov. Common. (v.v.)


P. 2–5 cm., rose, or rose-red colour, convexo-plane, obconical, obtuse, at length sometimes depressed, slightly glutinous. St. 3–5 × 1–
GOMPHIDIUS 325


1015. G. viscids (Linn.) Fr. Cke. Illus. no. 858, t. 881.

Viscidus, viscid.

P. 5–15 cm., fuscous rufous, fleshy, campanulate, or obconical, then expanded, umbonate, slightly viscid, paler and shining when dry. St. 7–12 × 2–3 cm., concolorous, paler, yellowish at the base, equal, or attenuated downwards, fibrillose scaly, slightly viscid. Cortina floccose, forming a fugacious ring. Gills olivaceous, then fuscous purple, deeply decurrent, distant, often branched, edge often paler. Flesh reddish, deep yellow in the lower two-thirds of the st. Spores brownish olivaceous, subsfusiform, 18–22 × 6–7 μ, 3-guttulate. Cystidia obtusely cylindrical, apex often subcapitate, 135–150 × 15–17 μ. Taste mild, often slightly astringent. Edible, indigestible to some people. Coniferous woods, and under conifers. July—Dec. Common. (v.v.)

var. testaceus Fr.

Testaceus, brick-red.

Differs from the type in the brick-red colour of the flatter p., and base of st. both externally and internally. Coniferous woods, and under conifers. July—Nov. Common. (v.v.)

1016. G. maculatus (Scop.) Fr. (= Gomphidius gracilis B. & Br. sec. Quél.)

Maculatus, spotted.

P. 3–6 cm., reddish brown, disc paler, often spotted with black, and becoming black at the edge, campanulate, or obconic, then plane, glutinous. St. 6–8 × 1–1.5 cm., white, yellow at the base, becoming blackish when touched, ventricose downwards, expanding into the p. at the apex, floccose, slightly viscid. Gills white cinereous, then olivaceous, deeply decurrent, often forked, somewhat crowded. Flesh whitish, stained bistre in the p. and yellow towards the base of the st., thick at the disc, thin at the margin. Spores olivaceous, fusiform, somewhat blunt at the end, 17–20 × 6 μ, 1–3-guttulate. Cystidia obtusely cylindrical, or fusiform, 120–140 × 18–20 μ. Coniferous woods, and under conifers. Sept.—Oct. Uncommon. (v.v.)

var. Cookei Massee. Cke. Illus. no. 859, t. 882, as Gomphidius maculatus Scop. var.

Maculatus, spotted.

M. C. Cooke, the eminent mycologist.

P. 2.5–5 cm., whitish, with black stains especially near the margin, convex, then subdepressed, or gibbous, viscid. St. 6–8 × 1 cm., pale above, becoming blackish towards the base, attenuated upwards. Gills
whitish, then brownish, decurrent, distant. Flesh pallid, blackish at the base of the st., thick at the disc, very thin at the margin. Spores brownish, fusiform, $20 \times 5-6\mu$, 1-guttulate. Woods. Sept. Rare.


Gracilis, slender.

P. 2.5-5 cm., pale vinous brown, or dingy tan colour, conico-hemispherical, clothed with dingy gluten, at length spotted with black, especially near the margin, the spots often forming an irregular black border. St. 4-5 cm. $\times 3-6$ mm., pale above, yellow at the base, and often becoming blackish, slightly attenuated downwards, flexuose, apex white squamulose, virgate below with the remains of the gluten. Gills whitish cinereous, decurrent, arched, forked, thick, obtuse, clothed (under a lens) with short, washy bistre hairs. Flesh white, yellow, or reddish at the base of the st., thin at the margin. Spores dingy olive, or brown, fusiform, 18-19 $\times 5-7\mu$, 2-3-guttulate. Fir woods, and heaths. July—Nov. Common. (v.v.)

C. Pileus confluent with, but heterogeneous from, the cartilaginous stem.

*Gills adnate, or sinuato-adnate.

†Margin of pileus at first incurved, or exceeding the gills.

Spores white.

**Collybia Fr.**

(κόλλυβος, a small coin.)

Pileus fleshy, membranaceous, regular; margin incurved. Stem central, cartilaginous. Gills adnate, adnexed, or free. Spores white, rarely yellowish, greenish, or brownish red; elliptical, globose, oblong, pip-shaped; smooth, verrucose, punctate, or echinulate; continuous. Cystidia present, or absent. Growing on the ground, or on wood; solitary, or caespitose.

a. St. stout, sulcate, or fribillosely striate.

A. Gills white, or brightly coloured, not cinereous. Flesh often white.

*Gills broad, subdistant.

1018. **C. radicata** (Relh.) Berk. Rolland, Champ. t. 45, no. 98.

Radicata, rooted.

P. 3-10 cm., fuscous-olivaceous, bistre, or whitish, fleshy, thin, convex, then flattened, gibbous, often irregular, glutinous, radiato-rugose. St. 10-20 $\times 5$ cm., white, or paler than the p., attenuated upwards, and downwards from the level of the soil, and forming a long tail-like fusiform root, smooth, at length striato-sulcate, cuticle cartilaginous,

1019. C. retigera Bres. (= Collybia plezipes (Fr.) Quél.) Bres. Fung. Trid. t. 4.

Rete, a net; gero, I bear.

P. 3–6 cm., fuscous cinereous, becoming pale, disc somewhat tawny, fleshy, thin, campanulate, then expanded, umbonate, reticulated with swollen, pale, anastomosing veins, especially when old, dry, smooth; margin striate. St. 4–6 cm. × 5–7 mm., livid-pallid, equal, somewhat rooting, often compressed, white-fibrillose. Gills cinereous, edge paler, fimbriate, rounded behind, almost free, broad, ventricose, somewhat crowded. Flesh concolorous, thin, soft, somewhat watery. Spores white, elliptical, 7 × 5–6 μ. Beech stumps. Dec. Uncommon.

1020. C. Henriettae W. G. Sm.

Henrietta Smith.

P. 10 cm., somewhat yellowish umber, convex, then expanded, dry, even, somewhat downy. St. 18–19 cm. × 6–7 mm., pale pallid yellowish brown, darker below, attenuated upwards, even, slightly rooting, sub-pruinose. Gills broadly adnate, slightly rounded behind, broad, distant. Flesh very thin, pale pallid yellowish brown in the st. Spores white, 18 × 12 μ. On and about trees, stumps, etc. Sept. Uncommon.

1021. C. longipes (Bull.) Berk. (= Marasmius longipes (Bull.) Quél.)

Longus, long; pes, foot.


var. badia Lucand.

Badia, bay brown.

Differs from the type in being thinner and smaller, and in the deep chestnut brown p. and st. covered with long, bay brown, shining hairs. Spores globose, 10–11 μ. Hedgerows. Sept.—Oct. Not uncommon. (v.e.)

1022. C. eriocephala Rea.

ἔριον, wool; κεφαλή, head.

P. 3–6 cm., fulvous tawny, convex, then expanded, velvety; margin involute. St. 4–7 × 5–1.5 cm., concolorous, pater above, fusiform, extending into the long, branched, rhizomorphoid, brown mycelium,
striae, only slightly velvety at the thickest part. Gills deep ochre, sinuate-adnate, 5–8 mm. broad, distant. Flesh pale, then yellowish, somewhat rufous at the base of the st., thick at the disc, firm. Spores white, oblong, 7–8 × 3–4 μ, 1–2-guttulate. Caespitose. Interior of a rotten elm stump, and in timber yards. Sept.—Jan. Uncommon. (v.v.)

1023. *C. platyphylla* (Pers.) Fr. (= *Collybia grammncephala* (Bull.) Quel.; *Collybia platyphylla* var. *repens* Fr.) Rolland, Champ. t. 47, no. 101, as *Collybia grammncephala*.

πλατύς, broad; φύλλον, leaf.

P. 5–20 cm., fuscos, or cinereous, becoming whitish, fleshy membranaceous, thin, fragile, convex, soon flattened, obtuse, watery when moist, streaked with bistre fibrils. St. 7–12 × 1–2 cm., whitish, equal, fibrillosely striate, apex sometimes pruinose, arising from a network of white, creeping, string-like mycelium. Gills white, obliquely truncate behind, slightly adnexed, very broad, 10–15 mm., distant, soft. Flesh white, thin at the margin. Spores white, broadly elliptical, 8–10 × 6–8 μ, 1-guttulate; "cystidia sack-shaped-club-shaped, 14 μ broad" Lange. Woods. May—Nov. Common. (v.v.)


Fumosa, smoky.

P. 3–9 cm., pitch black, lurid grey, or smoky greyish, becoming paler and spotted fuscos, fleshy, convexo-campanulate, then expanded and depressed, silky, then smooth; margin undulate, finally splitting. St. 4–8 × .5–1.5 cm., concolorous, or paler, subequal, subcartilaginous, somewhat fibrillosely striate, base sometimes bulbous. Gills greyish-cinereous, rounded behind, or truncate and free, veined at the sides, spotted with black when touched. Flesh cinereous, becoming whitish, thick at the disc. Spores white, globose, 6–7 μ, 1-guttulate. Smell rancid, taste bitterish. Caespitose. Woods, and pastures. Sept.—Oct. Not uncommon. (v.v.)


Crassus, thick; folium, leaf.

P. 4–7 cm., lurid ochraceous, disc fuscos, becoming concolorous, fleshy, convex, or campanulate and umbonate, then expanded and depressed silky, becoming smooth; margin undulate, or lobed. St. 2.5–5 × .5–1.5 cm., white, becoming fuscos, often attenuated at the base, pruinose, becoming smooth, round, or compressed, subcartilaginous. Gills whitish-grey, becoming bluish and finally blackish when touched, rounded behind, adnexed, sometimes forked, distant, broad, thick, fleshy. Flesh white, spotted black when broken, thick at the disc. Spores white, globose, 5–7 μ, 1-guttulate. Smell strong, rancid, taste mild. Coniferous woods. Oct. Uncommon. (v.v.)
1026. **C. semitalis** Fr. (= Collybia fumosa (Pers.) Quél.) Bres. Fung. Trid. t. 158.  

*Semitalis,* pertaining to footpaths.

P. 3–7 cm., whitish fuliginous, or fuscous, becoming pale cinereous yellow, or isabelline when dry, fleshy-membranaceous, convex, or convexo-campanulate, then expanded and umbonate, or depressed, smooth, moist, sometimes innately fibrillose; margin striate. St. 3–8 cm. × 6–8 mm., white, becoming fuscous, subequal, fibrillose, base white-strigose. Gills white, becoming yellowish, and finally spotted black when touched, adnate, or sinuato-adnate, somewhat crowded. Flesh white, becoming black when broken, thin. Spores white, elliptical, 7–8 × 3–4 μ, pointed at one end, 1–guttulate. Smell rancid, taste bitterish. Coniferous woods. Sept.—Nov. Uncommon. (v.v.)

1027. **C. fusipes** (Bull.) Berk. Cke. Illus. no. 185, t. 141.

*Fusus,* a spindle; *pes,* foot.

P. 4–10 cm., rufescent reddish brown, or liver colour, becoming pale, or dingy tan, fleshy, convex, then flattened, umbonate, the umbo evanescent, smooth, dry, often splitting. St. 7–15 × 1 cm., concolorous, very cartilaginous, swollen, ventricose in the middle, attenuated at both ends, often twisted, longitudinally striato-sulcate, fusiformly attenuated at the base and blackish, often arising from the remains of underground stems of a previous year’s growth, the so-called sclerotium of Léveillé. Gills whitish, becoming concolorous and often spotted, annulato-adnixed, soon separating, free, broad, distant, firm, connected by veins, crisped. Flesh concolorous, becoming whitish, firm. Spores white, elliptical, 5–6 × 3–4 μ. Cystidia filiform, flexuose, clavate, 10–44 × 1–2 μ. Taste mild. Edible. Caespitose, at the base of oaks and on old stumps. May—Dec. Common. (v.v.)

var. **oedematopus** (Schaeff.) Fr. Bulliard, t. 76, as *Agaricus fusiformis.*

*Oidēma,* a swelling; *πούς,* foot.

Differs from the type in the rufous date brown, conical, then plane, pulverulent *p.,* the pulverulent, very ventricose stem, and the pallid gills. Stumps. Sept.—Oct. Not uncommon. (v.v.)

var. **contorta** (Bull.) Gill. & Lucand. Bulliard, t. 36.

*Contorta,* twisted together.

Differs from the type in the equal, contorted stems, connate at the base, the white, crowded gills, and the deeper coloured, thinner *p.* Stumps.

1028. **C. lancipes** Fr.

*Lancea,* a spear; *pes,* foot.

P. 4–7 cm., pale reddish brown, or flesh colour, becoming paler, often white at the striate margin, fleshy, convex, then plane, often umbonate, radiately rugose, smooth. St. 4–10 cm. × 5–12 mm., concolorous, or paler, equal, attenuated at the base, striate, twisted. Gills pale flesh
**Gills narrow, crowded.**


*Maculata,* spotted.

P. 7–12 cm., white, then spotted rufescent, rarely becoming wholly rufescent, fleshy, very compact, convexo-plane, obtuse, repand, smooth; margin thin, involute at first. St. 7–12 × 1–2 cm., white, spotted rufescent, somewhat ventricose, attenuated downwards to the praemorse base, hard, externally cartilaginous, striate. Gills cream colour, often spotted rufescent, emarginato-free, linear, 2–4 mm. broad, very crowded, denticulate. Flesh white, thick, firm. Spores white, sub-globose, 5–6 μ, punctate. Cystidia none. Smell pleasant, or none. Taste unpleasant, bitter. Beech, and pine woods. May—Nov. Common. (v.v.)


*Immaculata,* unspotted.

Differs from the type in not being spotted, and in the broader gills. Pine woods. Aug.—Oct. Not uncommon. (v.v.)

var. *scorzonerea* (Batsch) Fr.

*Scorzon,* a serpent.

Differs from the type in its smaller size, and in becoming yellowish, in the long, rooting often flexuose st., and the yellowish gills. Beech woods. Sept.—Oct. Uncommon. (v.v.)

1030. *C. fodiens* Kalchbr. Kalchbr. Icon. t. 36, fig. 2.

*Fodiens,* digging.


1031. *C. prolixa* (Fr. Dan.) Fr.

*Prolixa,* stretched out.

P. 5–12 cm., brick-red ferruginous, becoming paler, fleshy, fragile, convex, then plane, gibbous, lax, smooth, margin often irregular. St. 10 × 1–3 cm., brick-red, firm, subequal, sulcate, often scrobiculate, minutely pubescent, fibrillose, base praemorse. Gills white, free,

1032. C. distorta Fr.  
Distorta, twisted.

P. 5–9 cm., bay brown, becoming pale, fleshy, thin, convex, then expanded, umbonate, very lax, smooth. St. 5–8 × 1 cm., pallid, fragile, externally cartilaginous, attenuated upwards from the tomentose base, contorted, sulcate. Gills white, then spotted rubiginous, slightly adnexed, crowded, somewhat linear, toothed. Flesh white, reddish under the cuticle of the p. and in the centre of the stem, thin. Spores white, broadly elliptical, 5–6 × 4–5μ, 3–4-guttulate. Gregarious, or growing in rings. Pine woods. July—Nov. Not uncommon. (v.v.)

1033. C. butyracea (Bull.) Fr. Cke. Illus. no. 189, t. 143.  
Butyracea, buttery.

P. 5–8 cm., rufous brown, fuscous livid, bistre, or bay, becoming pale and almost white when dry, fleshy, convex, then expanded, more or less umbonate, smooth, greasy. St. 5–8 × 5–1 cm., rufous, or bistre, conico-attenuated upwards from the swollen, white-tomentose base, cuticle rigid, cartilaginous, striate, smooth, rarely villous. Gills white, slightly adnexed, somewhat free, broad, thin, crowded, crenulate. Flesh pinkish, or pale brown, becoming whitish, soft, watery, with a horn-like line at the base of the gills. Spores white, elliptical, 9 × 4–5μ, 1-guttulate. Cystidia none. Woods, heaths, and hilly pastures. Jan.—Dec. Common. (v.v.)

var. bibulosa Massee.  Bibulosa, sodden.

Differs from the type in the dingy olive p.

var. aurorea (Larb.) Fr.  Aurorea, like the dawn.

Differs from the type in the thinner p., and striate margin.

C. phaeopodia (Bull.) Fr. = Tricholoma phaeopodium (Bull.) Quél.

1034. C. stridula Fr. Fr. Icon. t. 62, lower figs.  Stridula, creaking.

P. 3–6 cm., blackish, or fuliginous, becoming pale, fleshy, soft, convex, then plane, slightly umbonate, smooth, moist, or slightly viscid, hygrophanous. St. 5–7 cm. × 4–6 mm., concolorous, cylindrical, rigid, but fragile, subcartilaginous, fibrillosely striate, base thickened, praemorse. Gills white, arcuato-adnexed, crowded, broad. Flesh brown, then whitish, soft. Spores white, “8–10 × 4μ” Sacc. On the ground. Oct. Rare.


P. 3–6 cm., purplish bay, nearly black, becoming paler when dry,
fleshy, thin, fragile, campanulate, then expanded, obtuse, smooth, hygrophanous. St. 6–8 cm. × 4–8 mm., whitish, equal, twisted, somewhat striate, apex mealy, attenuated at the praemorse base. Gills whitish, adnexed, rather broad, transversely pellucid-striate and veined, crowded. Flesh white, thick at the disc. Spores white, elliptical, 10 × 6–7 µ. Smell none, or strong of garlic. Caespitose, or solitary. Birch stumps. Aug.—Oct. Uncommon. (v.v.)

1036. **C. xylophila** (Weinm.) Fr. (= *Mycena rugosa* Fr. sec. Quél.)
Fr. Icon. t. 63, lower figs. Χύλον, wood; φιλός, loving.

P. 6–10 cm., whitish, or becoming fuscous tan at the disc, slightly fleshy, campanulate, lax, obtuse, or with a minute umbo, then expanded, broadly gibbous, smooth, moist; margin often rimosely split. St. 4–8 cm. × 5–8 mm., whitish, equal, often flexuose, fibrillosely striate. Gills white, adnate, often decurrent with a small tooth, very narrow, 2 mm. broad, very crowded. Flesh becoming watery fuscous, thin, fragile. Spores white, “elliptical, 4 × 2·5 µ” Massee. Caespitose. Old stumps. Sept.—Oct. Not uncommon. (v.v.)

β. St. thin, velvety, floccose, or pruinose.

*Gills broad, subdistant.

1037. **C. velutipes** (Curt.) Fr. (= *Pleurotus velutipes* (Curt.) Quél.)
Cke. Illus. no. 191, t. 184, fig. A. Vellus, a fleece; pes, foot.

P. 2–10 cm., fulvous, or tawny, sometimes paler at the margin, fleshy, convex, soon becoming plane, often excentric, irregular and repand, smooth, viscid; margin spreading, at length slightly striate. St. 5–10 cm. × 4–8 mm., lemon yellow, then umber and blackish, equal, often ascending, or twisted, tough, cartilaginous, densely velvety. Gills pallid yellow, becoming tawny, broader and rounded behind, slightly adnexed, subdistant, very unequal. Flesh yellowish, thin at the margin, watery, soft. Spores white, elliptical, 7–8 × 5 µ, 1–2-guttulate. “Cystidia conic, rather acute, almost subulate, 8–12 µ broad, protruding part 18–30 µ long” Lange. Taste and smell very pleasant. Edible. Caespitose. On old stumps, fallen trunks, and pales. Aug.—April. Common. (v.v.)

var. lactea Quél. Lactea, milk-white.

Differs from the type in being creamy white. Stumps. Oct. (v.v.)


Differs from the type in the bright ferruginous brown p., the darker blackish cinnamon st., and the gills becoming spotted with brown. Amongst fir leaves.
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338. C. laxipes (Batt.) Fr. (= Marasmius laxipes (Batt.) Quél.)

P. 1–3 cm., whitish, often yellowish at the disc, slightly fleshy, convexo-plane, obtuse, smooth, moist, sometimes striate. St. 6–12 cm. × 2–4 mm., rufous, lax, stiff, velvety, apex white pruinose, channelled, and twisted when dry. Gills milk white, separating free, broad, ventricose, distant. Flesh white, rufous in the st., thin. Spores white, elliptical, 5–6 × 3 μ, 1-guttulate. Amongst pine chips, twigs, and on wood. Feb.—Sept. Not common. (v.v.)


P. 2–4 cm., pale yellow-buff, disc brownish buff, slightly fleshy, plane, smooth, with a thin separable cuticle. St. 5 cm. × 3–4 mm., deep brown, apex yellow buff and smooth, or slightly pruinose, base fibrillosely striate in the middle. Gills dingy ochraceous, very broad, subdistant. Flesh rufous, very thin. Spores white, elliptical, 8 × 4–5 μ. Smell and taste strong, like fish. Amongst deal shavings. Nov. Uncommon.


Floccus, a flock of wool; pes, foot.

P. 1–2 cm., fuliginous black, becoming livid, rather fleshy, campanulate, then convex, umbonate, smooth. St. 3–5 cm. × 2–3 mm., pallid, equal, straight, rooting, rough with black, punctiform, floccose scales. Gills white, adnexed, ventricose, thick, subdistant. Flesh white, greyish under the cuticle of the p., thin. Spores “white, subglobose, prominently apiculate, 5–6 × 4–5 μ. Cystidia abundant, narrowly lanceolate, 60–90 × 7–11 μ, apex subobtuse” Kauffm. On the ground, and about trunks, in beech woods. Sept. Rare.

C. undata Berk. = Marasmius undatus (Berk.) Quél.
C. vertirugis Cke. = Marasmius undatus (Berk.) Quél.
C. stipitaria Fr. = Crinipellis stipitarius (Fr.) Pat.


λευκός, white; Myosotis, the Forget-me-not.

P. 2.5–3 cm., pale mouse-grey, disc darker, paler at the margin, the whole plant becoming pallid, almost white when dry, fleshy, convex, then expanded, sometimes obtusely umbonate; margin faintly striate. St. 10–13 cm. × 4–6 mm., pallid, equal, very brittle, apex slightly pruinose, base white, obtuse. Gills white, adnate, sinuate behind, thick, subdistant. Flesh dingy, rather thick. Spores white, elliptical, 6–7 × 4 μ, 1-guttulate. Cystidia flask-shaped, apex obtuse, 3–3.5 μ in. diam., 25–30 × 7 μ. Smell strong, rather fragrant. On Sphagnum in bogs. May—Sept. Not uncommon. (v.v.)

**Gills very narrow, crowded.

C. hariolorum (DC.) Fr. = Marasmius hariolorum (DC.) Quél.
C. confluentes (Pers.) Fr. = Marasmius hariolorum (DC.) Quél.

C. ingrata (Schum.) Fr. = Marasmius ingratus (Schum.) Quél.

C. esculenta (Wulf.) Fr. = Marasmius esculentus (Wulf.) Karst.


1042. C. cirrhata (Schum.) Fr. Fr. Icon. t. 68, fig. 1. Cirrata, curled.

P. 5–1 cm., white, disc rufescent, or ochraceous, slightly fleshy, conico-convex, then plane, umbilicato-depressed, and often with a small central protuberance, slightly silky, at length very delicately, and often concentrically rivulose. St. 2.5–5 cm. × 1 mm., pallid, filiform, flexuose, white-pulverulent, rooted with a fibrillose twisted tail. Gills white, adnate, at length occasionally separating, linear, very narrow, very unequal, crowded. Flesh whitish, very thin. Spores white, elliptical, 4–5 × 2–3μ. Amongst leaves and on bare ground. Aug.—Nov. Common. (v.v.)


Tuberosa, having a swelling.

P. 4–12 mm., white, disc ochraceous, slightly fleshy, convex, then plane, umbonate, slightly silky, becoming smooth, opaque. St. 1.5–3 cm. × 1 mm., white, or rufescent, equal, commonly ascending, pruinose, arising from a purple brownish, or ochraceous, pear-shaped or roundish lobed sclerotium. Flesh whitish, or reddish becoming whitish, very thin. Spores white, elliptical, 4–6 × 2.5–3μ, punctate. Cystidia “on edge of gill scattered, filamentous” Rick. On dead Agarics, chiefly Russula adusta, Russula nigricans, Lactarius vellereus, Poly- porus squamosus and Hydnei. Aug.—Nov. Common. (v.v.)


Racemosa, clustered.

P. 5–8 mm., grey, submembranaceous, convex, then plane, often imperfectly formed, papillate, tomentose, striate. St. 3–5 cm. × 1 mm., grey, springing from a swollen black sclerotium, racemose with simple, small, capitulate hairs, which are globose at the apex, hyaline, glutinous, and are really oblong, 12–15μ long, guttulate, greenish conidia. Gills concolorous, adnate, very narrow, crowded. Spores “oval, incurved, 5μ, minutely echinulate, greyish” Quél. On the ground, and rotten fungi. Sept.—Oct. Rare. (v.v.)

γ. St. thin, glabrous.

*Gills broad, rather distant.

1045. C. collina (Scop.) Fr. Cke. Illus. no. 198, t. 205.

Collina, belonging to hills.

P. 2.5–5 cm., pale fuscous, or pale tan, fleshy-membranaceous, cam- panulate, then expanded and often umbonate, smooth, subviscid, striate when moist, shining when dry. St. 7–10 cm. × 4–6 mm., pallid


θηλή, a nipple; φέρω, I bear.

P. 2–3 cm., pale dingy ochraceous, disc darker, slightly fleshy, campanulate, lax, with a small, acute, papillate umbo, then expanded and wavy, often depressed round the umbo, smooth, slightly striate; margin at first incurved. St. 6–10 cm. × 2–3 mm., purplish brown at the base, paler upwards, equal, smooth. Gills whitish, adnate, narrower in front, 3 mm. broad, thin, rather crowded. Flesh pinkish, thin. Spores white, elliptical, 9 × 7μ. Gregarious. Peat bogs, and partly dried up Sphagnum swamps. Sept. Uncommon.

1047. C. ventricosa (Bull.) Fr. Bulliard, t. 411, fig. 1.

Ventricosa, ventricose.


1048. C. Stevensonii B. & Br. Cke. Illus. no. 199, t. 145, fig. B.

Rev. John Stevenson, the eminent Scotch mycologist.

P. 1–1.5 cm., pallid yellow, slightly fleshy, semi-ovate, obtuse, viscid, here and there spotted by the viseous matter. St. 3–5 cm. × 2 mm., slightly rufous, attenuated at the base into a somewhat long, thread-like root deeply immersed in the soil, fibrillose, pulverulent upwards. Gills white, adnate with a decurrent tooth, subventricose, very broad, distant. Flesh white, reddish in the st., thin. Spores white, elliptical, 10–11 × 7–8μ. Old pastures. Aug. Rare.

1049. C. psathyroides Cke. Cke. Illus. no. 200, t. 266.

Psathyra, the genus Psathyra; εἰδεσί, like.

Entirely ivory white. P. 2.5 cm. high, 18 mm. broad, slightly fleshy, campanulate, obtuse, rather viscid; margin regular, even. St. 7–10 cm. × 3–4 mm., equal, straight, rather tough. Gills adnate with a decurrent tooth, very broad, 6–8 mm., triangular, subdistant. Flesh whitish, thin. Spores white, elliptical, 15 × 7μ. On the ground in woods. Oct. Rare.
1050. **C. xanthopus** Fr.

ξανθός, yellow; πόνιος, foot.

P. 2-5-5 cm., tan, becoming pale, slightly fleshy, campanulato-convex, then expanded, lax, umbonate, smooth, dry; margin at length spreading, slightly striate. St. 6-10 cm. × 4-6 mm., tawny yellow, equal, tough, smooth, strigously rooting at the base. Gills whitish, truncate behind, adnexed, then free, very broad, crowded, lax. Flesh white, yellowish under the cuticle of the p., rufous in the st., thin. Spores white, elliptical, 5 × 3 μ, 1-guttulate. Cystidia “flask-shaped, 45-50 × 10-15 μ” Rick. On stumps, and amongst leaves, chiefly in pine woods. July—Nov. Uncommon. (v.v.)

1051. **C. nitellina** Fr. Fr. Icon. t. 65, figs. 1, 2.

Nitellina, belonging to a dormouse.

P. 1-5-4 cm., tawny, or brick tawny, becoming tan colour when dry, submembranaceous, convexo-plane, obtuse, often umbonate, elastic, flaccid, hygrophanous, smooth, polished, somewhat rugulose under a lens, pellucidoro- striate when moist. St. 2-5-7-5 cm. × 3-5 mm., ferruginous tawny, becoming yellow when dry, equal, flexuose, cartilaginous, shining, polished, apex often pruinose, base white villous. Gills whitish, or citron yellow, then flesh colour, adnate, very obtuse behind, broad, attenuated in front, somewhat crowded, often undulate. Flesh concolorous, thin. Spores “bright brownish red in the mass, yellowish under the microscope, elliptical, with a basal apiculus, 7-8 × 4-5 μ, or sometimes 10 × 5 μ, 1-many-guttulate, warted” René Maire. Smell strong, rancid, or “like melon” Quél. Taste mild. Edible. Forming rings on the ground in coniferous woods. May—Oct. Uncommon.

1052. **C. succinea** Fr. Cke. Illus. no. 203, t. 151, upper figs.

Succinea, of amber.

P. 2-5-5 cm., rufous, or brown fuscous, becoming pale, fleshy, thin, convex, then flattened, obtuse, at length depressed and unequal, rimosely split when dry, smooth. St. 2-5-5 cm. × 2-5 mm., rufescent, apex paler, equal, attenuated at the base, tough, smooth, shining, sometimes arising from nodules of compact mycelium. Gills cream colour, adnate, obtuse behind, very broad, rather thick, not much crowded, delicately toothed. Flesh reddish, thin. Spores white, pip-shaped, 7-8 × 4 μ, depressed on one side, multi-guttulate. Cystidia none. Solitary or gregarious in coniferous woods and under conifers. May—Aug. Not uncommon. (v.v.)

1053. **C. nummularia** (Lam.) Fr. Cke. Illus. no. 203, t. 151, lower figs.

Nummularia, like a coin.

P. 1-4 cm., whitish, or very pale ochre, becoming white, tinged yellow at the umbilicate disc, slightly fleshy, convex, then plane, orbicular, then depressed round the obsolete umbo, hygrophanous, smooth. St. 3-5 cm. × 3-4 mm., whitish, attenuated downwards to the bulbous, tomentose
base, curved, tough, smooth. Gills white, free, subdistant, narrow, minutely toothed. Flesh pallid, thin. Spores white, elliptical, $7 \times 4-5\mu$. In troops, in mixed woods. July—Nov. Not uncommon. (v.v.)

C. tenacella (Pers.) Fr. = Marasmius conigenus (Pers.) Karst.

C. tenacella (Pers.) Fr. var. stolonifera (Jungh.) = Marasmius conigenus (Pers.) Karst.

1054. C. planipes (Brig.) Fr.  

Planus, flat; pes, foot.


1055. C. acervata Fr. (= Collybia erythropus (Pers.) Quél.) Fr. Icon. t. 64, lower figs.  

Acervata, heaped up.

P. 3–7 cm., reddish flesh colour, whitish when dry, slightly fleshy, convex, then flattened, obtuse, or at length gibbous; margin at first involute, at length flattened and slightly striate. St. 5–10 cm. $\times$ 2–5 mm., rufous, sometimes brown, rigid-fragile, slightly attenuated upwards, rarely compressed, very smooth, base white-tomentose. Gills flesh colour, then whitish, adnexed, soon free, linear, narrow, plane, very crowded. Flesh pallid, reddish in the st., thin. Spores white, elliptical, 6–8 $\times$ 3–4. Caespitoso-fasciculate. Pine stumps. Aug.—Oct. Not uncommon. (v.v.)

C. dryophila (Bull.) Fr. = Marasmius dryophilus (Bull.) Karst.

C. dryophila (Bull.) Fr. var. funicularis Fr. = Marasmius dryophilus (Bull.) Karst. var. funicularis (Fr.) Rea.

C. dryophila (Bull.) Fr. var. aurata Quél. = Marasmius dryophilus (Bull.) Karst. var. auratus (Quél.) Rea.

C. dryophila (Bull.) Fr. var. oedipus Quél. = Marasmius dryophilus (Bull.) Karst. var. oedipus (Quél.) Rea.

C. dryophila (Bull.) Fr. var. alvearis Cke. = Marasmius dryophilus (Bull.) Karst. var. alvearis (Cke.) Rea.

C. dryophila (Bull.) Fr. var. aquosa (Bull.) Quél. = Marasmius dryophilus (Bull.) Karst. var. aquosus (Bull.) Rea.

1056. C. extuberans (Batt.) Fr. Cke. Illus. no. 202, t. 146, as Collybia nitellina Fr.  

Extuberans, swelling out.

P. 2–5 cm., rufous fuscous, bay brown, occasionally becoming pale, slightly fleshy, convex, then flattened, orbicular, at length depressed round the prominent umbo, smooth, slightly viscid when moist. St. 4–5 cm. $\times$ 3–5 mm., concolorous, or paler, equal, tense and straight,
smooth, shining, base attenuated and rooting. Gills white, then cream colour, somewhat free, reaching the st. with a small tooth, crowded, narrow, plane. Flesh reddish, becoming white, thin. Spores white, pip-shaped, $6 \times 3\mu$ ("yellowish" Quél). Smell pleasant, or none. Edible. On the ground, and on trunks, in pastures, and coniferous woods. May—Sept. Uncommon. (v.v.)

*C. exsculpta* Fr. = *Marasmius exsculptus* (Fr.) Rea.

1057. **C. luteifolia** Gillet. *Luteus, yellow; folia, leaves.*

P. 3–5 cm., reddish, or cinnamon, becoming paler and white or whitish, slightly fleshy, convex, soon plane, smooth, glabrous; margin often lobed, irregular. St. 3–4 cm. $\times$ 2–3 mm., concolorous, equal, smooth. Gills sulphur yellow, free, rounded at the base, pointed at the margin, very crowded. Flesh white, reddish in the st. Taste pleasant. Woods, and parks. Rare.

1058. **C. macilenta** Fr. Fr. Icon. t. 66, fig. 1. *Macilenta, lean.*

P. 1–2.5 cm., dark yellow, bright yellow at the margin, slightly fleshy, convex, then plane, obtuse, orbicular, smooth, dry. St. 4 cm. $\times$ 2–3 mm., concolorous, or bright light yellow, becoming brownish at the fibrillose, rooting base, tough, cartilaginous, flexuose, smooth. Gills pure yellow, separating-free, narrow, linear, very crowded, very unequal. Flesh yellow, thin. Spores white, elliptical, $5–6 \times 4\mu$. "Cystidia hair-shaped, subnodulose or wavy" Lange. Amongst pine needles. Autumn. Rare.

*C. clavus* (Linn.) Fr. = *Mycena clavus* (Linn.) Rea.

1059. **C. ocellata** Fr. (= *Collybia cirrhata* (Schum.) Quél. var. ocellata (Fr.) René Maire.) Cke. Illus. no. 209, t. 147, middle figs. *Ocellata, having little eyes.*

P. 1–2 cm., whitish, fuscous, rufous, or yellowish at the depressed, eye-like, umbonate disc, slightly fleshy, conico-convex, then plane, smooth; margin crenulate. St. 3–5 cm. $\times$ 1–2 mm., white, becoming yellowish, or fuscous, equal, filiform, tough, smooth, often pruinose, base fibrillose and rooting. Gills white, adnate, at length separating, crowded, the alternate ones shorter. Flesh white, thin. Spores white, elliptical, $5 \times 3\mu$. Amongst mosses, and *Jungermannia* in woods. Sept.—Oct. Uncommon. (v.v.)

1060. **C. muscigena** (Schum.) Fr. (= *Mycena muscigena* (Schum.) Quél.) Cke. Illus. no. 209, t. 147, lowest figs. *Muscus, moss; γίγνομαι, to be born.*

Entirely white. P. 3–6 mm., submembranaceous, pellucid, globosohemispherical, then flattened, obtuse, smooth, withering up. St. 3–4 cm. $\times$ 1 mm., capillary, flexuose, flaccid, smooth, base attenuated,
C. **rancida** Fr. Cke. Illus. no. 210, t. 153, upper figs.  

_Rancida_, stinking.  

P. 2–5 cm., lead colour, or fuliginous, disc blackish, or fuscous, at first covered with a delicate, silky, white _pruina_, then becoming paler, slightly fleshy-cartilaginous, tough, convex, then plane, broadly and obtusely _umbonate_, smooth, viscid when very wet. St. 7–15 cm. × 4–6 mm., _livid_, becoming _greyish_, _rigid_, equal, tense and straight, _smooth_, attenuated at the base into a long, _fusiform_, _villus root_. Gills dark _cinereous_, somewhat _pruinose_, _free_, _crowded_, _narrow_, but _ventricose_. Flesh _greyish_, thin at the margin. Spores white, oblong elliptical, 9–10 × 4–5 μ, 1–2-guttulate, minutely punctate. Smell like rancid meal. Woods, and hedgerows. Aug.—Dec. Common. (v.v.)

C. **eustygia** Cke. Cke. Illus. no. 1146, t. 1185.  

_εστυγια_, truly; _στυγια_, belonging to the nether world.  

P. 3–5 cm., _dingy white_, disc a little darker, _shining when dry_, fleshy, convex, then plane, sometimes depressed, sometimes wavy, smooth. St. 5–8 cm., _white above_, _sprinkled with small punctate scales_, darker below and often becoming _sooty_, attenuated downwards into a rooting base, often curved, somewhat _longitudinally striate_, or _fibrous_. Gills _dark grey_, rounded behind, _adnexed_, or almost _free_, rather _broad_, not crowded. Flesh _white_, thick at the disc. Spores white, _globose_, 4–5 μ. Smell like rancid meal. The whole plant becoming black in drying. On the ground. Oct. Uncommon.

C. **coracina** Fr.  

_κόραξ_, a raven.  

P. 2–4 cm., _fuscous and shining_, _becoming grey and opaque when dry_, somewhat fleshy-cartilaginous, convexo-expanded, _umbonate_, or _depressed_, often _irregular_ and _undulate_, _smooth_, _hygrophanous_; margin sometimes wrinkled. St. 2–4 cm. × 4–8 mm., _becoming fuscous_, very _cartilaginous_, tough, _rigid_, at length _fragile_, _often compressed_, or _twisted_, _apex mealy with white squamules_, attenuated downwards to the swollen base. Gills _whitish grey_, _obtusely adnate_, separating-free, _broad chiefly behind_, scarcely crowded, distinct, then connected by veins. Flesh _white_, _scissile_, thin. Spores white, elliptical, 6–7 × 3–4 μ, _punctate_, _1-guttulate_ ("greenish" Quél.). Smell strong of new meal. Grassy places, and _fir plantations_. Oct.—Nov. Uncommon. (v.v.)
1064. C. ozes Fr.

P. 2–3 cm., grey-fuscous, becoming clay-fuscous, pallid when dry, slightly fleshy, convex, then plane, umbonate, hygrophanous, smooth; margin striate when moist. St. 6–11 cm. × 2 mm., fuliginous grey, equal, or scarcely attenuated from the base, lax, flexuose, fragile, slightly striate, containing a pith when young, apex white mealy. Gills fuliginous-olivaceous, adnate, subventricose, 4–6 mm. broad, crowded often veined. Spores white, “elliptical, 6–7 × 3–4 μ, smooth. Cystidia none” Rick. Smell strong of new meal. On the ground and on pine needles. Feb. Rare.


Mephitis, a noxious exhalation from the ground.

P. 1.5–4 cm., greyish ochre, becoming whitish, fleshy, convex, sub-umbonate, hygrophanous, smooth, dry, adpressedly and innately silky. St. 5–7 cm. × 2–5 mm., grey, filiform, equal, rigid, pruinose velvety with white flocci, base enlarged, covered with the white mycelium. Gills grey, obtusely adnate, separating from the st., attenuated in front, 4–7 mm. broad, crowded. Flesh yellowish, thin. Spores white, elliptical, 7–8 × 4 μ. Smell strong of new meal. Amongst pine needles in woods. Sept.—Oct. Uncommon. (v.v.)

1066. C. inolens Fr.

Inolescens, growing in.

P. 2–5 cm., livid, becoming pale tan and slightly silky when dry, but opaque, slightly fleshy, campanulato-convex, then plane, obtusely and broadly umbonate, hygrophanous, very smooth; margin inflexed, then expanded, striate, undulate. St. 5–8 cm. × 2–5 mm., concolorous, becoming pale when dry, rigid, equal, often compressed, undulated, apex white-squamulose, base white-strigose. Gills grey, adfixed, separating, somewhat free, linear, or slightly ventricose, 2–4 mm. broad. Flesh greyish, thin. Spores white, elliptical, 7 × 4–5 μ, 1-guttulate. Smell of new meal. Pine woods, and under conifers. Sept.—Nov. Uncommon. (v.v.)


P. 3–5 cm., blackish, whitish at the margin, becoming fuliginous livid, fleshy-membranaceous, campanulate, umbonate, somewhat wrinkled, slightly striate. St. 7–10 cm. × 2–4 mm., livid, cartilaginous, equal, covered with a network of silky-fibrils, slightly striate, base shortly, and bluntly rooted. Gills white, then glaucous, free, very much attenuated behind, ventricose, somewhat crowded. Spores white, elliptical, 8–9 × 5 μ. Woods, especially beech. Sept.—Nov. Uncommon.
1068. **C. atrata** Fr. Cke. Illus. no. 212, t. 155, upper figs.

_Atrata_, clothed in black.

P. 2–4 cm., _pitch-black and shining_, becoming _fuscous when dry, slightly fleshy, firm, plano-depressed at the disc_, convex at the margin, orbicular, smooth, viscid when very wet. St. 2.5–5 cm. × 3–7 mm., _fuscous_, very cartilaginous, _tough_, equal, or thickened upwards, round, smooth. Gills _whitish, then grey, becoming fuscous_, adnate, scarcely decurrent, arculate, then plane, rather broad, _subdistant_. Flesh _fuscous, especially in the st._, thin. Spores white, globose, 5 μ, with a large central gutta. Smell none, or strong, and unpleasant. Charcoal heaps, and burnt soil. July—Dec. Not uncommon. (v.v.)

1069. **C. ambusta** Fr. Cke. Illus. no. 212, t. 155, lower figs.

_Ambusta, scorched._

P. 1–2.5 cm., _fuscous, becoming greyish, submembranaceous_, convex, then plane, at length depressed, _umbonate with a minute papilla_, smooth, becoming slightly striate. St. 2–3 cm., _concolorous_, cartilaginous, _tense_, _pruinose_ when young. Gills _pallid, becoming fuscous; adnate_, with a decurrent tooth, lanceolate, plane, _crowded_. Flesh _becoming whitish_, thin. Spores white, globose, 5 μ, very minutely warted, “4–5-angled” Rick. Burnt soil, and charcoal heaps. July—Nov. Common. (v.v.)

**Gills broad, rather distant.**


_Lacerata_, torn to pieces.

P. 2–5 cm., _fuscous fuliginous, becoming pale, fleshy-membranaceous_, campanulate, then convex and _umbilicate_, somewhat moist, _streaked with fuscous lines_; margin fimbriately torn, splitting with age. St. 4–7 cm. × 4–6 mm., pallid, equal, at length compressed, _fibrillosely striate_, firm, often twisted, apex _floccoso-pruinose_, base white-tomentose, somewhat rooting. Gills _white-grey_, rounded behind, adnate, broad, thick, somewhat crowded, or distant. Flesh _greyish white_, thin, firm. Spores white, subglobose, 6–7 μ, _1-guttulate, “sub-granular” Rick_. Caespitose. Fir woods, often on stumps. Autumn. Rare.

1071. **C. murina** (Batsch) Fr. _Murina, of mice._

P. 3–4 cm., _fuscous brown, becoming pale, slightly fleshy, campanulato-convex_, then expanded, obtuse, or umbilicate, _slightly wrinkled, or very thinly squamulose_, tough; margin at first involute. St. 5–8 cm. × 3–4 mm., white, _becoming cinereous, equal, tense, straight, delicately fibrillosely, apex flocculose when young, base pubescent_. Gills _white, becoming cinereous, attenuato-adnexecl_, very broad, almost obovate, rather thick, _distant_. Flesh _greyish white, thin, tough_. Spores white, “subfusiform-elliptical, 8–9 × 3–4 μ” Rick. Woods, and under oaks. Oct. Uncommon.
1072. Collybia Protracta Fr. Fr. Icon. t. 67, fig. 2. Protracta, drawn out.

P. 2 cm., grey-fuscous, shining, submembranaceous, convexo-plane, disc depressed, often with a little central umbo; margin paler, striate. St. 15–16 cm. × 2–3 mm., livid grey, very cartilaginous, tense, straight, smooth, attenuated at the base into a tapering, subterranean, strigously fibrous root. Gills grey, delicately white-pruinose, adfixed, very ventricose,—as if truncate behind,—very broad, 6 mm., subdistant. Spores white, “elliptical, 7–9 × 5–6μ” Bres. Mossy ground near stumps in fir woods. Aug.—Nov. Rare.

1073. C. Tesquorum Fr. Fr. Icon. t. 70, fig. 3. Tesqua, deserts.

P. 6–10 mm., fuscous black, becoming pale, fleshy-membranaceous, slightly firm, convex, very obtuse, smooth. St. 2–4 cm. × 2 mm., fuscous, somewhat filiform, equal, flexuose, smooth, apex mealv. Gills cinereous fuscous, free, very ventricose, 4 mm. broad, subdistant. Flesh concolorous, thin. Spores white, broadly elliptical, 7–8 × 5–6μ, echinulate. Waste ground, and open pastures. Uncommon. (v.v.)

1074. C. Clusilis Fr. Cke. Illus. no. 215, t. 247, lower figs.

Clusilis, easily closing.

P. 1–3·5 cm., livid, becoming pale, grey clay colour when dry, submembranaceous, rather plane, disc depressed, or broadly umbilicate, very much sloped downwards towards the margin, smooth, soft, fragile; margin at first incurved, slightly striate when moist. St. 4 cm. × 2 mm., livid, cartilaginous, soft, flexile, equal, smooth, polished, stuffed with a white floccose pith. Gills white, becoming cream colour, adnate, plane, with a decurrent tooth, 4–8 mm. broad, in the form of a segment, somewhat crowded. Flesh white, thin at the margin. Spores white, elliptical, 8–9 × 4–5μ, with a large central gutta. Amongst moss and grass on heaths, and hillsides. Sept.—Oct. Uncommon. (v.v.)


Tylicolus, a crustacean allied to the woodlouse; color, colour.

P. 1–3 cm., grey cinereous, slightly fleshy, convex, then flattened, subumbonate, smooth, opaque. St. 2–5 cm. × 2 mm., grey, somewhat fragile, equal, whitish-pulverulent. Gills grey, paler than the p., free, broad, plane, distant, rather thick. Spores white, “oval, 5·5–6 × 3·3·5μ, minutely echinulate” Sacc. Deciduous woods amongst grass. Oct. Rare.

Introduced species.

1076. C. Dorothyae Berk. Lady Dorothy Neville.

P. 2–3 cm., dark brown, becoming paler, globose, then flatly hemispherical, at length expanded, slightly umbonate, finally depressed, radiately sulcate almost to the disc, granulated, covered with
short, white bristles pointing in every direction when young; margin crenate. St. 5–6 cm. × 2 mm., brownish, white below, becoming white above and yellowish or rufous below, granulated, covered with white bristles, base with a minute disc-like swelling. Gills white, adnexed, slightly ventricose, connected behind, distant. Dead fern stems in a hot-house. Rare.


P. 12–15 mm., brown, hemispherical, umbonate, rugose. St. 4–5 cm. × 2 mm., paler, cartilaginous, smooth. Gills somewhat ash-coloured, adnato-decurrent, interstices veined near the margin. On Sphagnum in an orchid pot. Rare.

Spores pink.

**Leptonia Fr.**

(*λεπτός*, thin.)

Pileus slightly fleshy, regular; margin incurved. Stem central, cartilaginous. Gills adnate, sinuato-adnate, or adnexed. Spores pink, angular, elliptical, subglobose, or oblong; continuous. Cystidia rarely present. Growing on the ground, or on wood.

*Gills whitish. P. slightly fleshy.*

1078. L. placida Fr. Fr. Icon. t. 97, fig. 1. *Placida*, gentle.

P. 2–3 cm., grey, becoming bluish, disc densely villose, blackish, fleshy membranaceous, campanulate, then convex, obtuse, squamulose with dark concentric scales and dark fuliginous black fibrils. St. 5–7.5 cm. × 2–6 mm., dark azure-blue, or black-blue, equal, very rigid; apex thickened, white pruinose and black-dotted. Gills whitish, then purplish, adnexed, very broad behind, plane crowded. Flesh brownish in the pileus, bluish in the stem. Spores pink, “angular, 7–12 × 6–7 μ.” Herpell. On and near beech, and fir stumps. Sept.—Oct. Rare.

1079. L. anatina (Lasch) Fr. *Anatina*, belonging to a duck.

P. 3–4 cm., greyish fuscous, somewhat fleshy, conico-campanulate, broadly umbonate, longitudinally fibrillose and squamulose, often rimose. St. 3–4 cm. × 4–6 mm., blue, equal, or attenuated downwards, at first pruinose, then squamoso-fibrillose, apex smooth, base white-villose. Gills whitish, then flesh colour, adnexed, then separating, broad, ventricose. Flesh bluish, becoming whitish. Spores pink, angular, broadly elliptical, 10–11 × 9–10μ, 1–2-guttulate. Heaths, and pastures. July—Oct. Uncommon. (v v.)

1080. L. lappula Fr. Fr. Icon. t. 97, fig. 2. *Lappa*, a bur.

P. 2.5–4 cm., grey, somewhat fleshy, hemispherical, convexo-plane, umbilicate, flocculoso-soft, then roughish with short erect fibrils, which
become black and crowded on the disc. St. 4–5 cm. × 2–4 mm., fuscous lilac, or dark purple, equal, moderately tough, striate and black-dotted upwards under a lens, base white-villose. Gills whitish-grey, then purplish, adnate with a small tooth, then separating, plane, very broad, ovate, crowded. Flesh white. Spores pink, “angular, elliptical, 12μ.” Quél. Amongst beech leaves. July—Oct. Uncommon.


Mrs E. A. Rea, the artist who has made many original paintings of fungi.

P. 5–1 cm., dark blackish blue, convex, then expanded, submembranaceous disc fleshy, not, or only slightly hygrophanous, rarely umbONate or papillate at maturity; margin slightly incurved, then expanded and sometimes substriate. St. 2–3 cm. × 1–5 mm., deep blue, or blue black, then often vinous, equal, flexuose, wavy, shining, obsoletely whitish mealy at the apex. Gills whitish then greyish-pink, broadly and deeply sinuate, narrowly adnate, then free, somewhat crowded, short, broad. Flesh vinous. Spores pink, obsoletely polygonal, subglobose, 8–10 × 7–8μ, including the apiculus, containing many oil drops. Pastures. Sept. Uncommon. (v.v.)

1082. **L. lampropus** Fr. Cke. Illus. no. 353, t. 331.

\[\text{λαμπρός, bright; πός, foot.}\]

P. 1–3 cm., mouse colour, or steel-blue, then fuliginous-grey, somewhat fleshy, convex, then expanded and depressed, becoming more or less squamulose. St. 2.5–4 cm. × 2–4 mm., becoming azure-blue, commonly steel-blue-violaceous, cartilaginous. Gills whitish, then slightly rose colour, adnate, readily separating, then free, ventricose. Flesh bluish. Spores pink, angular, broadly elliptical, 9 × 7μ, 1-guttulate, with somewhat rounded angles. Heaths, and pastures. July—Nov. Common. (v.v.)

var. **cyanulus** (Lasch) Fr.

\[\text{κύανος, dark blue.}\]

Differs from the type in the more slender, membranaceous, blackish-blue, subumbilicate, floccosely-villose p., the capillary, pruinose st., and the glaucous, then flesh colour, adnate, distant gills. On the ground near alders.

1083. **L. aethiops** Fr. Fr. Icon. t. 97, fig. 3.

\[\text{αἰθιός, an Ethiop.}\]

P. 1–3 cm., black, then fuliginous, slightly fleshy, plano-depressed, streaked with fibrils, shining when dry. St. 4–5 cm. × 2 mm., fuscous blackish, black dotted upwards. Gills whitish, then purplish, adnexed, or adnate, linear, or ventricose. Flesh whitish. Spores pink, angular, 9–10 × 6μ, 1-guttulate. Woods, and heaths. Sept.—Oct. Not uncommon. (v.v.)
1084. **L. solstitialis** Fr.  
*Solstitialis*, belonging to midsummer.

P. 1–3 cm., becoming fuscous, slightly fleshy, at length depressed, papillate in the centre, slightly wrinkled, obsolescent innato-fibrillose. St. 2–3 cm. × 2–4 mm., smoke colour. Gills whitish, then flesh colour, emarginate, broad. Spores pink, angular, oblong, 10 × 7 μ, 1-guttulate. Pastures, and amongst stones. Aug.—Sept. Uncommon. (v.v.)

**Gills at the first azure-blue, or slightly dark-blue.**

1085. **L. serrulata** (Pers.) Fr.  
*Serrula*, a small saw.

P. 1–3 cm., blackish-blue (shining when dry), fuliginous when old or in wet weather, and then slightly striate, slightly fleshy, convex, umbilicato-depressed, squamulose, or fibrillose. St. 2–3 cm. × 2–4 mm., paler than the p., cartilaginous, equal, apex black dotted, base white-woolly. Gills bluish-grey-whitish, then grey flesh colour, adnate, in the form of a segment, broad in the middle; edge black, serrulate. Flesh whitish. Spores pink, angular, 8–11 × 7 μ, 1-guttulate. Cystidia "pale grey, fasciculate, clavate, 11–12 μ broad" Lange. Woods. Pastures. June—Oct. Common. (v.v.)

var. **Berkeleyi** Maire. Cke. Illus. no. 355, t. 333, as *Leptonia serrulata* Fr.  
Rev. Miles Joseph Berkeley, the father of British mycology.


var. **laevis** Maire.

Differs from the type in the smooth (not black dotted) apex of the stem. Woods, and pastures. July—Sept. Not uncommon. (v.v.)

1086. **L. euchroa** (Pers.) Fr.  
*Boud. Icon. t. 98.

εὐχρως, well coloured.

P. 1–4–5 cm., violaceous, then purple-fuliginous, slightly fleshy, convex, obtuse, squamuloso-fibrillose. St. 2–6 cm. × 2–4 mm., concolorous, equal, fibrillose mealy especially at the apex, tough; base white, hairy. Gills dark violaceous, becoming pale, the edge retaining the darker colour, adnate, ventricose. Flesh bluish. Spores pink, angular, 10–15 × 7–9 μ. On stumps, and branches of alder, hazel, and birch. Aug.—Oct. Not uncommon. (v.v.)

1087. **L. chalybaea** (Pers.) Fr.  
χάλυφς, steel.

P. 2–3 cm., dark violaceous, or blackish blue, slightly fleshy, convex, subumbonate, flocculose, then squamulose. St. 4–5 cm. × 2 mm., dark blue, cartilaginous, slightly firm. Gills bluish-grey-whitish, edge paler, adnate, crowded, broad, ventricose. Spores pink, "longish, 5–6-angled, 9–10 × 7–8 μ, with prominent angles" Rick. Pastures. July—Oct. Not uncommon. (v.v.)
1088. **L. lazulina** Fr.  
*Lapis lazuli*, ultramarine.

P. 1.5–2 cm., becoming black fuliginous, at first black blue, or date-brown-mouse colour, with the disc darker, submembranaceous, campanulato-convex, then expanded and obtuse, striate, obsoletely umbilicate, rimososquamulose. St. 4–5 cm. x 2–3 mm., dark blue, cartilaginous, base white-woolly. Gills *pallid deep blue*, adnate, separating, equally attenuated from the stem to the margin of the pileus. Flesh *dark blue*. Spores pink, angular, oblong, 11–12 x 7–8 μ, 1-guttulate. Heaths, and pastures. Sept. Uncommon. (v.v.)

***Gills pallid. Becoming pale, yellow or green.***

1089. **L. incana** Fr. (= *Leptonia chloropola* (Fr.) Quél.) Cke. Illus. no. 359, t. 336

*Incana*, hoary.

P. 2–3 cm., variegated fuscous and green, becoming cinereous when dry, submembranaceous, fragile, convex, then expanded, umbilicate, striate, slightly silky when dry. St. 2.5–5 cm. x 2–4 mm., green, or fuscous green, cartilaginous, base white-floccose. Gills *whitish green*, then flesh colour, adnate, decurrent with a tooth, at length separating, 4–6 mm. broad at the middle, *distant*. Flesh *green*, thin. Spores pink, angular, 8–12 x 7–8 μ, 1-guttulate. Smell like that of *mice*. Woods, heaths, and pastures. July—Oct. Common. (v.v.)

1090. **L. euchlora** (Lasch) Fr. Boud. Icon. t. 99.

εβ, well; χλωρίς, pale green.

P. 1.5–3.5 cm., olivaceous, becoming paler, submembranaceous, campanulato-convex, then plane, *fuscous fibrillose*, subsquamulose, especially at the darker, finally depressed disc. St. 3–6 cm. x 3–5 mm., greenish, apex yellowish, becoming deep blue or verdigris when bruised or handled, equal, slightly thickened at the white, tomentose base, hollow, fragile, smooth. Gills *whitish*, or very pale yellowish, then pink, 5–6 mm. wide, broadly adnate, subdistant. Flesh *greenish*, becoming deep blue or verdigris when bruised or pressed, thin. Taste and smell none. Spores pink, oblong, angular, 11–15 x 8–10 μ, multi-guttulate. Amongst short grass in woods and open downs. Sept.—Oct. Uncommon. (v.v.)

1091. **L. sericella** (Fr.) Quél. (= *Entoloma sericellum* Fr.) Cke. Illus. no. 355, t. 307, as *Entoloma sericellum* Fr.  
*Sericus*, silken.

P. 1.5–3 cm., white, or becoming yellow white, somewhat fleshy, convex, then plane, obtuse, at length depressed, often unequal, silky, often squamulose; margin inflexed, floccose. St. 2.5–5 cm. x 2–3 mm., white, then becoming pale, waxy, equal, fibrillose, at length somewhat polished, pellucid. Gills *white*, then flesh colour, at first adnate, even, decurrent with a tooth, then separating and somewhat emarginate, very broad, subdistant. Flesh *white*, thin. Spores pink, angular,
LEPTONIA


var. decurrens (Boud.) Rea. Boud. Icon. t. 94.

Decurrens, running down.


var. lutescens Fr.

Lutescens, becoming yellow.

Differs from the type in the yellowish, more regular, convex, even p., and almost adnate gills.

var. sublutescens Henn. Sub, somewhat; lutescens, becoming yellow.

Differs from the type in the white, silky-flocose p. becoming smooth and dingy yellow, and the white st. becoming yellowish.

1092. L. formosa Fr. Fr. Icon. t. 98, fig. 1. Formosa, beautiful.

P. 2–3 cm., yellow wax colour, sprinkled over with minute fuscous squamules or fibrils, submembraneous, slightly tough, convex, then plane, slightly umbilicate, striate. St. 4–5 cm. × 1–2 mm., yellow, cartilaginous, equal, shining. Gills light-yellow-pallid, then flesh colour, adnate, decurrent with a tooth, subdistant. Spores pink, angular, oblong, 10 × 8μ, 1-guttulate. Coniferous woods, and heaths. Sept.—Oct. Uncommon. (v.v.)

var. suavis (Lasch) Fr. Cke. Illus. no. 360, t. 488. Suavis, pleasant.

Differs from the type in the stem becoming blue. Amongst Equisetum. Sept. Rare.

1093. L. chloropolia Fr. (= Leptonia incana Fr. sec. Quéhl.) Fr. Icon. t. 98, fig. 2.

χλωρός, pale green; πολιός, grey.

P. 2–3 cm., livid, disc black squamulose, membranaceous, convex, then flattened, striate; margin at first inflexed. St. 5–7.5 cm. × 2–4 mm., bluish-grey-green, slightly firm, rigid. Gills whitish, then flesh colour, adnate. Spores pink, angular, globose, 9–10 × 8μ, 1-guttulate. Heaths, and pastures. Sept.—Oct. Not uncommon. (v.v.)

****Gills grey, or glaucous. Hygrophanous, p. somewhat striate.

1094. L. asprella Fr. Quéhl. Jur. et Vosg. t. 6, fig. 4.

Asprella, somewhat rough.

P. 2–4 cm., fuliginous, or mouse colour, then livid-grey, submembranaceous, convex, then flattened, darker umbilicus villose, at length squamulose, marked with spots, striate, often fibrillose. St. 2.5–5 cm. × 1–2 mm., fuscous, green, or azure-blue, cartilaginous, equal, tense and straight, base white-villose. Gills whitish grey, then flesh colour, adnate, separating free, subdistant, equally attenuated from the stem.
towards the margin, edge often black. Spores pink, angular, oblong, 10 × 6–7μ. Pastures, and heaths. Aug.—Oct. Uncommon. (v.v.)

1095. **L. nefrens** Fr.  
*Nefrens*, having no teeth.


Spores ochraceous, or ferruginous.

**Naucoria** Fr.  
*(Naucum, a flock of wool.)*

Pileus fleshy, regular; margin at first incurved. Stem central, cartilaginous. Gills adnate, sinuato-adnate, or adnexed. Spores ochraceous, ferruginous or fuscous; elliptical, pip-shaped, almond-shaped, or oblong elliptical, smooth, punctate, or verrucose; continuous, or with a germ-pore. Cystidia present. Growing on the ground, more rarely on wood; solitary, gregarious, or caespitose.


*Gills free, or slightly adnexed.

1096. **N. lugubris** Fr. Fr. Icon. t. 121, fig. 1. *Lugubris*, mournful.

P. 5–8 cm., *pallid*, then ferruginous, at length almost date brown, fleshy, campanulate, then expanded, gibbous, smooth, rarely bullate, undulated, and tenaciously viscid. St. 5–10 cm. × 6–10 mm., *pallid*, becoming ferruginous downwards when old, with a long, attenuated, fusiform root, externally very cartilaginous, rigid, smooth. Gills *pallid*, then ferruginous, *quite free*, ventricose, very broad behind, 12 mm. and more broad, crowded, edge for the most part serrated. Flesh white. Spores pallid, then ferruginous, “nearly almond-shaped, 7–8 × 4–5μ. Cystidia only on edge of gill, clavate filamentous” Rick. Often caespitose. Mountainous fir woods. Sept.—Oct. Rare.


P. 2–5 cm., *olivaceous fuscous*, becoming *olivaceous straw colour*, *isabelline*, *bay*, or *rufous when dry*, fleshy, convex, slightly gibbous, smooth, glutinous when fresh. St. 5–9 cm. × 4–8 mm., rufous, violaceous, olivaceous, or *pallid*, with reticulately adpressed black fibrils, equal, or attenuated downwards, somewhat rooting, sometimes ventricose and compressed, very cartilaginous, either fuscous squamulose, or smooth. Gills *whitish*, *then olivaceous*, *rufous*, or *ferruginous blood red*, *free,*
attenuated behind, generally ventricose, 6 mm. broad, crowded, edge often white, pubescent. Flesh *pallid, becoming reddish in the st.*, thin at the margin. Spores ferruginous, almond-shaped, $8 \times 4 \mu$, 1-guttulate, "roughish. Cystidia only on edge of gill, filamentous" Rick. Smell weak, of radish. Coniferous woods, and amongst grass. Sept. Rare.

1098. **N. obtusa** Cke. & Massae. Cke. Illus. no. 1171, t. 1155.

*Obtusa*, blunt.

P. 2–3 cm., *rufous, or orange tawny, becoming pale*, campanulate, obtuse, margin faintly striate. St. 5 cm. $\times$ 4–6 mm., *flesh colour, or pale cinnamon*, equal, smooth. Gills *cinnamon*, broadly adnate, or with a tooth, 4–6 mm. broad, ventricose, edge serrate. Flesh *concolorous, becoming pale, darker at the base of the st.* Spores ferruginous, elliptical, 7–8 $\times$ 4$\mu$. On the ground. Sept. Rare.

1099. **N. subglobosa** (A. & S.) Fr.

*Sub*, somewhat; *globosa*, spherical.

P. 2–3 cm., *light yellow, darker at the disc*, fleshy, hemispherical, smooth, moist. St. 2.5 cm. $\times$ 2–4 mm., *concolorous, brownish at the base*, equal, rigid, striate at the apex. Gills *concolorous, somewhat free, very broad*, convex, rhomboidal. Flesh *lemon yellow*, thin. Spores ochraceous, "unequal-elliptical, 6–7 $\times$ 3–4$\mu$, smooth. Cystidia on edge of gill large, lanceolate-fusiform, 50–60 $\times$ 12–15$\mu$, without a globose head" Rick. Pine woods, and on the ground. Sept.—Oct. Uncommon.

1100. **N. hamadryas** Fr. Fr. Icon. t. 121, fig. 3.

*μαδρυάς*, a wood nymph.

P. 4–5 cm., *bay brown ferruginous, pale yellowish when old, and becoming pale*, fleshy, convex, then expanded, gibbous, smooth. St. 5–7.5 cm. $\times$ 6 mm., *pallid, somewhat fragile*, equal, smooth. Gills *ferruginous, opaque, attenuato-adnexed*, somewhat free, slightly ventricose, 3–4 mm. broad, crowded. Flesh *paler*, thin, that of the p. easily separating from the st. Spores "ferruginous, elliptical, 13–14 $\times$ 7$\mu$" Massae. Woods, and under trees. Sept.—Nov. Uncommon.

1101. **N. cidarís** Fr. Fr. Icon. t. 123, fig. 2.

*κίδαιρος*, a tiara.

P. 2–5 cm., *clay cinnamon, or dark tawny cinnamon, tan colour when dry*, fleshy, conical, then campanulate, slightly striate when moist at the undulate, membranaceous margin, pruinose, or smooth. St. 4–5 cm. $\times$ 4 mm., *fuscous black, apex concolorous* and pruinose, *attenuated from the apex to the base*, or fusiform, subcompressed, flexuose, or straight, tough, smooth. Gills *honey colour, or cinnamon clay, adnexed*, separating free, ascending, ventricose, 4–6 mm. broad, crowded. Flesh *whitish*, scissile, thin at the disc. Spores ferruginous, "elliptical,
5–6 × 3–4 μ, smooth. Cystidia only on edge of gill, filamentous.”


*Cucumis*, cucumber.

P. 1–4 cm., tawny cinnamon, pitch black, bay-brown-fuscous, becoming paler towards the margin, umber, fawn, or tan colour when dry, fleshy, campanulate, then convex, umbonate, or obtuse, pruinose; margin incurved, often striate when moist. St. 3–6 cm. × 3–6 mm., date brown, chestnut brown, or fuscous blackish, tough, equal, pruinose, velvety, apex often paler, white floccose at the base. Gills pale, yellowish flesh colour, then saffron yellow, or tawny, emarginate, ventricose, crowded. Flesh concolorous, thin at the margin. Spores pale, ferruginous, oblong, elliptical, 8–10 × 3–4 μ, 1–3-guttulate. Cystidia “broadly lanceolate, 60–75 × 18–23 μ.” Rick. Smell unpleasant, of fish, or cucumber. Coniferous, and damp woods, amongst dead leaves, and bare soil in gardens. Aug.—Nov. Common. (v.v.)

1103. **N. echinospora** W. G. Sm. ἐχινός, hedgehog; στορά, seed.

P. 12 mm., buff, then pale, flat, subumbonate, moist, hygrophanous, slightly furfuraceous; margin substriate. St. 2 cm. × 4–5 mm., brownish salmon, paler above, rufescent below, white flocculose. Gills ochre, olive-shaded, sinuate, subdistant. Spores 7 × 6 μ, rough. Greenhouses. Aug. Rare.

1104. **N. anguinea** Fr. Fr. Icon. t. 122, fig. 1.  ἀγανίνες, snaky.

P. 3–6 cm., rufous, or pale yellowish, somewhat tan colour when dry, fleshy, campanulate, then convex, gibbous, smooth, covered near the margin when young with a superficial silky zone from the fibrils of the veil. St. 5–8 cm. × 4–6 mm., bay brown, equal, base thickened, often flexuose, densely white-fibrillose, and forming numerous zone-like marks; often with silky spots when dry. Gills pallid isabelline, or yellow, then ferruginous, somewhat free, ascending into the top of the cone, somewhat linear, 3–4 mm. broad, crowded. Flesh concolorous, thin except at the disc. Spores ferruginous. Damp places in woods, and heaths. Sept.—Nov. Uncommon. (v.v.)

1105. **N. centunculus** Fr. Cke. Illus. no. 495, t. 601, fig. A.

*Centunculus*, patch-work.

P. 8–20 mm., lurid, or olivaceous fuscous, becoming light yellow green, finally becoming pale, but not hygrophanous, fleshy, convex, then plane, obtuse, often excentric, dry, slightly silky under a lens; margin incurved, often striate, occasionally yellow-pulverulent. St. 2–5–3 cm. × 2–4 mm., cinereous light yellow, somewhat equal, often curved,

1106. **N. horizontalis** (Bull.) Fr. (= *Galera horizontalis* (Bull.) Quél.)

Cke. Illus. no. 495, t. 601, fig. B. Horizontalis, horizontal.


1107. **N. rimulincola** (Lasch) Rabenh. (= *Galera horizontalis* (Bull.) Quél.)

Cke. Illus. no. 496, t. 509, fig. B.

*Rimula*, a small crack; colo, I inhabit.


1108. **N. semiflexa** B. & Br. Cke. Illus. no. 496, t. 509, fig. A.

*Semi*, half; *flexa*, bent.

P. 12 mm., chestnut, hygrophanous, fleshy, subcampanulate, then hemispherical, or flattened; margin adorned with the delicate white veil. St. 6–18 × 1–2 mm., pale, semi-horizontal. Gills tawny, adnexed, rather broad, distant. Flesh white, thin. Spores "amber, elliptical, 8 × 5μ, verrucose" Massee. On wood, and on the ground. Oct. Rare.


**Gills adnate, p. convexo-plane.**

1109. **N. abstrusa** Fr. Fr. Icon. t. 122, fig. 2. Abstrusa, hidden.

P. 2–4 cm., ferruginous clay, fleshy, convex, then plane, orbicular, smooth, viscid. St. 2.5–3.5 cm. × 2–4 mm., pallid ferruginous, base darker, very cartilaginous, tough, rigid, equal, round, tense, straight, polished, naked. Gills watery ferruginous, or cinnamon, adnate, plane, crowded. Flesh concolorous, becoming pale, thin at the margin. Spores ferruginous, "elliptical, 10 × 5μ." Sacc. Woods, and on sawdust. Oct. Uncommon.
1110. **N. innocua** (Lasch) Fr. Cke. Illus. no. 498, t. 489, fig. A.

_Innocua_, harmless.


1111. **N. cerodes** Fr. Cke. Illus. no. 498, t. 489, fig. B.

_κηρώδης_, wax-like.

P. 1–3 cm., _watery cinnamon_, _tan colour when dry_, submembranaceous, _campanulato-convex_, then flattened, at length depressed, obtuse, smooth, pellucidly striate at the margin when moist, _slightly silky-atomatate_ when dry. St. 5–8 cm. × 2–4 mm., _pallid_, or _pale yellowish_, becoming _bay-brown-fuscous_, sometimes only at the base, slightly firm, equal, somewhat flexuose, fibrillolessly striate under a lens, apex mealy. Gills _pallid_, _then cinnamon_, adnate, separating, _very broad behind_, hence almost triangular, _subdistant_, broad, plane, edge minutely fimbriate under a lens. Flesh _pallid_, thin. Spores brownish ferruginous, broadly elliptical, 9–12 × 6–7 μ, 1–2-guttulate. Cystidia "on surface of gill fusiform, 35–40 × 10–12 μ, sparse, on edge of gill the majority filamentous-clavate" Rick. Woods, heaths, burnt ground, and on stumps. May—Oct. Uncommon. (v.v.)

1112. **N. melinoides** Fr. Cke. Illus. no. 499, t. 457, upper figs.

_μέλι_, *honey*; _εἴδος_, like.

P. 1–2 cm., _tawny_, _ochraceous when dry_, fleshy, convex, then plane, sometimes globose then hemispherical, obtuse, or gibbous, striate at the margin when old. St. 4–7.5 cm. × 2 mm., _concolorous_, or _ochraceous_, _base paler_, _white_, equal, or _slightly attenuated_, sometimes attenuated at both ends, slightly firm, smooth, apex _white pruinose_. Gills _something tawny_, or _light yellowish ochraceous_, adnate, ventricose, crowded, _edge often denticulate_. Flesh _yellowish_, thin at the margin. Spores pale ferruginous, elliptical, 9–13 × 4–8 μ, with a large central gutta. Cystidia flask-shaped, capitate, apex 5–8 μ in diam., base ventricose, 50–55 × 8–19 μ. Heaths, pastures, lawns, and roadsides. June—Nov. Common. (v.v.)

1113. **N. pusiola** Fr. Fr. Icon. t. 124, fig. 4. _Pusio_, a little boy.

P. 6–12 mm., _yellow_, or _tawny yellow_, submembranaceous or slightly fleshy, hemispherical, or campanulato-hemispherical, then expanded, obtuse, smooth, _slightly viscid_. St. 2.5–4 cm. × 1–2 mm., _shining light yellow_, or _lemon yellow_, tough, equal, or attenuated upwards, flexuose, smooth, _slightly viscid_, apex often pruinose, base often becoming brownish. Gills _yellow white_, or _watery cinnamon_, then _brown_, adnate, broad, plane. Flesh _concolorous_, thin. Spores "brown, pruiniform, 8 × 4 μ" Sacc. Pastures, and mossy hillsides. Sept.—Oct. Uncommon. (v.v.)
1114. **N. nuclea** (Bolt.) Fr. Bolt. Hist. Fung. t. 70.

*Nucea*, belonging to a nut.

P. 1–2·5 cm., pale chestnut, submembranaceous, globozo-campanulate, never flattened, umbilicate, smooth, slightly dotted; margin incurved, somewhat lobed. St. 7–8 cm. × 2 mm., white, tough, equal, silky fibrillos, becoming even, base with a small bulb. Gills cinnamon, adnate, semicircular, 6–8 mm. broad, plane, often undulate. Spores ferruginous, "elliptical, base apiculate, 10–11 × 6μ" Mass. Pine, and fir woods. Oct. Rare.

1115. **N. glandiformis** W. G. Sm. Cke. Illus. no. 500, t. 490, fig. B.

*Glans*, acorn; *forma*, shape.

P. 2–5 cm., nut brown, disc darker, obtusely campanulate, becoming somewhat hemispherical, or filbert-shaped, smooth. St. 7·5–10 cm. × 4 mm., pallid, equal, sometimes twisted, splitting. Gills umber, adnate, very broad, 12 mm. and more, rounded behind, serrate. Flesh yellowish, thick at the disc. Spores ferruginous, broadly almond-shaped, 10–12 × 6–8μ. On the ground. Oct. Rare.

1116. **N. scolecina** Fr. Fr. Icon. t. 124, fig. 1. *σκώλη*, a worm.

P. 1–2 cm., bay-brown-ferruginous, becoming pale, opaque, fleshy, campanulate, then convex, often umbonate, obtuse, smooth, fragile; margin paler, at length striate. St. 3–7·5 cm. × 1–3 mm., rufous ferruginous, base becoming fuscos, equal, often flexuose and curved, white mealy everywhere, then only at the paler apex. Gills whitish flesh colour, then ferruginous, adnate, broader behind, 2–4 mm. broad, edge flocculose, ciliate. Flesh pallid, thin at the margin. Spores ferruginous, subglobose, 4 × 3μ, 1-guttulate. Alder swamps, and damp places. Sept.—Oct. Not uncommon. (v.v.)


*Stria*, a furrow; *pes*, foot.

P. 2·5–6 cm., ochraceous, fleshy, campanulate, obtuse, then expanded, smooth. St. 4–8 cm. × 4–6 mm., white, equal, straight, or flexuose, longitudinally striate. Gills tawny ferruginous, slightly adnate, subdistant, 4–6 mm. broad. Flesh concolorous, then white, thin at the margin. Spores pale ferruginous, elliptical, 7–9 × 4–5μ. Caespitose, or gregarious. Woods, lawns, pastures, and roadsides. Sept.—Nov. Not uncommon. (v.v.)

1118. **N. amarescens** Quél. Boud. Icon. t. 127.

*Amarescens*, becoming bitter.

P. 1·5–4 cm., reddish brown, or cinnamon, becoming pale when dry, campanulate, then expanded, often umbonate, minutely rugose, then torn and cracked, moist. St. 3–7 cm. × 4–6 mm., concolorous, or

R. B. B.

1119. **N. sideroides** (Bull.) Fr. Cke. Illus. no. 503, t. 458, upper figs. σιδήρος, iron; εἶδος, like.

P. 1–2.5 cm., pale yellowish, honey colour, or cinnamon, tan ochraceous when dry, somewhat shining, fleshy, campanulate, then expanded, umbonate, smooth, very slightly viscid when moist; margin incurved at first, then slightly striate. St. 5–8 cm. × 2–4 mm., pallid, then becoming yellow and ferruginous downwards, base at length becoming fuscous, slightly firm, equal, sometimes undulated, or slightly thickened at the apex, smooth, apex often white pruinose. Gills becoming watery-yellow ochraceous, at length somewhat cinnamon, adnate, with a small decurrent tooth, sometimes sinuate and uncinato-adfixed, ascending, linear, crowded. Flesh pallid, thin. Spores pale yellow, "cylindrical-elliptical, 7–8 × 3–4μ. Cystidia on edge of the gill very delicate, filamentous-fusiform, 30–36μ, apex with a globose head" Rick. Stumps, ash and pine trunks, twigs, and chips. Oct.—Nov. Uncommon.

1120. **N. badipes** Fr. (= *Galera badipes* (Fr.) Rick.) Fr. Icon. t. 123, fig. 3.  

Bādius, bay brown; pes, foot.

P. 8–20 mm., yellowish ferruginous, tan when dry, submembranaceous, campanulate, then convex, umbonate, pellucidly striate to the disc when moist, smooth; margin almost straight and adpressed to the st. St. 5–7.5 cm. × 2 mm., ferruginous, darker and becoming fuscous towards the base, equal, firm, rigid, often flexuose, covered up to the middle with white floccose scales, apex paler, naked. Gills pale yellowish ferruginous, adnate, very ventricose, thin, subdistant. Flesh concolorous, thin. Spores ferruginous, elliptical, 10–12 × 5μ. Cystidia "thin, fusiform, with long, blunt point, 50–60 × 10–15μ." Rick. Damp places in coniferous woods, and on heaths. Sept.—Nov. Not uncommon. (v.v.)

1121. **N. camerina** Fr. (= *Galera camerina* (Fr.) Rick.) Fr. Icon. t. 124, fig. 2.  

Kαμάρα, an arched roof.

P. 1–2 cm., honey colour, tan colour when dry, obtuse umbo often darker, fleshy, campanulato-convex, obtuse, umbonate, smooth, hygrophanous; margin somewhat striate when moist. St. 3–4 cm. × 1–2 mm., umber, apex pallid, equal, or attenuated downwards, somewhat curved, or flexuose, tough, adpressedly fibrillos. Gills yellowish cinnamon, then ferruginous, adnate, plane, ascending, attenuated be-


υδώρ, water; φιλος, loving.

P. 1–3·5 cm., pale ochraceous tan with a distinct tinge of green here and there, fleshy, campanulate, then slightly expanded, acutely umbonate, smooth; margin striate when moist. St. 3–5 cm. × 2 mm., rather ferruginous, or with red and green tints, equal, flexuose, smooth. Gills pallid, then brownish, adnexed, rather crowded, 3 mm. broad, edge pale. Flesh greenish, very thin. Spores brown, elliptical, 13–14 × 6–7μ. Gregarious. Swampy places under trees. Sept.—Oct. Rare.

1123. **N. triscopa** Fr. (= *Galera triscopa* (Fr.) Quel.) Fr. Icon. t. 124, fig. 3.

τρι-, three; σκοπός, faced.

P. 4–10 mm., deep bay, tawny or ochraceous when dry, always opaque, fleshy, hemispherical, obtuse, then convexo-plane, with a prominent umbo, smooth. St. 1–3 cm. × 1–2 mm., ferruginous, opaque, base umber, often velvety, equal, curved, or flexuose, smooth. Gills yellowish, then dark ferruginous, adnate, ventricose, plane, thin, somewhat crowded. Flesh yellowish, ferruginous in the st., very thin at the margin. Spores "ferruginous, pruiniform, 10μ." Quel. Stumps, and rotten wood of frondose trees, rarely on humus. May—Sept. Uncommon.

II. P. naked. Gills and spores fuscous ferruginous.

Veil potential, rarely manifest.

*Growing in fields, and plains.

1124. **N. vervacti** Fr. Cke. Illus. no. 504, t. 617, fig. A.

**Vervactum**, fallow ground.

P. 2–3 cm., light yellow, or pallid yellow, fleshy, convex, then plane, obtuse, or umbonate, soft, smooth, slightly viscid, shining when dry. St. 2·5–4 cm. × 4–6 mm., whitish, cartilaginous, rigid, attenuated either upwards or downwards, smooth, often striate. Gills pallid, then ferruginous fuscous, adnate with a decurrent tooth, 6 mm. broad, plane, at length ventricose, crowded. Flesh white, thick at the disc. Spores “olive brown in the mass, elliptic-oval, 12–17 × 8–12μ. Cystidia on edge of gill fusiform, 40–45 × 9–10μ, with or without a head” Rick. Gardens, and pastures. May—Nov. Uncommon.

P. 2–5 cm., yellow, or pale yellowish ochraceous, then becoming pale, fleshy, convex, then plane, obtuse, dry, smooth, at length rimose-rivulose. St. 5–8 cm. × 2–4 mm., yellowish, stuffed with a pith, sub-flexuose, tough, equal, base bulbous from the mycelium being rolled together, slightly silky, becoming even. Gills somewhat fuscous, then dingy cinnamon, adnexed, 4–10 mm. broad, crowded, then subdistant. Flesh white, thin at the margin. Spores fuscous ferruginous, broadly elliptical, 8–9 × 5–6 μ, with a large central gutta. Cystidia ventricose-fusiform, or with an enlarged head, 45–50 × 8–10 μ. Rick. Pastures, and roadsides. July—Nov. Not uncommon. (v.v.)

1126. **N. semi-orbicularis** (Bull.) Fr. (= *Naucoria pediades* Fr. sec. Quél.) Cke. Illus. no. 507, t. 493, fig. A.

Semi-, half; orbicularis, round.

P. 2–5 cm., tawny ferruginous, then ochraceous, fleshy, convexo-expanded, obtuse, slightly viscid when fresh and moist, then dry, smooth, corrugated when dry. St. 7–10 cm. × 2–3 mm., ochraceous, becoming pallid ferruginous, shining, often darker at the base, cartilagineous, tough, equal, tense, straight, smooth, internally with a separate fistulose tube which is easily broken up into fibrils. Gills pallid, then ferruginous, adnate, rarely sinuate, 4–6 mm. broad, crowded. Flesh white, thin at the margin. Spores brownish, elliptical, 9–12 × 5–7 μ. Cystidia flask-shaped, or fusiform, 45–50 × 13–15 μ, apex obtuse, 6–8 μ in diam. Pastures, heaths, roadsides. June—Oct. Common. (v.v.)

1127. **N. arvalis** Fr.

*Arvum*, an arable field.

P. 1–2 cm., yellow fuscous, pallid ochraceous when dry, disc yellow, or concolorous, fleshy, firm, convex, then expanded, orbicular, obtuse, smooth, slightly viscid. St. 3–4 cm. × 1–2 mm., becoming yellowish, equal, smooth, often pulverulent, attenuated into a long, cottony root, internally with a not easily separable fistulose tube. Gills pallid grey, then umber fuscous, or becoming ferruginous, adnexed, plane, very broad, quaternate, distant, edge often lemon yellow. Flesh lemon yellow. Spores "light yellow, almond-shaped, 10–12 μ, oblong" Quél. Arable fields, gardens, and sea-sands. July—Oct. Uncommon.

1128. **N. tabacina** (DC.) Fr. Cke. Illus. no. 507, t. 493, fig. B.

*Tabacum*, tobacco.

P. 6–20 mm., umber, then bay-brown-cinnamon, very moist, tan colour when dry, fleshy, convex, then plane, disc very obtuse, smooth; margin involute, often covered with a silky veil. St. 2.5–5 cm. × 2 mm., brown, darker and fuscous at the base, equal, attenuated downwards

**Growing in moist, uncultivated, wooded places.

1129. **N. tenax** Fr. Tenax, firm.

P. 2–5 cm., varying between cinnamon and an olivaceous, or somewhat fuscous yellow, dirty, becoming pale when dry, fleshy, hemispherical, then expanded, obtuse, rarely umbonate, sometimes becoming depressed at the disc, smooth, or slightly wrinkled, slightly viscid when young. St. 5–10 cm. × 4–10 mm., concolorous, or dingy pallid, becoming fuscous, or olive, apex paler, equal, or thickened upwards, striate with adpressed fibrils, and sprinkled with white fibrils, the remains of the fugacious veil. Gills whitish fuscous, then ferruginous with the edge whitish, adnate, becoming somewhat rounded and separating, 6–10 mm. broad, plane, triangular, or oblong. Flesh yellowish, becoming whitish, thick at the disc. Spores ferruginous, pip-shaped, 13–16 × 7–8 μ, sometimes depressed on one side, 1–2-guttulate. Bogs on dead stems of *Potentilla Comarum*, and in ditches amongst sticks. May—Oct. Not uncommon. (v.v.)

1130. **N. Myosotis** Fr. Fr. Icon. t. 125, fig. 1.

*Myosotis*, the Forget-me-not.

P. 2–4 cm., olivaceous, or fuscous green, becoming pale, or light yellow, disc darker, fleshy, convex, then plane, subumbonate when flattened, smooth, with a viscid pellicle. St. 7–15 cm. × 2–6 mm., pallid, then fuscous, apex white pruinose, slightly firm, equal, often flexuose, either fibrillose (the fibrils here and there blackish) or scaly. Gills pallid umber olivaceous, then brown ferruginous, with the edge whitish and serrate, adnate, decurrent with a tooth, 5–6 mm. broad, subdistant. Flesh pallid, thin. Spores fuscous ferruginous, pip-shaped, 16–18 × 8–10 μ, 1-guttulate. Cystidia on gill edge subcylindrical, flexuose, 36–40 × 7–9 μ, apex obtuse, 5–6 μ in diam. Bogs amongst *Sphagnum*, and *Potentilla Comarum*. July—Sept. Uncommon. (v.v.)

1131. **N. temulenta** Fr. Fr. Icon. t. 125, fig. 2. Temulenta, sodden.

P. 1–3 cm., ferruginous, ochraceous, or whitish when dry, hygrophanous, submembranaceous, campanulate, then convex, sometimes subumbonate, smooth; margin striate when moist. St. 4–8 cm. × 2 mm., yellow, or ferruginous, tough, equal, flexuose, polished, fistulose with a pith, apex pruinose, base white-villous. Gills yellow, or lurid ferruginous, then umber, or ferruginous, adnate, attenuated in front, sub-


P. *brown ochre, tan when dry*, campanulate, then convex, slightly umbonate, striate, hygrophanous. St. *concolorous, dark rusty at the thickened base*. Gills *concolorous, almost free, narrow, crowded*.


*Latissima*, very broad.

P. 1–3·5 cm., *deep chestnut brown*, fleshy, subglobose, then hemispherical; margin at first incurved. St. 2–5 cm. × 4–8 mm., *dark brown below, paler above*, attenuated downwards, rooting, smooth. Gills tawny umber, rounded behind, slightly adnate, very broad, 12 mm. Flesh *white*, brownish at the base of the stem, thick at the disc. Amongst grass. Sept. Rare.

1134. *N. reducta* Fr. Fr. Icon. t. 125, fig. 3. *Reducta*, reduced.

P. 8–20 mm., *olivaceous, orfuscous honey colour, dirty tan colour when dry, membranaceous*, convex, then plane, sometimes umbonate, hygrophanous, smooth, then pruinose under a lens, *striate to the disc when moist*. St. 5–8 cm. × 2–4 mm., *amber fuscous, apex paler*, pruinose, slightly attenuated upwards, tough, flexuose, soft and splitting, smooth. Gills *dirty yellow, or pale ochraceous, then ferruginous, adnate, or rounded and separating, broad, ventricose, somewhat crowded*. Flesh *subconcolorous*, slightly thick at the disc. Spores “ochraceous, pruniform, oblong, 10μ, punctate” Quèl. Boggy woods. Sept.—Oct. Rare.

III. P. flocculose, or squamulose. Veil manifest.

Spores ferruginous.

*Squamules of p. superficial, separating.*


*Porriginosa*, full of scurf.

P. 2·5–5 cm., *tawny, tan colour when dry*, fleshy, hemispherical, then convex, hardly expanded, very obtuse, *viscid when moist, covered with superficial, fugacious, saffron coloured squamules*; margin striate when old. St. 5–7·5 cm. × 2–3 mm., *pallid*, equal, more or less fibrillosely silky, base white villose. Gills *yellow, then tawny cinnamon, adnate*, often with a small decurrent tooth, crowded. Flesh *lemon yellow*, thick at the disc. Amongst twigs, and rubbish. Oct. Rare.
1136. **N. sobria** Fr. Cke. Illus. no. 512, t. 511, fig. A.

*Sobria*, sober, not bibulous.

P. 6-20 mm., honey colour, disc darker, becoming pale, fleshy, convex, obtuse, or umbonate, slightly viscid, margin appendiculate with the silky, fugacious veil. St. 3-4 cm. × 2 mm., pallid upwards, ferruginous fuscous downwards, slightly firm, somewhat tough, straight, or slightly bent, equal, often sprinkled with whitish spots, the remains of the veil, apex often mealy. Gills paler than the p., then saffron, with the edge whitish or yellowish floccose, obtusely adnate, broader behind, plane, 3 mm. broad, subdistant. Flesh pallid, somewhat ferruginous towards the base of the st., thin. Spores ochraceous, elliptical, or pip-shaped, 6-7 × 4 μ. Charcoal heaps, and on the ground in woods. July—Nov. Uncommon. (v.v.)

var. **dispersa** B. & Br.

*Dispersa*, scattered.

Differs from the type in its smaller size, in the punctulate p. and the appendiculate ring on the st. Lawns. July. Rare.

**P. with innate squamules.**

*N. erinacea* Fr. = *Pholiota erinacea* (Fr.) Quél.

1137. **N. siparia** Fr. Fr. Icon. t. 126, fig. 2.

*Siparium*, a little curtain.

Entirely rufous ferruginous. P. 6-20 mm., fleshy, convex, then plane, obtuse, densely villoso-squamulose, moist. St. 1-2.5 cm. × 2 mm., fragile, equal, tense and straight, densely sheathed with the scaly, villose, downy veil; apex ochraceous, pruinose. Gills ochraceous, then ferruginous, adnate, quaternate, subdistant, edge flocculose. Flesh concolorous, becoming yellowish, thick, soft. Spores pale ferruginous, pip-shaped, 8-9 × 6-7 μ, 1-guttulate. On wood, dead branches, earth, dead fern stems, and caddis worm cases. July—Oct. Rare. (v.v.)

1138. **N. conspersa** (Pers.) Fr. Cke. Illus. no. 514, t. 512, fig. A.

*Conspersa*, besprinkled.

P. 1-2.5 cm., bay brown, or rufous cinnamon, ochraceous when dry, fragile, very hygrophanous, fleshy, campanulato-convex, then flattened, obtuse, even, soon furfuraceous and broken up into small scales. St. 2.5-5 cm. × 2 mm., cinnamon, ochraceous when dry, equal, fibrillose, apex squamuloso-furfuraceous, base white tomentose. Gills dark cinnamon, adnate, then emarginato-separating, linear, or ventricose, crowded. Flesh whitish, thin. Spores “ferruginous, elliptical, 9-11 × 5-6 μ” Karst. Gregarious. Woods, heaths, and pastures. Aug.—Oct. Not uncommon. (v.v.)

var. **uliginosa** Fr.

*Uligo*, marshy ground.

Differs from the type in being twice or thrice as large in all its parts, in the fuscous rufescent, umbonate pileus, the long, twisted, umber st.

1139. *N. escharoides* Fr.  ἐσχαρόδης, scab-like.

P. 1–2 cm., tan, then whitish, disc at length becoming fuscous, fleshy, soft, conico-convex, soon flattened, obtuse, flocculoso-furfuraceous. St. 2.5–5 cm. × 2–3 mm., pallid, at length becoming fuscous, fragile, equal, flexuose, adpressedly fibrillose, or floccose, becoming smooth, apex pruinose. Gills pallid tan, then somewhat cinnamon, edge often pale and floccose, adfixed, or decurrent with a tooth, at length emarginate, somewhat free, ventricose, 3–4 mm. broad, lax. Flesh whitish, thin at the margin. Spores pale ferruginous, elliptical, 11–12 × 6 μ, 1-guttulate. Alder swamps, and bare damp ground. Aug.—Oct. Not uncommon. (v.v.)

1140. *N. Wieslandri* Fr. Fr. Icon. t. 126, fig. 3. J. Wieslander.

P. 2–4 mm., tawny, fleshy, convex, then plane, obtuse, smooth, but the cuticle is soon areolately rivulose, hence spotted with darker, crowded, wart-like papillae. St. 5 cm. × 1 mm., becoming black, flaccid, almost naked. Gills at length dark ferruginous, adnate, broad. Flesh ferruginous, thin. Amongst short grass in woods. Sept. Rare.

***P. destitute of scales, silky, or sprinkled with atoms.

1141. *N. carpophila* Fr. (= *Galera carpophila* (Fr.) Quél.) Fr. Icon. t. 126, fig. 4. καρπός, fruit; φίλος, loving.

P. 2–10 mm., tan, pallid, or whitish when dry, hygrophanous, submembranaceous, convex, obtuse, furfurate with shining atoms, sometimes also floccoso-squamulose, striate, diaphanous; margin crenulate with furfuraceous, fugacious flocci. St. 2–2.5 cm. × 1 mm., pallid, firm, furfuraceous, then naked. Gills pallid, then ochraceous, rounded, adnexed, somewhat free, ventricose, broad, subdistant, often crenulate. Flesh yellowish, thin. Spores “rusty-yellowish in the mass, subpyriform, 7–8 × 4–5 μ, smooth. Cystidia on the edge of the gill filamentous-subulate” Rick. Beech leaves and mast. May—Oct. Rare. (v.v.)


P. 5–8 mm., fuscous, then fawn ochraceous, submembranaceous, convex, papillate, shaggy tomentose. St. 1.5–2.5 cm. × 1 mm., becoming fuscous, apex pale, tough, equal, hairy. Gills pale ochraceous, then pale cinnamon, slightly adnexed, subdistant. Flesh whitish, thin. Spores pale ferruginous, broadly elliptical, 6–7 × 4–5 μ, 1–3-guttulate. On grass stalks, and dead *Pteris* stalks. Aug.—Oct. Uncommon. (v.v.)

P. 5–8 mm., ochraceous, then pale olivaceous greyish, convex, then plane, globose, diaphanous, covered with shining crystalline grains. St. 5 × 1 mm., cream olivaceous, curved, mealy, base villose. Gills cream colour, then brown, or olive, sinuato-free, or decurrent by a tooth. Flesh olivaceous, thin. Spores brown, broadly elliptical, 9–10 × 5–6 μ, with a large central gutta. Dead twigs and branches of pear. Sept.—Oct. Uncommon. (v.v.)

Spores purple, or fuscous.

**Psilocybe** Fr.

(ψιλός, naked; κύθη, head.)

Pileus fleshy, regular; margin at first incurved. Stem central, cartilaginous. Gills adnate, sinuato-adnate, or adnexed. Spores purple, fuscous, rarely pinkish fuscous; elliptical, pip-shaped, almond-shaped or oblong elliptical; smooth, or verrucose, with an apical germ-pore. Cystidia present. Growing on the ground, or on wood, solitary, gregarious, caespitose, or subcaespitose.

I. Veil accidental, rarely conspicuous. St. thick-skinned, flexile, most frequently coloured. P. pelliculose, most frequently slightly viscid in wet weather, becoming somewhat pale. Colour of p. bright.

*Gills ventricose, not decurrent.

1144. **P. sarcocephala** Fr. (= *Psathyra sarcocephala* (Fr.) Quél.) Fr. Icon. t. 135, fig. 1. σάρξ, flesh; κεφαλή, head.


var. **Cookei** Sacc. Cke. Illus. no. 591, t. 620.

M. C. Cooke, the eminent English mycologist.

Differs from the type in the larger, ochraceous, radiately rivulose, at length umbilicate p. Base of trees. Sept.—Nov. Uncommon. (v.v.)
1145. **P. atrobrunnea** (Lasch) Fr.  
Ater, black; brunnea, brown.

P. 2–5 cm., brownish, fleshy, thin, campanulate, then convex, umbo-nate. St. 6–12.5 cm. × 4–5 mm., paler than the p., fibrilloose, apex white-mealy. Gills becoming brownish, adnexed, then separating, sub-distant, somewhat thick, wide. Spores dark brown, “9–12 × 5–6μ” Sacc. Smell and taste of radish. Marshes amongst Sphagna. Rare.

1146. **P. nemophila** Fr.  
vémos, wood; φιλος, loving.

P. 4–10 cm., brick red, paler at the margin, fleshy, convex, obtuse, smooth. St. 7–10 × 1 cm., concolorous but paler, fusiformly attenuated downwards, naked. Gills pallid, deeply decurrent, very narrow, edge crisped and dentate. On the ground, under old trees. Rare.


Helvola, pale yellow.

P. 2–4 cm., tawny ochraceous, disc darker, fleshy, campanulate, then expanded, obtuse, smooth, the cuticle often cracked into patches near the disc. St. 4–6 cm. × 3–4 mm., white, or tinged ochraceous, equal, fibrilloose, often twisted; base white, thickened, downy. Gills purplish umber, clouded, edge white, adnate, then separating from the st., broad, rather distant. Flesh pallid, thin at the margin. Spores “purplish brown, obliquely elliptical, ends pointed, 9–10 × 4–5μ, warted” Massee. Amongst grass. Sept. Rare.

1148. **P. ericaea** (Pers.) Fr. Fr. Icon. t. 136, fig. 1. ἐπίκη, heath.

P. 2–4 cm., tawny ferruginous, tawny yellow, or date brown, fleshy, convex, then expanded, obtuse, slightly viscid when wet, dry and shining when dry. St. 7–10 cm. × 2–4 mm., paler than the p., becoming yellowish, equal, tough, somewhat smooth, or silky. Gills pallid, becoming blackish, adnate, narrowed behind, 6–8 mm. broad, plane, edge whitish. Flesh yellow, thin. Spores fuliginous, broadly elliptical, 12–14 × 7–8μ. Cystidia “on surface of gill sparse, clavate with a prominent point, 30–36 × 9–10μ, contents yellowish, on edge of gill filamentous” Rick. Heaths, and damp pastures. May—Oct. Common. (v.v.)

1149. **P. subericaea** Fr. (= *Psilocybe ericaea* (Pers.) Fr. sec. Quél.) Fr. Icon. t. 136, fig. 2.

Sub, somewhat; ericaea, the species *P. ericaea*

P. 3–5 cm., tawny, fleshy, convex, then plane, smooth. St. 2.5–6 cm. × 2–5 mm., becoming yellow, equal, tough, smooth. Gills pallid, then fuscos purple, sinuato-adnate, 5–10 mm. broad. Flesh yellow, thin. Spores fuliginous purple, elliptical, or pip-shaped, 7–8 × 4μ. Heaths, and grassy places. June—Sept. Common. (v.v.)
1150. *P. uda* (Pers.) Fr. (= Flammuloides uda (Pers.) Quél.) Cke. Illus. no. 594, t. 569.

*Uda,* moist.

P. 1–2.5 cm., brick tawny, becoming pale, fleshy, convex, then flattened, often more or less umbonate, smooth, slightly wrinkled when old; margin often striate. St. 4–7.5 cm. × 2–4 mm., tawny ferruginous, apex paler, equal, flexuose, fibrillose. Gills pallid, then becoming fuscous purple, adfixed, ventricose, 4–6 mm. broad, lax, plane, or convex. Flesh yellow, ferruginous towards the base of the st., thin. Spores purple, broadly elliptical, 8–11 × 5–6μ, 1–2-guttulate. Cystidia “on the edge of the gill clavate-filamentous, 45–50 × 3–4μ.”


var. *Polytrichia* Fr.

*Polytrichum,* a genus of mosses.

Differs from the type in the p. being pallid yellow, becoming whitish especially at the margin, and at length plane and depressed, in the glabrous, pallid tawny st., and the whitish clouded gills at length becoming decurrent, never becoming purple but often greenish. Amongst *Polytrichia*. Sept.—Oct. Uncommon. (v.v.)


Differs from the type in the submembranaceous p. being livid, or greenish yellow, and striate when moist, becoming yellowish when dry. Amongst *Sphagna* in mountain pine woods.


*Canus,* hoary; *faciens,* making.

P. 2–4 cm., dark bay brown, disc ferruginous, fleshy, campanulate, then expanded, scarcely umbonate, clad everywhere as well as the st. with delicate, scattered, white hairs, which are soon evanescent at the apex; margin appendiculate with the white, fibrillose veil. St. 5–7.5 cm. × 4–6 mm., concolorous, base very dark, subequal. Gills dark umber, adnate, 6 mm. broad, ventricose. Flesh of the p. pallid, of the st. rufescent, gradually darker downwards, thick at the disc. Spores umber brown, elliptic oblong, 17 × 8, 10 × 4μ. Caespitose. Rotten straw, and rubbery. May. Rare.


*Areolata,* divided into small patches.

P. 3–7.5 cm., ochraceous, or fuscous, fleshy, convex, minutely fibrillose, cuticle cracking into nearly equal, square patches, interstices and margin pale. St. 5–7.5 cm. × 4–6 mm., dirty white, equal, often thickened at the base, fibrillose. Gills umber, at length blackish, edge white and beaded with drops of moisture, adnate, 4–6 mm. broad. Flesh tinged brown, thick at the disc. Spores “blackish umber with a purple tinge, broadly almond-shaped, 12–13 × 8μ” Massee. Densely caespitose. On wood. Gardens. May—Oct. Rare.
1153. **P. virescens** (Cke. & Massee) Massee. Cke. Illus. no. 1182, t. 1177, as *Psilocybe areolata* Klot. var.

Virescens, growing green.

P. 3–5 cm., bright dark brown, fleshy, convex, obtuse, then expanded, minutely silky when young, the brown cuticle breaking up into persistent, angular patches, the interstices being clear pale green, becoming yellowish with age. St. 4–5 cm. × 6 mm., pale green, and strongly striate at the apex, ferruginous below, base snow-white, downy, equal, smooth, firm, straight, or slightly incurved. Gills *palld., then smoky purple, edge pale, adnexed, 6 mm. broad, rather crowded, soft. Flesh whitish, ferruginous towards the base of the st., thick at the disc. Spores sooty purple, elliptical, ends obtuse, 9 × 5μ. Solitary. On rotten chips, and stumps. Sept.—Oct. Rare.

1154. **P. agraria** Fr. Fr. Icon. t. 137, fig. 1.

*Agraria*, pertaining to land.

P. 2:5–5 cm., white, becoming cinereous when dry, fleshy, convex, at length flattened and then often umbominate, smooth. St. 4–5 cm. × 2–4 mm., white, equal, smooth. Gills white, at length fuscous, obtusely adnate, linear. Flesh white, firm, not 2 mm. thick. Clay fields, and about the roots of decayed trees. Sept.—Oct. Rare.

1155. **P. chondroderma** B. & Br. Cke. Illus. no. 599, t. 606, fig. A.

χόνδρος, grain; δέρμα, skin.

P. 2–3 cm., dark date brown, fleshy, campanulate, very smooth, cracked here and there in different directions; margin appendiculate with the woven, jagged veil. St. 4–5 cm. × 5–6 mm., paler than the p., subequal, fibrillose, base squamulose. Gills dark brown, edge white, adfixed, separating, ventricose. Flesh yellowish, ferruginous towards the base of the st., thick at the disc. Spores “purple black, elliptical, 6–7 × 3–3:5μ.” Massee. Fir woods. Sept. Rare.


Scobis, saw-dust; colo, I inhabit.

P. 2:5–4 cm., white, fleshy, convex, umbilicate, smooth. St. 2:5–4 cm. × 4 mm., whitish, subequal, or dilated at the apex, fibrillose. Gills brown with a red tinge, adnexed, broad. Flesh white, thin. Spores pale, elliptical, 8 × 5μ. On pine sawdust, and branches. Nov. Rare.

**Gills plane, very broad behind, somewhat decurrent.
(Deconica W. G. Sm.)

1157. **P. ammophila** (Dur. & Mont.) Fr. (= Hypholoma ammophilum (Mont.) Quél.) Cke. Illus. no. 599, t. 606, fig. B.

ἄμμος, sand; φιλος, loving.

P. 2–4 cm., reddish tan, becoming paler, fleshy, campanulate, then convex, and at length flattened, fibrillose. St. 4–5 cm. × 2–3 mm.,
white, becoming yellowish except at the apex, equal, basal half clavate, densely covered with matted mycelium and sunk in the sand, sometimes fusiform and rooting, striate. Gills smoky, then bistre purple, subdecurrent with a tooth, 4 mm. broad. Flesh white, yellowish at the base of the st., very thin at the margin. Spores purple, broadly elliptical, 11–12 × 7–8 μ. Sands on the sea shore. Aug.—Oct. Not uncommon. (v.v.)

1158. _P. coprophila_ (Bull.) Fr. Cke. Illus. no. 600, t. 608, fig. A.

κόπρος, dung; φίλος, loving.

_P. 2–3 cm., rufescent tan, fleshy, hemispherical, then expanded, umbonate, slightly viscid, smooth. St. 2:5–4 cm. × 2–3 mm., rufescent, becoming pale, attenuated upwards, at first containing a pith, shaggy-flocculose, the smooth and shining apex pruinose. Veil reddish, floccose, very fugacious Gills livid, then fuscous, somewhat arcuate-decurrent, very broad, 4–6 mm., crowded. Flesh white, thin. Spores purple, “nearly lemon-shaped, 11–12 × 7–8 μ, smooth, with a very thick membrane. Cystidia cylindric-fusiform, 40–50 × 8–10 μ” Rick. On dung, especially cow and rabbit. Pastures, and manure heaps. Sept.—Jan. Uncommon. (v.v.)

1159. _P. bullacea_ (Bull.) Fr. Cke. Illus. no. 600, t. 608, fig. B.

_Bullacea_, having a knob.

_P. 1–2 cm., dark bay brown tawny, then ochraceous brick and tan when dry, fleshy, hemispherical, obtuse, then expanded, umbonate, covered with a viscid, separable pellicle, striate; margin at first appendiculate with the white, floccose, fugacious veil. St. 2:5–3 cm. × 2 mm., slightly tawny, becoming yellow, fuscous ferruginous at the base, equal, or attenuated at the base, slightly fibrillose, apex pruinose. Gills livid-whitish, then fuscous purple, adnate, somewhat triangular, plane, crowded. Flesh brown, very thin at the margin. Spores purple, pip-shaped, 7–8 × 4–5 μ. Cystidia “on the edge of the gill, filamentous” Rick. Gregarious. Horse dung, pastures, and amongst _Polytricha_. April—Oct. Common. (v.v.)

1160. _P. physaloides_ (Bull.) Fr. Cke. Illus. no. 601, t. 609, fig. A.

_Φυσαλίς_, a bladder; _εἶδος_, like.

_P. 1–1:5 cm., fuscous purple, then tan, or flesh colour, paler round the margin; fleshy, campanulate, then expanded, at length flattened, with a prominent umbo, finally depressed round the umbo, often striate, pelliculoso-viscid, smooth, shining. St. 2–3 cm. × 2 mm., becoming pale, base date brown, equal, filiform, flexible, adpressedly fibrillose. Gills pallid, or flesh colour, then ferruginous-fuscous, adnate, subdecurrent, equally attenuated from the st. Flesh whitish, subferruginous at the base of the st., thin. Spores “yellowish under the microscope,
P. 1-1.5 cm., black-rufous, or purple-fuscous, becoming very pale when dry, fleshy, hemispherico-convex, obtuse, or with a knob, smooth, striate at the margin when in full vigour, without striae when dry. St. 2.5-5 cm. × 2 mm., pallid date brown, equal, fibrillose, or smooth, fragile, apex pruinose. Gills greyish, then umber, or purple umber, adnate, subdecurrent, triangular, broad, edge white. Flesh thin. Spores “yellowish under the microscope, oval-elliptical, 7-8 × 4-5μ.” Rick. Mixed woods. Nov. Rare.

***Gills somewhat linear, ascending.

P. tegularis (Schum.) Fr. Tegula, a tile.

P. compta Fr. (= Agaricus comptulus B. & Br. non Fr.) Cke. Illus. no. 603, t. 589, fig. A. Compta, adorned.
P. 2.5-4 cm., pallid, then ochraceous, submembranaceous, conical, then expanded, striate, sprinkled with shining spots; margin subcrenulate. St. 5 cm. × 2-3 mm., pallid, pale rufous downwards, flexuose, silky-shining. Gills rosy umber, adnate, ascending, distant. Flesh white, thin. Spores purple brown. Amongst grass. Woods. Sept.—Oct. Rare.

P. 1-2.5 cm., yellow, green, or fuscous, submembranaceous, acutely conical, almost cuspidate, 10-15 mm. high, never expanded, covered with a viscid pellicle, separable in wet weather; margin incurved when
young, slightly striate. St. 4–7.5 cm. × 2 mm., pallid, equal, often flexuose, containing a pith, capable of being twisted round the finger, smooth, cortinate when young. Gills cream colour, then purple black, ascending into the apex of the cone, adnexed, almost linear, crowded. Flesh white, thin. Spores purple, 11–13 × 6–7.5 μ. Cystidia on edge of gill flask-shaped, or fusiform-subulate, 18–22 × 5–7 μ. Woods, heaths, pastures, and roadsides. Aug.—Dec. Common. (v.v.)

var. caerulescens Cke. Cke. Illus. no. 605, t. 573.

Caerulescens, becoming blue.


1166. **P. callosa** Fr. Pers. Myc. Eur. t. 27, fig. 3.

Callosa, thick-skinned.

P. 1–2 cm., livid, becoming fuscous, yellow, or whitish, fleshy, conical, then campanulate-convex, obtuse, or broadly gibbous, smooth, dry. St. 5–7.5 cm. × 1–2 mm., yellowish, becoming pallid, equal, often flexuose, smooth, tough. Gills cream colour, then fuliginous black, adnate, ascending, ventricose, crowded. Flesh thin. Spores “dark to dark brown, elliptic-oval, triangular-globose, of various sizes and shapes, 5–11 × 4–6 μ” Herpell. Pastures, lawns, and roadsides. Aug.—Oct. Uncommon.

II. No veil. St. rigid. P. scarcely with a pellicle, but the flesh most frequently scissile, hygrophanous. Gills adnexed, very rarely adnate.

1167. **P. canobrunnea** (Batsch) Fr. (= Psathyra canobrunnea (Batsch) Quél.)

Canus, hoary; brunnea, brown.

P. 5–8 cm., watery pallid, or fuscous flesh colour, becoming pallid tan, dry, fleshy, convex, then plane, obtuse, smooth, sometimes cracked into small squares, somewhat viscid when moist. St. 5–6 cm. × 6–10 mm., whitish, rigid, equal, rooting at the base, squamulose. Gills pallid, then fuscous purple, somewhat free, ventricose, 6 mm. broad, somewhat crowded. Flesh white, thick, firm. Spores “very dark in the mass, narrowly elliptical, 8–9 × 4–5 μ, brown, almost opaque. Cystidia on edge of gill clavate-filamentous, 45–50 × 5–7 μ” Rick. Solitary, or laxly gregarious. Grassy places in woods, and burnt ground in beech woods. Sept.—Oct. Uncommon.

1168. **P. spadicea** Fr. (= Psathyra spadicea (Fr.) Quél.)

Spadicea, date brown.

P. 3–12 cm., date-brown-umber, becoming pale when dry, fleshy, convex, then plane, obtuse, smooth, moist in rainy weather, often broken up in cracks when dry, hygrophanous; margin inflexed when
young. St. 4–10 cm. × 3–10 mm., white, firm, subcartilaginous, equal, often curved, smooth, silky. Gills whitish, then flesh colour, at length umber, rounded adnexed, crowded, arid. Flesh whitish, soft, somewhat thick at the disc. Spores brownish purple, elliptical, 9 × 5–6 μ, 1-guttulate. Solitary, or subcaespite. On stumps, and on the ground. Woods, and pastures. April—Nov. Uncommon. (v.v.)

var. hygrophila Fr. οὐρός, moisture; φίλως, loving.

Differs from the type in its larger size, the bullate p., the long, 10–15 cm., subfusiform rooting st., and the emarginate gills deeply decurrent in the form of lines. Base of ash trees, and stumps. Oct. Rare.

var. polycephala Fr. πολύς, many; κεφαλή, head.

Differs from the type in the more slender, densely crowded pilei, and the connately branched, thinner, flexuose stems. Prostrate trunks. Rare.

1169. P. cernua (Fl. Dan.) Fr. (= Psathyra cernua (Fl. Dan.) Quél.) Cke. Illus. no. 607, t. 574. Cernua, nodding.

P. 2:5–6 cm., livid, inclining to pale when moist, white when dry, hygrophanous, fleshy, fragile, campanulate, then flattened, obtuse, smooth, or atomate under a lens, slightly wrinkled when dry, often slightly pellucid-striate. St. 5–6 cm. × 3–4 mm., shining white, equal, round, rigid-fragile, sometimes curved, smooth, apex mealy. Gills white, then cinereous-blackish, adnate, at first linear, then ventricose, 2–4 mm. broad. Flesh white, thin at the margin. Spores “dark brown in the mass, brown under the microscope, subcylindrical, 7–8 × 3–4 μ, smooth. Cystidia on edge of gill clavate-bottle-shaped, 3:6–40 × 12–20 μ” Rick. Solitary, or gregarious. On dead wood, chips, leaves. Aug.—Dec. Uncommon.

1170. P. squalens Fr. Fr. Icon. t. 137, fig. 2. Squalens, dirty.

P. 2:5–5 cm., ferruginous, with a lurid tinge, becoming pale and dirty tan when dry, fleshy, convex, then plane, obtuse, or depressed, smooth. St. 2:5–5 cm. × 2–4 mm., concolorous, equal, slightly rigid, obsoletely fibrillose, apex somewhat pruinose, striate. Gills clay colour, then umber cinnamon, adnato-decurrent, ventricose, 4 mm. broad, crowded. Flesh becoming whitish, thin. Spores fuscos ferruginous. Solitary, or subcaespite. On rotten trunks. Rare.

1171. P. hebes Fr. Fr. Icon. t. 137, fig. 3, minor. Hebes, blunt.

P. 2–3 cm., lurid, pale when dry, hygrophanous, fleshy, convex, then expanded, obtuse, smooth, somewhat viscid, slightly striate at the margin when moist, even when dry. St. 4–5 cm. × 4 mm., becoming pale white, cartilaginous, rigid, equal, smooth. Gills white, becoming fus-
cous, wholly adnate, very broad behind, triangular, rigid, arid, crowded. Flesh cinereous, thin at the margin. Spores black purple, \(14-16 \times 7\mu\) Massee. Commonly solitary. On trunks in beech woods, and amongst grass and leaves near chestnut trees. Nov. Rare.

1172. \(P.\) foenisecii (Pers.) Fr. (= \(Psathyra\) foenisecii (Pers.) Quél.)
Cke. Illus. no. 608, t. 590.\(\)
Foenisecia, hay-harvest.

P. 1-5-2-5 cm., pale fuliginous fuscous, or brown, becoming pale from the disc outwards in drying, fleshy, campanulato-convex, obtuse, smooth, slightly wrinkled in very dry weather. St. 5-7-5 cm. \(\times\) 2-4 mm., rufescent, at first paler and white pulverulent, somewhat pubescent, then naked, equal, rigid fragile, tense and straight. Gills inclining to fuscous, livid fuscous at the sides, then umber, adnate, ventricose in front, hence appearing broadly emarginate, subdistant, edge white. Flesh whitish, thin at the margin. Spores cinereous purple, almond-shaped, 12-15 \(\times\) 7-9 \(\mu\). Cystidia on edge of gill cylindrical, flexuose, apex obtuse, 4-7 \(\mu\) in diam., base ventricose, 29-42 \(\times\) 9-11 \(\mu\). Taste mild. Edible. Pastures, lawns, heaths, and roadsides. Feb.—Dec. Common. (v.v.)

1173. \(P.\) clivensis B. & Br.
Cke. Illus. no. 1183, t. 969.
Clivensis, belonging to a hill.

P. 2-3 cm., pallid brown, then pallid ochre inclining to white, sub-hemispherical, smooth, sprinkled with shining particles; margin striate. St. 2-5-4 cm. \(\times\) 2-3 mm., whitish, nearly equal, base slightly clavate, somewhat silky. Gills umber, edge white, adnate, widely emarginate, 4-5 mm. broad, ventricose in front. Flesh brownish, becoming whitish, thin. Spores cinereous purple, broadly elliptical, 9-10 \(\times\) 6-7 \(\mu\), 1-2-guttulate. Heaths, and pastures. June—Nov. Uncommon. (v.v.)

1174. \(P.\) catervata Massee.
Caterota, crowded.

P. 1-1-5 cm., snow white, campanulate, obtuse, smooth, satiny. St. 4-5 cm. \(\times\) 2 mm., white, equal, usually rather wavy, shining, brittle. Gills grey, then brown with a tinge of purple, edge white, slightly adnexed, rather broad, crowded. Flesh white, rather thick. Spores brown with a purple tinge, elliptic-oblong, 12 \(\times\) 4 \(\mu\). Densely fasciculate. On the ground. Oct. Rare.

\(P.\) spadiceo-grisea (Schaeff.) Boud. = \(Psathyra\) spadiceo-grisea (Schaeff.) Fr.

Spores black, or blackish.

\(Panaeolus\) Fr.

(\(\pi\) \(\nu\) \(\nu\) \(\alpha\) \(\iota\) \(\omega\)\(\beta\)\(\omicron\); all variegated.)

Pileus slightly fleshy, regular, viscid, or dry, margin exceeding the gills. Gills adnate, or adnexed, variegated with the dark spores. Spores black, orfuscous black, elliptical, oblong ovate, boat-shaped,
or almond-shaped; smooth, with an apical germ-pore. Cystidia present. Growing on dung and rich soil, solitary, or caespitose.

*P. viscid, shining when dry.

1175. P. leucophanes B. & Br. Cke. Illus. no. 625, t. 927, fig. A.

λευκός, white; φαϊνα, I appear.

P. 2–3 cm., white, here and there somewhat ochraceous, campanulate, obtuse, viscid, shining when dry, innately silky; margin appendiculate with the veil. St. 5–8 cm. × 2–4 mm., white, attenuated upwards, fibrillose, sprinkled with mealy particles, somewhat transversely undulated. Gills pallid grey flesh colour, then black, adnate, edge white. Flesh white, thin at the margin. Spores black, “red-brown under the microscope, elliptical, with a flattened germ-pore, 10–12 × 6–7 µ. Cystidia on edge of gill clavate-vesiculose, 30–36 × 9–10 µ.” Rick. Pastures. Aug. Rare.


Egregius, distinguished.

P. 4–5 cm., bright orange brown, disc darker, fleshy, ovate-campanulate, 6 cm. high, smooth, viscid when moist, with a trace of agglutinated down, slightly wrinkled when dry; margin exceeding the gills. St. 12-5 cm. × 12 mm., pale brown, duller than the p., slightly thickened at the base, fibrillose, readily splitting longitudinally, base white and cottony, apex smooth. Gills brownish black, with a tinge of purple at maturity, adnexed, ventricose, 12 mm. broad, thin, crowded, dry, not deliquescent; edge paler. Flesh ochraceous, thick at the disc. Spores brown, then blackish, oblong ovate, with a minute apiculus, 15–17 × 7–8 µ. Solitary. On the ground. Jan. Rare.

1177. P. phalaenarum Fr.

φάλαινα, a moth.


**P. moist, opaque, bibulous, subsfloculose when dry.

1178. P. retirugis Fr. Cke. Illus. no. 628, t. 627.

Rete, a net; ruga, a wrinkle.

P. 1–3 cm., flesh tan colour, or pale grey, fleshy, globose, then hemispherical, often subumbonate, reticulate with raised ribs, atomate, opaque; margin appendiculate with the dentate, torn, fugacious veil. St. 5–9 cm. × 2–4 mm., flesh colour, becoming purple, equal, pruinose. Gills cinereous blackish, adfixed, ascending. Flesh thin. Spores black, “olive black under the microscope, nearly lemon-shaped, 12–14 × 8–

1179. **P. sphinctrinus** Fr. Cke. Illus. no. 629, t. 628.

σφυγκτήρ, a band.

P. 1–3 cm., fuliginous, or fuliginous grey, livid when dry, hygrophanous, fleshy, oval, then campanulate, 2-2.5 cm. high, never expanded, obtuse, always opaque, moist in rainy weather, somewhat silky when dry; margin crenate with the appendiculate, fugacious, white veil. St. 2.5-7.5 cm. × 2–4 mm., fuliginous grey, tense and straight, equal, fragile, pruinose, apex smooth. Gills cinereous blackish, adnate, ascending, crowded, edge often white. Flesh reddish, fairly thick. Spores black, globose-elliptical, 13–14 × 9–10μ, with a hyaline germ-pore at each end. Cystidia on the edge of the gill cylindrical, flexuose, apex obtuse, 4–5μ in diam., base often subventricose, 30–38 × 6–7μ. Rich pastures, and garden soil. April—Nov. Common. (v.v.)

***P. dry, smooth, slightly shining, not zoned.

1180. **P. campanulatus** (Linn.) Fr. Cke. Illus. no. 630, t. 629.

Campanulatus, bell-shaped.

P. 1–3 cm., fusco-fuliginous, rufescent when dry, fleshy, campanulate, at length convex, often umbonate, slightly viscid when moist, then somewhat shining, often excoriated when dry. St. 6–9 cm. × 2–4 mm., rufescent, whitish pruinose at first, equal, tense and straight, apex striate. Gills varying grey and black, adnate, ascending, crowded, edge often white, and distilling watery drops. Flesh reddish, thin. Spores black, almond-shaped, 10–12 × 7–8μ. Cystidia cylindrical, flexuose, apex obtuse, 4–6μ in diam., 35–40 × 7–9μ. On dung, especially horse. Pastures, and gardens. June—Nov. Common. (v.v.)

1181. **P. papilionaceus** (Bull.) Fr. Cke. Illus. no. 631, t. 630.

Papilionaceus, like a butterfly.

P. 2–4 cm., pallid, or pale grey, disc reddish, hemispherical, pruinose, rimosely cracked when dry. St. 2.5–7 cm. × 3–6 mm., whitish, equal, or attenuated downwards, apex white pulverulent. Gills blackish, broadly adnate, 6–15 mm. broad, at length plane, edge often white. Flesh pallid, then whitish, thick at the disc. Spores black, almond-shaped, 14–15 × 7–8μ, with a large central gutta. Cystidia “on edge of gill clavate-capitate, 30–36 × 6–7μ” Rick. On dung, and on the ground. Pastures, and woods. June—Nov. Not uncommon. (v.v.)

1182. **P. caliginosus** (Jungh.) Fr. Cke. Illus. no. 632, t. 631, fig. A. 

Caliginosus, dark.

P. 1–2 cm., brown, fleshy, campanulate, obtuse, smooth. St. 4–7 cm. × 2 mm., concolorous, equal, even, naked. Veil very thin, or obsolete.

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****P. dry, smooth, zoned round the margin.

1183. **P. subbalteatus** B. & Br. Cke. Illus. no. 632, t. 631, fig. B.  
Sub, somewhat; *balteatus*, belted.

P. 2–5 cm., dull deep fawn colour, pallid when dry, hygrophanous, fleshy, convex, margin slightly incurved, then expanded, obtuse, or slightly umbонate, irregular, slightly wrinkled, marked near the margin with a dark, narrow zone. St. 5–8 cm. × 2 mm., red brown, equal, brittle, stringy, splitting longitudinally, marked with short white fibrils. Gills brownish, adnate, slightly ventricose, edge white, slightly toothed. Flesh brownish, thick at the disc. Spores “black, opaque, almost lemon-shaped, 13–14 × 8–9μ. Cystidia on edge of gill filamentous, with a brown apex, 36–45 × 6–7μ.” Rick. Caespitose. In a tare-field. Sept.—Oct. Rare.

1184. **P. acuminatus** Fr. Cke. Illus. no. 633, t. 632, fig. A.  
*Acuminatus*, pointed.

P. 1.5–2.5 cm., flesh tan colour, fleshy, conical, acuminate, smooth, shining, zoned with a blackish line round the margin which is at first crenulate. St. 2.5–7.5 cm. × 2–3 mm., pallid above, fuscous below, equal, pruinose, base thickened. Gills whitish, then blackish, adnexed, ventricose, broad. Flesh pallid, fuscous towards the base of the st., thin. Spores black, “opaque when mature, lemon-shaped, 12–15 × 8–10μ. Cystidia on edge of gill filamentous, 50–70 × 4–6μ.” Rick. On dung. Pastures, and roadsides. Oct.—Nov. Rare.

1185. **P. fimbicola** Fr. Cke. Illus. no. 633, t. 632, fig. B.  
*Fimbicola*, dung; *colo*, I inhabit.

P. 1–2 cm., fuliginous grey, clay hoary when dry, fleshy, campanulate, then convex, obtuse, smooth, opaque, marked round the margin with a narrow fuscous zone, and inside this with a white one. St. 5–10 cm. × 2 mm., becoming dingy pale, equal, soft-fragile, obsoletely slightly silky striate, apex white pruinose. Gills variegated grey and fuliginous, adnate, slightly rounded, somewhat ventricose, broad, almost semi-ovate, edge often white. Flesh grey white, thin. Spores brownish black, “nearly transparent, subelliptical, 11–12 × 7–8μ, smooth. Cystidia on edge of gill, cylindrical-filamentous, rarely flask-shaped, 40–50 × 6–12μ” Rick. On dung. Rich pastures. April—Oct. Uncommon.

*Cinetulus*, a little girdle.

Differs from the type in the reddish cinnamon *p.* with broad brown
marginal zone, and the dingy brown st. On dunghills after rain. June—July. Not found since the time of Bolton.

*P. caudatus* (Fr.) Quél. = *Psathyrella caudata* Fr.

*P. atomatus* (Fr.) Quél. = *Psathyrella atomata* Fr.

††Margin of pileus straight, at first adpressed to the stem. Spores white.

**Mycena** Fr.  
(*μύκης, a fungus.*)

Pileus fleshy, or submembranaceous, regular; margin straight, never incurved. Stem central, cartilaginous. Gills adnate, or sinuato-adnate with a decurrent tooth. Spores white, elliptical, oval, globose, or oblong elliptical; smooth, punctate, or verrucose; continuous. Cystidia present, very rarely absent. Growing on the ground, or on wood; solitary, or caespitose.

I. St. juiceless, base not dilated into a disc. Edge of gills darker, denticulate.

1186. **M. pelianthina** Fr. (= *Mycena denticulata* (Bolt.) Quél.) Cke. Illus. no. 216, t. 156, fig. 1.  

P. 2–4 cm., *pale purple livid, becoming whitish when dry, diaphanous, fleshy, convex, obtuse, or obsoletely umbonate; margin striate. St. 5–8 cm. × 2–5 mm., concolorous, equal, sometimes incurved at the base, *firm*, apex fibrillosely striate. Gills *dark violaceous, edge blackish violet, denticulate, truncato-adnexed, very sinuate, distant, very elegantly connected by a network of veins*. Flesh *whitish, somewhat yellowish under the pellicle of the p.*, thick at the disc. Spores white, elliptical, 6–7 × 3 μ, 1–2-guttulate. Basidia clavate, with 4-sterigmata. Cystidia filled with a dark purplish juice or colourless, cylindric-fusiform, 60–100 × 10–12 μ. Smell of radish. Amongst dead leaves in woods, especially beech. Aug.—Nov. Common. (v.v.)

1187. **M. carneosanguinea** Rea.  
Caro, flesh; *sanguinea, blood-red.*  


1188. **M. marginella** Fr. (= *Mycena mirabilis* Cke. & Quél.) Cke. Illus. no. 1148, t. 951, fig. A, as *Mycena mirabilis* Cke. & Quél.  

Margo, a border.  

P. 6–8 mm., *somewhat fuscous when young, fleshy, campanulate, umbo darker*, smooth, slightly striate elsewhere and somewhat
azure-blue-floccose. St. 6-7 cm. × 1-2 mm., azure-blue-floccose, equal, tomentosely rooting. Gills white, or cinereous, slightly adnexed, distant; edge fringed with azure-blue, or red floccules. Flesh tinged with blue, thin at the margin. Spores white. Fir trunks amongst Hypnum cupressiforme. Aug.—Sept. Uncommon.

1189. **M. avenacea** (Fr.) Schroet.  

*Avenacea*, oat.

P. 1-2.5 cm., dirty yellowish brown, disc often darker and obtusely umbonate, submembranaceous, campanulate, 1 cm. high, wrinkled when dry; margin striate. St. 5-6 cm. × 1-2 mm., yellowish brown, apex paler, equal, tough, shining, base white floccose. Gills dirty white, or greyish, slightly adnexed, fairly distant, 1.5-2 mm. broad; edge floccose, brown. Spores white, ovate ellipsoid, 9-11 × 5-6 μ. Cystidia filled with a brownish juice, flask-shaped, pointed above, sometimes branched, attenuated at base, 45-70 × 6-12 × 2.5-3 μ at apex. Woods, hedgerows and wood stacks. Sept.—Nov. Not uncommon. (v.v.)

var. **olivaceo-marginata** (Massee) Rea. Cke. Illus. no. 1153, t. 959, fig. A, as Mycena olivaceo-marginata Massee.

*Olivaceus*, olive-coloured; *marginata*, bordered.

Differs from the type in the smaller spores, 6-7 × 4-5 μ. Amongst short grass in pastures, hill sides, and hedgerows. Sept.—Nov. Not uncommon. (v.v.)

1190. **M. aurantio-marginata** Fr. Fl. Dan. t. 1292.

*Aurantius*, orange; *marginata*, bordered.

P. 1-2 cm., olivaceous-fuscous, or olivaceous tan, becoming paler, fleshy, campanulate, then convex, obtuse, or obsoletely umbonate, smooth; margin striate when moist. St. 2.5-5 cm. × 2-4 mm., yellowish, or greyish, firm, equal, smooth, base inflated ventricose, clothed with strigose yellow hairs. Gills grey, then greenish vivid, very attenuato-adnexed, very ventricose, crowded, connected by veins; edge orange, floccose. Flesh fuscous, becoming whitish, thick at the disc. Spores white, elliptical, or pip-shaped with a lateral apiculus, 6-8 × 4-5 μ. Cystidia filled with a yellowish juice, broadly clavate, or bludgeon-shaped, coarsely verrucose, 30-34 × 12 μ. Smell none, or strong. Grassy places in woods and amongst conifer needles. Aug.—Nov. Uncommon. (v.v.)

1191. **M. elegans** (Pers.) Fr.  

*Elegans*, graceful.

P. 10-12 mm., yellow fuscous, or light yellow vivid, opaque, membranaceous, campanulate, more or less umbonate; margin saffron coloured, slightly sulcate. St. 5-6 cm. × 2 mm., deep, or light yellow, apex paler, rigid, tense and straight, equal, base attached to its support by yellow bristling filaments. Gills greyish, adnate, decurrent with


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1192. **M. atrO-marginata** Fr. (= *Mycena balanina* Berk. sec. Quél.)

Fr. Icon. t. 78, fig. 3.  
Ater, black; marginata, bordered.

P. 1·5—3 cm., cinereous-fuscous, or purplish fuscous, paler at the margin, very membranaceous, conical, then conico-campanulate, 1·5—3 cm. high, lax, deeply sulcate, smooth, slightly viscid when moist. St. 4—10 cm. × 2—4 mm., concolorous, apex paler, strict, very fragile, equal, or slightly attenuated upwards, sometimes twisted, sulcate; base rooting, white tomentose. Gills whitish grey, then flesh colour, slightly adnexed, attenuated behind, almost linear, narrow, 2—3 mm. broad, subdistant, often slightly connected by veins; edge black, very thin. Flesh white, purplish in the stem, thin. Spores white, oblong-elliptic, 10—12 × 7 μ, with a large central gutta. Pine woods. Sept.—Oct. Uncommon. (v.v.)

1193. **M. balanina** Berk. (= *Mycena atrO-marginata* Fr. sec. Quél.)

Cke. Illus. no. 216, t. 156, fig. 2.  
βάλανος, an acorn.

P. 2—4 cm., ochraceous with a slight tinge of umber, fleshy membranaceous, convex, somewhat campanulate, obtusely umbonate, at length more or less expanded, minutely pulverulent, slightly rugulose, striate when moist. St. 6—7 cm. × 2—4 mm., white and pruinose above, deep sienna-brown below, attenuated downwards, flexuose, rigid, shining, quite smooth; base dark brown, villose. Gills pale, or whitish with a pinkish tinge, quite free, rounded, 3 mm. broad, connected by veins, edge fringed with dull purple spiculae, which are also sprinkled over the surface. On beech mast, and amongst oak leaves.

1194. **M. rubro-marginata** Fr. Fr. Icon. t. 78, fig. 4.  
Ruber, red; marginata, bordered.

P. 1—2 cm., red-livid, or purple fuscous, becoming pale, sometimes almost white, hygrophanous, membranaceous, campanulate, obtuse, striate, smooth. St. 2·5—5 cm. × 2—3 mm., pallid livid, rigid-fragile, equal, often curved, smooth, base slightly thickened. Gills whitish, then grey, adnate, with a small decurrent tooth, distant; edge fuscous purple, then brown. Flesh whitish, thin. Spores white, boat-shaped, 12—13 × 3·4—5 μ, 1-guttulate. Cystidia “claviform, pointed at the free end, 50—60 × 10—16 μ, filled with brownish juice” Barbier; “with one or more sterigma-like projections on the top” Rick. Pine, and larch woods. July—Nov. Common. (v.v.)
var. fusco-purpurea (Lasch) Cke.  *Fuscus*, brown; *purpurea*, purple.

Differs from the type in the purple brown *p.*, the finely striate *st.* villosose rooting at the base, and the eroded, brown edge of the gills. Willow trunks, and amongst dead leaves. Sept. Uncommon.

1195. *M. strobilina* Fr.  στροβίλινος, belonging to a pine cone.

P. 6–12 mm., persistently scarlet, often paler at the circumference, membranaceous, conical, then campanulate, acutely umbonate, slightly striate, smooth, dry. St. 3–5 cm. × 1–2 mm., concolorous, slightly rigid, equal, smooth, base white strigose. Gills rosy red, adnate, decurrent with a tooth, distant, alternate; edge darker, deep blood colour. Flesh reddish, very thin at the margin. Spores white, elliptical, 7–9 × 4–5 μ, 1-guttulate. Cystidia “on edge of gill elongate-vesiculose, 45–50 × 15–18 μ.” Rick. Gregarious. On pine needles, occasionally in beech woods. Sept.—Oct. Not uncommon. (v.v.)


Rose colour, becoming pale. P. 7–10 mm., membranaceous, campanulate, then hemispherical, obtusely umbonate, slightly hygrophanous, striate. St. 2–3.5 cm. × 1 mm., equal, soft, base white tomentose. Gills rose colour, adnate, with a tooth, subdistant, edge blackish purple. Flesh white, reddish in the st., very thin at the margin. Spores white, elliptical, 7–8 × 4 μ. Cystidia “obovate or bludgeon-shaped, 42 × 7–15 μ, occasionally the apex drawn out, somewhat bottle-neck-like, the free portion more or less warted, filled with a reddish or pinkish juice” Lange and Schroeter. On coniferous needles. June—Dec. Not uncommon. (v.v.)


*Ater*, black; *virens*, green.

P. 8 mm., blackish green, paler and whitish at the striate margin, bright green at the circumference, slightly fleshy, hemispherical, smooth, somewhat viscid on the disc at first. St. 3 cm. × 1 mm., cinereous, or greyish fuliginous, equal, smooth. Gills whitish, green and minutely toothed on the edge especially towards the margin of the *p.* adnate, 2 mm. broad, subdistant, attenuated in front. Flesh fuscous, thin. Smell and taste none. Spores white, elliptical, or pip-shaped, often with an oblique apiculus, 5–6 × 3 μ, minutely punctate; basidia clavate, 23–25 × 6–7 μ, with 4-sterigmata. Cystidia on edge of gill abundant, often fasciculate, slightly clavate, or cylindrical, 35–40 × 3–4 μ, flexuose, filled with a greenish juice, thin walled. Beech stumps. Oct. Rare. (v.v.)
II. St. juiceless, base not dilated into a disc. Gills unicolorous, not changing colour. P. pure coloured, bright, not becoming fuscos, nor cinereous.

1198. **M. pura** (Pers.) Fr. (= Mycena pseudopura Cke.) Pura, clean.  

P. 2-8 cm., rose, purple, lilac, bluish-grey, or white, fleshy, campanulate, then expanded, at length rather plane, sometimes umbonate; margin striate. St. 3-10 cm. × 2-6 mm., concolorous, or whitish, tough, polished, equal, or attenuated upwards when larger, smooth, base white villose. Gills pallid, or whitish, adnate, broad, ventricose, connected by veins. Flesh white, thin at the margin. Spores white, elliptical, 6-9 × 3-5-4 μ, 1-2-guttulate. Cystidia on gill edge only, hyaline, cylindrical, broadly fusiform, or bladder-like, obtuse, more rarely somewhat pointed, becoming larger with age, 45-60 × 11-20 × 5-10 μ at apex. Smell and taste of radish. Poisonous. Woods and pastures. June—Dec. Common. (v.v.)

var. *carnea* Rea.  

Carnea, fleshy. 

Differs from the type in the fleshy, fibrillose st. Amongst oak and beech leaves in deciduous woods. Aug.—Nov. Not uncommon. (v.v.)


_Multus_, many; _color_, colour.

P. 3-5-5 cm., bright greyish blue, umber fulvous. St. 5-7 cm. × 4-8 mm., rosy purple, base becoming yellowish, white tomentose. Gills grey. Spores white, elliptical, 5 × 3 μ (7-9 × 4-5 μ Bres.). Cystidia cylindrical, or ventricously fusiform, rarely subclavate. Amongst leaves. Oct. Uncommon. (v.v.)

1199. **M. zephyrus** Fr. (= Mycena spiripes (Schwartz) Sacc.) Fr. Icon. t. 78, fig. 6.  

_Zéphyrus_; the west wind.

P. 2-3 cm., livid reddish, whitish flesh colour, or greyish, disc occasionly becoming fuscos, diaphanous, submembranaceous, campanulate, then convex, striate to the middle. St. 3-8 cm. × 2-4 mm., lilac, becoming rufescent, fragile, equal, or slightly attenuated upwards, slightly striate, at first clad with deciduous, white scales; base incurved, woolly. Gills white, or flesh coloured, adnate, subdecurrent with a small tooth, at length separating, broad, slightly connected by veins. Flesh pallid, thin at the margin. Spores white, pip-shaped, 7-9 × 4 μ, 1-4-guttulate. Cystidia “obovate, globose, or clavate, 40-60 × 16-25 μ, crowned with 1-4-finger-like, often branched protuberances, sometimes only toothed” v. Hoehnel. Gregarious. Amongst fir needles, or decayed fir wood, and amongst dead leaves. Sept.—Dec. Uncommon. (v.v.)


P. 1-2 cm., rosy vinous, disc greyish, pellucid, very thin, campanu-
late, then convex, silky. St. 3-5 cm. × 2 mm., hyaline white, becoming purplish, often flattened, bristling with white hairs at the base. Gills rose, or lilac, adnate by a tooth, distant, reticulately connected by veins, firm. Spores white, punctate, elliptical, 7–13 μ, barrel-shaped. Smell none, taste like turnips. Fasciculate. Pine cones. Sept.—Oct. Rare.

Flavus, light yellow; pes, foot.  

1202. **M. clavus** (Linn.) Rea. (= Mycena rubella Quél.) Boud. Icon. t. 68, as Mycena rubella Quél.  
Clavus, a nail.  
P. 5–12 mm., orange scarlet, disc often darker, fleshy, conico-convex, then plane, umbo acute, diaphanous, smooth; margin pale, striate. St. 2–4 cm. × 2 mm., white, hyaline, with a fugacious, rosy tint at the apex, equal, smooth, base woolly. Gills white, then rose colour, edge paler, adnexed. Flesh of p. red, of st. white, very thin. Spores white, elliptical, or pip-shaped, 6–7 × 3–4 μ, multigranular. Cystidia “only on the edge of the gill, sparse, rigid and threadlike above, ventricose below, 28–32 × 10 μ” v. Hoehnel. On twigs, leaves, and amongst mosses. Aug.—Dec. Not uncommon. (v.v.)

1203. **M. coccinea** (Sow.) Quél.  
Coccinea, scarlet colour.  
P. 5–12 mm., rosy-red, somewhat orange, membranaceous, campanulate, striate; margin incurved, wrinkled. St. 2–3 cm. × 1 mm., rose colour, equal, smooth; base subbulbose, white strigose. Gills rosy, emarginate. Flesh of p. red, whitish or yellowish in the st., very thin. Spores white, pip-shaped, or elliptical, with a basal apiculus, 8–10 × 5–6 μ. Cystidia hyaline, flask-shaped, ventricose, apex pointed, or obtuse, often constricted at about one-third of its length from the apex, 25–35 × 7–10 × 3–5 μ at apex. On larch cones, twigs and needles. Sept.—Oct. Uncommon. (v.v.)

1204. **M. Adonis** (Bull.) Fr.  
Adonis, son of Cinyras, king of Cyprus.  
P. 6–10 mm., rose-red, margin whitish, membranaceous, campanulate, 6–8 mm. high, minutely and almost obsoletely papillate, smooth, pellucidly striate. St. 3–5 cm. × 1 mm., shining white, pellucid, flexuose,
equal, smooth; base swollen, strigose. Gills white, or flesh coloured, uncinato-adnexed, ascending, very thin, narrow, somewhat distant. Flesh of pileus red, of st. white, very thin. Spores white, elliptical, often with a basal apiculus, 7–8 × 4 μ, 1–3-guttulate. Basidia "2-spored. Cystidia awl-shaped-conical, long, pointed, up to 60 μ." Lange. Woods and pastures. Sept.—Nov. Uncommon. (v.v.)


χλαμέδιος, grass green; ἀνθός, flower.

P. 10–15 mm., olive green, becoming paler, disc yellow, membranaceous, conico-campanulate, 4–8 mm. high, then expanded, obtuse, smooth, striate when moist. St. 2.5–10 cm. × 2–3 mm., bluish, transparent, firm, straight, smooth, base white villose. Gills white with a slight tinge of green, adnate, narrow, 2 mm. broad, subventricose, thin, crowded. Flesh bluish in the st. Spores white, elliptical, 8–9 × 5–6 μ, 1-guttulate, white in the mass, greenish by transmitted light. Cystidia "only on the edge of the gill, rarely obtuse, obovate oblong, generally fusiform, conical or bluntly pointed at the apex, 27–35 × 9–15 μ" v. Hoehnel. Woods, and hedgerows. Aug.—Oct. Uncommon. (v.v.)


P. 6–15 mm., yellow, olivaceous, rarely whitish, generally becoming light yellow, very membranaceous, hood-shaped, then campanulate, obtuse, lineato-sulcate to the disc, smooth. St. 4–7 cm. × 2–3 mm., concolorous, equal, smooth, base white villose. Gills white, or pale cream, adnate, linear, 2–3 mm. broad, subdistant. Flesh yellowish at the disc, very thin at the margin. Spores white, pip-shaped, 7–8 × 4 μ or elliptical, often slightly depressed on one side, 9–12 × 5–6 μ, often 1-guttulate, punctate. Cystidia pyriform, setulose, 20–25 μ in diam. Amongst moss. Woods, and pastures. Aug.—Oct. Not uncommon. (v.v.)

var. *expallens* Fr. Fr. Icon. t. 78, fig. 5. Expallens, becoming pale.

P. 1–2 cm., pale yellow, campanulate, striate up to the disc. St. 5 cm. × 1 mm., pallid; base white, downy. Gills white, linear, very narrow, rather distant. Amongst moss.

1207. *M. farrea* (Lasch) Fr. Fr. Icon. t. 80, fig. 4, wrongly cited as t. 79, fig. 4, in the text. Trans. Brit. Myc. Soc. i, t. 2, fig. 1, surface cells of the pileus magnified. Farrea, mealy.

P. 1–2 cm., whitish, or yellowish, often with a tinge of flesh colour, membranaceous, campanulate, then expanded, subumbonate, sulcate, covered with a shining pruina ("composed of globose, hollow bodies, 1 Plates 79 and 80 are interchanged in some copies of Fries' Icones.}
40–50 μ" Plowright); margin light yellow, or flesh colour, becoming whitish when dry, at first floccose, crumulate. St. 5–7.5 cm. × 2–3 mm., white, somewhat fragile, equal, silky-striate, often somewhat rooting. Gills white, adnate, thin, somewhat crowded, connected by veins, often fimbriate. Flesh white, thick at the disc. Amongst moss and heather on heaths. Sept. Rare.

1208. **M. luteo-alba** (Bolt.) Fr. *Luteus, yellow; alba, white.*


1209. **M. flavo-alba** Fr. *Fr. Icon. t. 80, fig. 5, wrongly cited as t. 79, fig. 5, in text. Flavus, light yellow; alba, white.*

P. 1–2 cm., ochraceous, light yellow-white, or wholly white, submembranaceous, campanulate, then convex, at length flattened, umbonate, smooth, often striate, scalloped when dry and rimosely split. St. 2–3 cm. × 2 mm., pellucidly white, or with a yellowish tinge, slightly rigid, fragile, tense and straight, equal, apex pruinose. Gills white, adnato-decurrent, soon separating-free, at length plane, ventricose, distant. Flesh white, thick at the disc. Spores white, elliptical, 6–8 × 3–4 μ, 1-guttulate. Cystidia flask-shaped, apex subulate, 3–4 μ in diam., ventricose at the base, 35–55 × 12–15 μ. Pastures, heaths, and woods. July—Dec. Common. (v.v.)

1210. **M. chelidonia** Fr.¹ (= *Mycena pumila* (Sow.) Quél.; *Mycena raebohiza* (Lasch) Gill.) *Fr. Icon. t. 83, fig. 4, as Mycena raebohiza Lasch.*

P. 1–2.5 cm., yellow flesh colour, or somewhat tawny, becoming paler flesh colour, or whitish at the margin, submembranaceous, campanulate, conical, fragile, pruinose, pellucidly striate when moist, even when dry. St. 3–5 cm. × 2 mm., pallid, or becoming yellow, equal, tough, rooting, smooth, apex mealy, base villose. Gills whitish, becoming yellowish, or flesh colour, adnate, or somewhat free, subdistant, at length connected by veins. Flesh yellowish, thin at the margin. Spores white, elliptical, 3 × 1.5–2 μ, 1-guttulate ("subglobose, 6–8 μ, or 6–7 × 5–6 μ" Gill.). Beech, and alder stumps. Oct. Rare. (v.v.)

¹ Fries placed this species in the section having milk, or a coloured juice in the st., but this factor is so slight that the fungus is far better ranged in this position.
1211. **M. lactea** (Pers.) Fr. Cke. Illus. no. 222, t. 159, bottom figs.

_Lactea_, milk-white.


var. _pithya_ (Pers.) Fr. (= _Collybia ludia_ Fr. sec. Quél.) Fr. Icon. t. 68, fig. 4, as _Collybia ludia_ Fr. _πίθυς_, a pine, or fir tree.

_Snow white, drying up and becoming yellowish._ P. 6–10 mm., becoming almost plane, margin incurved. St. 2–2.5 cm. × 1–2 mm., pulverulent, base villose, subbulbous, villosely strigose. Gills somewhat wide, distant. On coniferous needles and chips. Sept. Rare.

var. _pulchella_ Fr. Fr. Icon. t. 80, fig. 3, wrongly cited as t. 79, fig. 3, in text as _Mycena lactea_ Pers. _Pulchella_, beautiful little.

_Differs from the type in the much thinner p., prominent umbo, and the gills broader at the base and subdistant._ Caespitose. On wood.

**M. muscigena** (Schum.) Quél. = _Collybia muscigena_ (Schum.) Fr.

1212. **M. gypsea** Fr. _γύψος_, chalk.

_P. 1–2 cm., white, or yellowish, disc yellow, membranaceous, somewhat fragile, conico-campanulate, umbonate, umbo not prominent, striate to the disc._ St. 6–8 cm. × 1–2 mm., white, equal, or attenuated upwards, rigid, fragile, smooth, or pruinose, base villose. Gills _shining white_, adnate, broadest behind, equally attenuated to the margin. Spores white, elliptical, 8–10 × 4–5 μ. Cystidia “obtusely conical, 30 × 11 μ, or obtuse and broadly thread-shaped above, slightly conical below, 30–62 × 8–16 μ” v. Hoehnel. Gregarious and caespitose. Amongst fragments of wood, and on trunks. June—Nov. Uncommon.

1213. **M. nivea** Quél. Quél. Soc. bot. Fr. xxiii, t. 2, fig. 1.

_Nivea_, snow-white.

_Shining white, transparent._ P. 15 mm., very thin, campanulate, never expanding, sulcate from the apex to the base, pruinose. St. 2–3 cm. × 1 mm., rigid, smooth, apex pruinose, base recurved, fibrillosely rooting. Gills adnate, uncinate, narrow, distant. Spores pruniform, 10–12 μ, granular. On twigs. Deciduous woods.

_M. galeropsis_ Fr. = _Marasmius dryophilus_ (Bull.) Karst. var. _oedipus_ (Quél.) Rea.
III. St. firm, rigid, somewhat tough, juiceless, somewhat strigose and rooted at the base. Gills changing colour, white, then grey, or reddish, commonly at length connected by veins. P. not hygrophanous. Generally lignicolous and caespitose.


1214. **M. prolifera** (Sow.) Fr. Sow. Eng. Fung. t. 169.

Proles, offspring; fero, I bear.

P. 1–2 cm., pallid, disc fuscosus, fleshy, campanulato-expanded, broadly umbonate, dry, slightly striate; margin at length sulcate, or rimosely split, pale yellowish, or becoming fuscosus tan. St. 5–8 cm. × 4–5 mm., pallid, apex greyish, base tawny bay, firm, rigid, smooth, shining, slightly striate, rooting, often proliferous. Gills white, then ochraceous, adnexed. Flesh pallid, thin. Spores white. Densely caespitose, glued together by villose down. Woods, and old logs in gardens. July—Oct. Uncommon. (v.v.)

1215. **M. excisa** (Lasch) Gillet.

Excisa, cut out.


1216. **M. fagetorum** (Fr.) Gillet.

Fagetum, a beech wood.

P. 1–2 cm., yellowish, pale livid, or fuliginous, membranaceous, campanulate, then convex, striate half way to the disc, smooth. St. 3–6 cm. × 3–4 mm., pallid, incurved, base villose, attached at right angles to the beech leaves. Gills white, or glaucous, attenuated at the base and attached to a collar. Spores white, “oblong elliptical, 9.5–11 × 4.4–5 μ. Cystidia few, small, insignificant, club, or pear-shaped, their not much protruding free portion set with short setae” Lange. Gregarious. On dead beech-leaves. Sept.—Nov. Not uncommon. (v.v.)

1217. **M. Berkleyi** Massee. Cke. Illus. no. 224, t. 148, as *Mycena excisa* Lasch.

The Rev. Miles Joseph Berkeley, the founder of British mycology.

P. 3–7 cm., dingy brown, umbo darker, paler when dry, fleshy, campanulate, then more or less expanded, slightly umbonate, slightly and distantly striate to the umbo, hygrophanous. St. 8–13 cm. × 6–8 mm., dingy brown with a purple tinge, almost equal, or slightly
thickened below, more or less striate; base long, tapering, rooting. Gills tinged purplish, or flesh colour, broadly sinuate behind, and adnate with a decurrent tooth, ventricose, 4–6 mm. broad, rather distant, thin. Flesh of st. purplish. Spores white, elliptical, 5 × 3–5μ, with an oblique basal apiculus. Cystidia none. Solitary or sub-caespitose. On trunks. Mixed woods. Sept.—Oct. Rare.


P. 4–9 mm., brown, becoming paler towards the margin, hygrophanous, somewhat hemispherical, sprinkled with very minute particles; margin striate. St. 1–2 cm. × 1 mm., white upwards, umber downwards, firm, rooting, wholly white pulverulent. Gills white, shortly adnate, sinuate behind, in the form of a segment. Smell strong, but not nitrous. Amongst moss on a sandbank. Sept. Rare.

1219. **M. rugosa** Fr. Cke. Illus. no. 225, t. 186, lower figs.

*Rugosa*, wrinkled.

P. 2–6 cm., cinereous, becoming pale, very tough, membranaceous, campanulate, then expanded, at length rather plane, somewhat obtuse, more or less corrugated, rugosely wrinkled, dry, striate at the circumference. St. 3–8 cm. × 3–4 mm., pallid, very cartilaginous, rigid, tough, straight, at length compressed, smooth, with a short, oblique, strigose root. Gills white, then grey, arcuato-adnate, with a decurrent tooth, united behind in a collar, broad, ventricose, connected by veins, edge sometimes serrulate. Flesh whitish, thick at the disc. Spores white, oblong elliptical, 9–11 × 6–7μ, with a large central gutta. Basidia with 2–4-sterigmata. Cystidia hyaline, broadly clavate, or bludgeon-shaped, apex covered with short, simple, more rarely branched setae, 24–50 × 10–12μ. On stumps and old posts. July—Dec. Common. (v.v.)

1220. **M. sudora** Fr.

*Sudor*, sweat.

P. 2–5 cm., whitish, or yellowish, diaphanous, submembranaceous, convex, umbonate, often irregular, striate, viscid. St. 6–11 cm. × 3–6 mm., concolorous, equal, firm, dry, smooth, rooting. Gills white, then flesh colour, obtusely adnate, broad, subdistal. Flesh white, thick at the disc. Spores white, broadly elliptical, 9–11 × 7–8μ. Cystidia “small, little protruding, 24 × 8μ, elliptical-vesiculose, mostly bluntly conical, somewhat ventricose below and often oblique” v. Hoehnel. On and near beech, and beech stumps. Aug.—Nov. Uncommon. (v.v.)

1221. **M. galericulata** (Scop.) Fr. (= *Mycena simillima* Karst.)

*Galericulum*, a cap.

P. 2–5 cm., fuscosus-ridiv, or changeable in colour, often becoming yellow, or rubiginous, sometimes white, submembranaceous, conico-campanulate, then expanded, striate to the umbo, dry, smooth. St.
5–12 cm. × 3–5 mm., concolorous, often becoming yellowish, or rubiginous, somewhat fragile, polished, often curved, smooth; base strigose, fusiform-rooted. Gills whitish, then flesh colour, adnate, decurrent with a tooth, sometimes connected by veins. Flesh greyish, very thin at the margin. Spores white, broadly elliptical, 10–11 × 6–8 μ, 1-guttulate. Basidia generally with 2-sterigmata only. Cystidia hyaline, broadly clavate, or bludgeon-shaped covered with short setae, 15–40 × 9–12 μ. Caespitose, the numerous stems often glued together with villose down at the base. On stumps, trunks, and pollards. Jan.—Dec. Common. (v.v.)

var. calopus Fr. (= Mycena inclinata Fr. sec. Lange.) Fr. Icon. t. 80, fig. 2.

Differs from the type in the fasciculate, fusiform chestnut coloured stem. "P. viscid, gills cinereous becoming whitish, spores ovate globose, 8 × 6 μ" Sacc. On stumps. Sept.—Nov. Uncommon. (v.v.)

1222. M. simillima Karst. Simillima, very like.

P. livid, or dingy pallid, conico-campanulate, even, dry, glabrous. St. fragile, polished, even, glabrous, base curved, rooting. Gills white, very slightly tinged with rose, emarginato-decurrent, crowded. Tree stumps. Sept. Rare.

1223. M. polygramma (Bull.) Fr. Cke. Illus. no. 228, t. 223. τολύς, many; γραμμή, a line.

P. 2–5 cm., fuscous, cinereous, livid, or becoming light yellow, margin white when young, submembranaceous, conical, then campanulate, subumbonate, striate, smooth, rarely pruinose; margin often toothed. St. 6–10 cm. × 2–4 mm., silvery, livid, blue grey, or becoming azure blue, rigid, tense and straight, equal, longitudinally striato-sulcate, base strigose-rooted. Gills white, or pinkish, attenuated behind, uncinate, subdistant, sometimes serrulate. Flesh greyish, very thin at the margin. Spores white, broadly elliptical, 9–12 × 6–8 μ, 1–2–multi-guttulate. Basidia with 4-sterigmata. Cystidia hyaline, flask-shaped, base ventricose, apex prolonged and attenuated upwards, flexuose, simple or branched, 20–60 × 4–10 × 1.5–3 μ at apex. Gregarious or solitary. On stumps and twigs. Aug.—Feb. Common. (v.v.)

1224. M. inclinata Fr. Cke. Illus. no. 234, t. 225, upper figs., as Mycena alcalina Fr.

Inclinata, bent in.

P. 2–3 cm., fuscous, livid fuscous, or bistre, submembranaceous, globose, then campanulate, obtuse, rarely gibbous, at length expanded and depressed at the apex, smooth, striate to the disc, shining when dry; margin at first white, exceeding the gills, delicately crenulate. St. 6–10 cm. × 2–4 mm., whitish, or brownish, becoming fulvous from the base upwards, slightly attenuated upwards, twisted, flexuose, apex incurved at first, somewhat tough when young, then fragile, pruinose

1225. **M. parabolica** Fr. Fr. Icon. t. 79, fig. 3, wrongly cited as t. 80, fig. 3, in the text. Parabolica, like a parabola.

P. 2–5 cm., somewhat violaceous, disc black, margin whitish, or lilac, submembraneous, at first erect and oval, then conical, never expanded, moist, somewhat shining when dry, smooth, striate to the disc. St. 5–8 cm. × 2–3 mm., whitish, or lilac, apex dark violaceous, tense and straight, not very rigid, white mealy when young, smooth, dry; base thickened, bearded-rooting. Gills white, greyish at the base, adnate, ascending, subdistant, rarely connected by veins. Spores white, elliptical, 7–8 × 5–6μ. "Basidia 2-spored. Cystidia obovate, crowned with minute wart-like setae" Lange; "conical (not, or slightly ventricose), mostly sharp pointed, 40–60 × 10–20μ" v. Hoehnel. Gregarious, or caespitose. On needles and rotten wood, in coniferous woods. Sept.—Dec. Uncommon. (v.v.)

1226. **M. tintinnabulum** Fr. Fr. Icon. t 79, fig. 4, wrongly cited as t. 80, fig. 4, in the text. Tintinnabulum, a door bell.

P. 2–3 cm., date brown, becoming pale, yellowish fuscous, azure blue, or whitish, submembraneous, very tough, campanulato-convex, then plane, smooth, subviscid when moist. St. 2–3 cm. × 1–2 mm., pallid, very tough, smooth; base shortly white-strigose. Gills whitish, then cream, or flesh colour, adnate, decurrent with a tooth, horizontal, narrow, very thin and crowded. Spores white, "elliptical, 9–10 × 5–7μ; basidia with 4-sterigmata. Cystidia on edge of gill subulate" Rick. For *Mycena tintinnabulum* Fr. sensu Schroet., v. Hoehnel and Lange give the following dimensions. Spores long-cylindrical, or ovate, 5–7 × 2.5–3μ. Cystidia vesiculose, obovate, subglobose, or cylindrical, often set with wart-like setae, 9–15μ across. Caespitose, or solitary. On fallen beech trunks. Oct.—April. Uncommon.

IV. St. fragile, dry, juiceless, fibrillose at the base, scarcely rooting, but not dilated nor inserted. P. hygrophanous. Gills changing colour, at length somewhat connected by veins. Usually strong scented, solitary and terrestrial, a few caespitose and lignicolous.


Ater, black; alba, white.

P. 2–3 cm., bistre blackish, whitish at the margin, submembraneous, conico-campanulate, obtuse, smooth; margin pellucidly striate.

1228. M. dissiliens Fr. Fr. Icon. t. 81, fig. 2. Dissiliens, flying apart.

P. 2–5 cm., cinereous-fuscous, margin whitish, submembraneous, very fragile, acorn-shaped, then conico-campanulate, sulcate to the disc, pruinose; margin revolute. St. 4–5 cm. × 2–5 mm., cinereous, attenuated upwards from the strigose base, somewhat incurved, smooth, or pruniate, slightly striate under a lens, split and breaking up into revolute flaps when compressed or bent, often twisted. Gills whitish, or cinereous at the base, rounded behind, separating free, broader in front, soft, watery. Flesh white, greyish in the st., thin at the margin. Spores white, elliptical, 7–8 × 4–5 μ, multi-guttulate. Cystidia "globose-ovate, 20 μ, crowned with a few, short, finger-like protuberances" v. Hoehnel. Smell weak. Amongst grass in woods and heaths, and on trunks. July—Nov. Uncommon. (v.v.)


Ater, black; cyanea, dark blue.

P. 5–13 mm., fuscous, then azure-blue-grey, membraneous, campanulato-convex, at length flattened, gibbous, with an irregularly shaped, somewhat angular, wrinkled, obtuse, fuscous blackish umbo, deeply sulcate to the umbo, sprinkled with a white, evanescent pruina. St. 3–5 cm. × 1–2 mm., dark blue-black, slightly attenuated from the subbulbous base, almost equal, rigid, fragile, smooth. Gills white, grey at the base, attenuato-adnate, joined in a collar, ventricose, distant. Flesh greyish, thin. Spores white, oblong, often apiculate at one end, 10–12 × 6–7 μ. Cystidia subulate-fusiform, or cylindrical, apex acute, 2–3 μ in diam., 80–100 × 10–12 μ. Amongst pine needles and on stumps. Sept.—Nov. Uncommon. (v.v.)


Pullus, dark coloured.

P. 18 mm., dark brown with a tinge of purple, disc almost black, becoming paler, sometimes with a glaucous bloom, membraneous, campanulate, obtusely umbionate, sulcate-striate to the middle. St. 7.5 cm. × 2 mm., concolorous; base thickened, whitish floccose, sometimes rooting. Gills white, adnexed, rather broad, scarcely crowded. Spores white, elliptical, 6 × 3 μ. Smell slightly nitrous. Amongst dead leaves. Oct.—Nov. Uncommon. (v.v.)


1233. **M. leptocephala** (Pers.) Fr. Pers. Ic. et Desc. t. 12, fig. 4. *λεπτός*, thin; *κεφαλή*, head.


1234. **M. alcalina** Fr. Fr. Icon. t. 81, fig. 3. *Alcalina*, alkaline.

P. 2–5 cm., *cinereous, fuscos, date brown, inclining to olivaceous, often tinged with yellow or pink*, submembranaceous, campanulate, obtusely umbonate, *deeply striate when moist, shining when dry*. St. 5–8 cm. × 2–4 mm., *normally yellow, often cinereous*, slightly firm, *rigid*, slippery when moist, shining when dry, smooth, base villose. Gills *glaucescent white, or dark cinereous, becoming white and sometimes brown at the edge*, adnate, slightly ventricose, sometimes connected by veins, subdistant. Flesh *whitish, thick at the disc*. Spores white, broadly elliptical, *8–10 × 6–7 μ*. Basidia with 4-sterigmata. Cystidia *hyaline, flask-shaped, or fusiform, base often ventricose; apex prolonged, obtuse or pointed, 35–45 × 10–18 × 4–5 μ* at apex. Smell *strong, alkaline*. Caespitose, rarely solitary. Coniferous stumps, trunks, and needles. Jan.—Dec. Common. (v.v.)
1235. **M. ammoniaca** Fr. Cke. Illus. no. 235, t. 238, upper figs.

*M. ammoniaca*, ammoniacal.

P. 1·5–2 cm., fuscous, becoming blackish, varying cinereous, disc fuscous blackish, paler round the striate margin, submembranaceous, acutely conical, papillate, then campanulate, naked, discoid, opaque. St. 2·5–5 cm. × 1–2 mm., whitish, slightly firm, equal, polished, dry, smooth; base rooting, strigose. Gills whitish, or grey, edge whitish, adnate, linear, distant. Flesh greyish in the p., becoming whitish, thin at the margin. Spores white, elliptical, 6–11 × 4–7 μ, often 1–2-guttulate. Cystidia hyaline, flask-shaped, ventricose at the base; apex acute, obtuse or subglobose, 40–55 × 15–18 × 3–7 μ at apex. Smell strong, alkaline. In troops on coniferous needles, and amongst short grass. July—Nov. Common. (v.v.)

1236. **M. metata** Fr. (= *Mycena paupercula* Berk. sec. Quél.)

*Metata*, conical.

P. 1–2 cm., cinereous and slightly striate when moist, opaque, whitish, and somewhat silky in appearance when dry, submembranaceous, hemispherico-campanulate, obtuse, then plane, disc papillate or somewhat umbilicate, very hygrophanous. St. 5–7·5 cm. × 1–2 mm., white, becoming cinereous, rarely yellowish, or flesh colour, soft-flaccid, equal, smooth, base white fibrillose. Gills whitish, or yellowish grey, adnate, linear, subdistant. Spores white, elliptical, 6–8 × 4–5 μ, with a large central gutta. Cystidia "obovate or pyriform, 12–19 μ across, set with setulose warts" Lange; "spinulose, 30 × 12–15 μ" Rick.; "conical, ventricose, 20–50 × 12–16 μ" v. Hoehnel. Smell faintly alkaline. In pastures, and amongst short grass. Sept.—Nov. Common. (v.v.)

1237. **M. plicosa** Fr. Fr. Icon. t. 81, fig. 4.

*Plicosa*, folded.

P. 1·5–3 cm., fuscous cinereous, opaque when dry, membranaceous, fragile, campanulate, then expanded, broadly and obtusely umbonate, deeply lineato-sulcate, plicate with the distant furrows, often split. St. 2·5 cm. × 2–3 mm., grey, then fuscous, rigid but fragile, equal, smooth; base abrupt, white villose. Gills grey, at length whitish pruinose, adnate, thick, distant, connected by veins Spores oblong-elliptical, 9–11 × 4–5 μ, "minutely punctate" Quél. Cystidia "on edge of gill clavate, 40–45 × 12–18 μ, with finger-like appendages" Rick. On bare soil in woods. Sept.—Oct. Uncommon. (v.v.)

1238. **M. cinerea** Massee & Crossl.

*Cinerea*, ash colour.

Entirely grey. P. 1·5–2 cm., submembranaceous, subgibbous, or obtuse, soon expanded, paler and silky when dry; margin striate. St. 5–7 cm. × 2 mm., cylindrical, smooth; base white, downy. Gills adnate, subdistant, edge pale, mealy with the spores. Flesh greyish,

1239. **M. peltata** Fr.

Peltata, having a shield.

P. 1.5–3 cm., black fuscos when moist, grey when dry, membranaceous, convex, soon exactly plane, disc orbicular, even, flat, rather umbilicate than umbonate; margin upturned and becoming black when dry, very closely striate. St. 4–5 cm. × 2 mm., livid, equal, rigid, somewhat fragile, often flexuose, smooth. Gills grey, paler at the edge, adnate, with a small decurrent tooth, ventricose. Flesh greyish, thick at the disc. Spores white, elliptical, 8–10 $\times$ 4–6$\mu$. Cystidia "broadly lanceolate, 40 $\times$ 12–15$\mu$, sometimes slightly capitate" Rick. Smell none, or alkaline. Woods, and heaths. Aug.—Oct. Uncommon. (v.v.)

1240. **M. consimilis** Cke. Cke. Illus. no. 1150, t. 1186.

Consimilis, entirely similar.

P. 2.5–3 cm., cinereous, umbo darker, membranaceous, conically campanulate, umbonate, striate to the middle, smooth, opaque; margin soon upturned, at length splitting. St. 2–3 cm. × 2 mm., paler than the p., attenuated upwards, often compressed below, rather rigid, dry, smooth. Gills cinereous, adnexed, or nearly free, linear, 1–2 mm. broad, scarcely crowded. Flesh white, thick at the disc. Spores white. Amongst grass. Sept. Rare.

1241. **M. aetites** Fr. (= Mycena umbellifera (Schaeff.) Quél.) Fr. Icon. t. 81, fig. 5.

Aetites, the eagle-stone.

P. 1–2 cm., fuscous grey, becoming pale, membranaceous, campanulate, then convex, sulcate to the broad, obtuse, prominent umbo, hygrophanous, smooth; extreme margin becoming black. St. 4–5 cm. × 2 mm., whitish, becoming fuscous downwards, shining, often compressed, unequal, fragile, smooth. Gills white, grey at the sides, adnate, subuncinate, thin, at first cohering in the form of a collar, beautifully reticulated by veins, linear, subdistant. Spores white, elliptical, often with an oblique apiculus, 8–10 $\times$ 5–6$\mu$. Cystidia hyaline, flask-shaped, ventricose at the base; apex prolonged, acute, or obtuse, 25–50 $\times$ 6–8 $\times$ 1$\mu$ at apex. Smell alkaline, or none. Taste bitterish, or obsolete. Amongst moss, and short grass in woods and upland pastures. June—Nov. Uncommon. (v.v.)

1242. **M. stannea** Fr. Fr. Icon. t. 82, fig. 2.

Stannea, tin-colour.

P. 3–4 cm., grey when moist, tin colour and silky shining when dry, hygrophanous, membranaceous, campanulate, then flattened, obsolescently umbonate, fragile, often rimose, smooth, pellucidly striate when moist. St. 5–8 cm. × 2–4 mm., grey, becoming pale, slightly rigid,

1243. **M. vitrea** Fr. Fr. Icon. t. 82, fig. 1. **Vitrea**, glassy.


Very fragile, caespitose, white. P. 1–2 cm., hyaline, or becoming fuscous white, very membranaceous, campanulato-convex, obtuse, lineato-striate, smooth; margin slight, beautifully fringed in a crenate manner, as if appendiculate with the fragments of the veil. St. 7–8 cm. × 1–2 mm., hyaline, base becoming yellowish, membranaceous, pellucid, tense and straight, smooth. Gills adnate, with a small decurrent tooth which is often obsolete, linear, rather thick, comparatively distant, soft. Spores white, subglobose, 4 × 3 μ, with a large central gutta. Woods, and pastures. Sept.—Oct. Uncommon. (v.v.)

V. St. filiform, scarcely a line thick (and not more), flaccid, somewhat tough, rooting, dry, juiceless, commonly very long in proportion to the p. Gills paler at the edge and changing colour. Very slender, tense and straight, terrestrial, and amongst moss, inodorous, solitary. *P*. fuscous, becoming somewhat pale, not hygrophanous, in the last species orange.

1245. **M. filopes** (Bull.) Fr. Cke. Illus. no. 238, t. 161, upper figs. **Filum**, a thread; pes, foot.

P. 1–1·5 cm., livid fuscous, or livid grey, rarely whitish, very membranaceous, conical then campanulate, obtuse, striate, dry, smooth. St. 7–9 cm. × 1–2 mm., livid, or becoming fuscous, filiform, tense and straight, flaccid, not very tough, equal, rooting with a long pilose tail, filled with a watery juice when in full vigour. Gills white, at length grey at the base, free, or only reaching the st., ventricose, or lanceolate, crowded. Flesh whitish, thin at the margin. Spores white, elliptical,
8-10 × 4-5 μ. Basidia with 2-4-sterigmata. Cystidia on gill edge, hyaline, crowded, forming a compact layer, obovate, or pyriform, minutely setulose towards the apex, 20-48 × 16-32 μ. Amongst dead leaves in deciduous woods, hedgerows and plantations. Aug.—Jan. Common. (v.v.)

1246. M. amicta Fr. (= Mycena Iris Berk. sec. QuéI.) Fr. Icon. t. 82, fig. 3. 

P. 6-12 mm., green, bluish grey, or livid, membranaceous, conico-campanulate, slightly pellucidly striate to the disc, covered with fugacious pruina. St. 6-8 cm. × 1-2 mm., livid, equal, flexile, covered with a delicate white pruina; base straight, or with a long tortuose root, smooth. Gills grey, edge paler, free, or only reaching the st., linear, narrow, crowded. Flesh fusco, thin at the disc. Spores white, elliptical, 7-8 × 4-5 μ, 1-2-guttulate. Basidia with 2-guttulate. Cystidia hyaline, flask-shaped, apex acutely conical, 20 × 6 μ. 

Amongst mosses in woods, and pastures. Sept.—Nov. Not uncommon. (v.v.)


P. 10-15 mm., grey, becoming yellowish, membranaceous, hemispherical, obtuse, covered with blue, evanescent fibrils, viscid; margin denticulate. St. 4-9 cm. × 2-3 mm., grey, equal, covered with evanescent blue fibrils, which are often only apparent at the base. Gills grey, edge becoming pale, free, or slightly adnexed, linear, edge sometimes denticulate. Flesh greyish, thick at the disc. Spores white, elliptical, 6-8 × 3-4 μ. Cystidia “crowded, conical, threadlike, obtuse, 20 × 4-5 μ” v. Hoehnel. On fir stumps, and sticks. Sept.—Nov. Not uncommon. (v.v.)

var. caerulea Rea. 

Caerulea, azure blue.

Differs from the type in the pure blue colour of the p., in the absence of blue fibrillae on the p. and st., and in the white pulverulent apex of the st. Spores white, elliptical, with an oblique apiculus, 8-9 × 5 μ. Inside a hollow tree. May. Rare. (v.v.)

1248. M. urania Fr. 

Oviparia, the Heavenly One.

P. 6-10 mm., dark blue, then becoming violaceous, and at length pallid lilac, rarely becoming fusco, membranaceous, campanulate, then hemispherical, obtuse, striate, dry, smooth. St. 5-8 cm. × 1-2 mm., dark blue, then becoming somewhat azure blue, equal, flexile, flaccid, smooth, slightly rooting; base white floccose. Gills white, uncinato-adnate, thin. Amongst alder leaves, Jungermanniae, and twigs in damp woods. July—Sept. Rare.
1249. **M. plumbea** Fr. (= *Omphalia plumbea* (Fr.) Rick.)

*Plumbea*, lead colour.

P. 1–3 cm., cinereous lead colour, covered with a white pruina, sometimes bluish ash colour, membranaceous, convex, then plane, obtuse, sulcate. St. 7–10 cm. × 2 mm., becoming cinereous, equal, fragile, pulverulent, apex hyaline, base white strigose. Gills concolorous, adnate, horizontal. Flesh whitish, very thin at the margin. Spores white, elliptical, 10–11 × 5–6 μ, 2–multi-guttulate. Mossy pastures, and amongst leaves. Sept.—Nov. Uncommon. (v.v.)


*Debilis*, weak.

P. 4–6 mm., whitish livid, or somewhat flesh colour, becoming fuscous, withered and corrugated when dry, membranaceous, very thin, campanulate, then convex, obtuse, striate when moist, even when dry, smooth. St. 5–10 cm. × 1 mm., concolorous, capillary-filiform, weak, lax, base fibrillose. Gills whitish, or concolorous, broadly adnate, rather broad, subdistant. Spores white, elliptical, 10–12 × 5 μ. Cystidia “thin, lanceolate, 60–75 × 9–12 μ, much projecting and making the gills appear rough” Rick. Amongst dead leaves in woods, and hedges. Sept.—Nov. Not uncommon. (v.v.)

1251. **M. vitilis** Fr. Cke. Illus. no. 240, t. 189, fig. 2. *Vitilis*, plaited.

P. 6–10 mm., fuscous, or livid, becoming pale, or whitish, membranaceous, conical, then campanulate, papillate, striate to the middle, dry, smooth. St. 7–15 cm. × 1–2 mm., livid, filiform, rooted, tense and straight, rigid, tough, easily flexile, smooth, shining. Gills whitish, or grey, edge becoming whitish, attenuato-adnate, ascending, linear, thin. Flesh white, very thin at the margin. Spores white, broadly elliptical, apiculate at base, 9–12 × 5–7 μ. Cystidia “very like those of *Mycena polygramma*, free portion hair-shaped, c. 10 μ long, 2 μ broad, basal part slightly thickened” Lange. Amongst dead leaves in deciduous woods. Sept.—Feb. Common. (v.v.)

var. **amsegetes** Fr.

*Amsegetes*, field by the roadside.

Diffs from the type in the obsoletely umbonate p., and the shorter, and thicker st. Meadows, and roadsides.

1252. **M. collariata** Fr.

*Collariata*, possessing a collar.

P. 1–2 cm., fuscous, becoming pale, often greyish white, becoming fuscous only at the disc, membranaceous, campanulate, then convex, subumbonate, striate, rigid when dry, smooth. St. 5 cm. × 1–2 mm., grey, becoming pale, filiform, tough, dry, smooth, slightly striate under a lens. Gills hoary-whitish, or obsoletely flesh colour, adnate, joined in a collar behind, thin, crowded. Spores white, “elliptical, 8–10 ×

1253. M. speirea Fr. (= Omphalia speirea (Fr.) Quél.) Fr. Icon. t. 78, fig. 2. σπείπα, a coil.

P. 4–10 mm., pallid cinereous, or whitish variegated with fuscous striae, umbo fuscous, membranaceous, conico-convex, then plane, at length depressed at the disc, smooth, sometimes pruinose. St. 5 cm. × 1 mm., white, base becoming fuscous and ending in a tail-like fibrillose root, tough, filiform, equal, smooth, shining. Gills shining white, adnate, then deeply decurrent, distant, the alternate ones shorter. Flesh white, thin at the margin. Spores white, “globose, 6μ, or broadly elliptical, 6–9 × 4–6μ. Cystidia numerous, cylindric, conical, generally sharp pointed, full of small oil globules, on the edge of the gill, 60 × 20μ, on the surface, 85 × 20μ, or cylindric, conical, with protruding points, 40 × 20μ.” v. Hoehnel. Woods, and mossy trunks. Aug.—Oct. Uncommon.

1254. M. tenella Fr. Cke. Illus. no. 241, t. 190, middle figs.

Tenella, rather tender.

Entirely white, or livid flesh colour, caespitose. P. 5–12 mm., membranaceous, very tender, campanulato-convex, obtuse, pellucid; margin slightly striate. St. 2 cm. × 1 mm., filiform, soft, smooth, base villose. Gills white, then flesh colour, uncinate, very thin, crowded. Flesh white, very thin. Spores white, elliptical, 8–9 × 4–5μ, minutely punctate. Cystidia “on the edge, in several rows, globose, 16–23μ, crowned with numerous, short spines” v. Hoehnel. On felled trunks, and twigs in wood heaps. Aug.—Dec. Common. (v.v.)

1255. M. acicula (Schaeff.) Fr. (= Mycena coccinea (Scop.) Sacc.)

Acicula, a small pin.

P. 2–10 mm., vermilion-orange, membranaceous, campanulate, then convex, with a very small slightly fleshy umbo, striate, smooth, shining. St. 2–5 cm. × 1 mm., bright yellow, becoming pale, filiform, rooting, smooth, shining, apex somewhat pruinose, base villose. Gills yellow, becoming whitish at the edge, or wholly white, rounded-adnexed, almost free, comparatively broad, ventricose, somewhat ovate, distant, the alternate ones shorter. Flesh reddish in the p., very thin. Spores white, oblong-fusiform, 9–12 × 2–4μ, attenuated at the base, 1-guttulate. Cystidia hyaline, flask-shaped, base ventricose or fusiform; apex acute, obtuse, or subglobose; 25–30 × 8–12 × 2–4μ at apex. On dead leaves and twigs in woods and hedgerows. May—Dec. Common. (v.v.)
VI. St. and gills exuding a milky, usually coloured juice when broken. St. dry, rooting.

1256. **M. hematopus** (Pers.) Fr. Fr. Icon. t. 83, fig. 1.

*alūa*, blood; *πούς*, foot.

P. 2–4 cm., greyish, or white flesh colour with a purplish tinge, disc bistre, fleshy-membranaceous, conical, then campanulate, obtuse, smooth; *margin denticulate*, slightly striate. St. 5–10 cm. × 2–5 mm., white, greyish, flesh colour, or violaceous, becoming cinereous, rigid, fragile, recurved, white pruinose, becoming smooth, containing a blood-like juice, base strigose. Gills white, then flesh colour, or violaceous, adnate, often with a small decurrent tooth, the alternate ones shorter. Flesh turning blood red, thick at the disc. Spores white, broadly elliptical, 10 × 6μ, rounded at both ends, with a large central gutta. Cystidia "conical, sharp pointed, often ventricose below, 45 × 15μ, or rigid, long, threadlike and pointed above, ventricose below, 40–45 × 12μ, contents colourless, seldom reddish" v. Hoehnel. Caespitose. On trunks, and stumps, especially birch. Aug.—Dec. Common. (v.v.)

var. **marginata** Lange.

Marginata, bordered.

Differs from the type in the dark edge of the gills. Cystidia "drawn out to a sharp point, below the middle fusiformly inflated, 10–17μ broad, their free portion 45μ long, contents pale brownish red" Lange. On stacked birch logs. Oct. Probably not uncommon. (v.v.)

1257. **M. cruenta** Fr. Fr. Icon. t. 83, fig. 2.

*Cruenta*, bloody.

P. 6–20 mm., bay brown, or fuscous, then red, becoming pale, sub-membranaceous, conical, then campanulate, obtuse, striate, smooth. St. 5–8 cm. × 2 mm., paler than the p., slightly firm, tense and straight, smooth, containing a dark red juice, base villose-rooted. Gills whitish, or pinkish, adnate, linear, crowded. Flesh dark red, thin. Spores white, broadly elliptical, 9–10 × 6μ, with a large central gutta. Cystidia "on gill edge only, contents granular, 35 × 9 × 2μ at apex" v. Hoehnel. Generally solitary. Pine woods. Sept.—Oct. Uncommon. (v.v.)

1258. **M. sanguinolenta** (A. & S.) Fr. Fr. Icon. t. 83, fig. 3.

*Sanguinolenta*, bloody.

P. 4–20 mm., pallid reddish, becoming fuscous, umbo and striae commonly darker, very membranaceous, campanulato-convex, or hemispherical, papillate, smooth. St. 5–12.5 × 1–2 mm., pallid, flaccid, weak, almost capillary, moderately tough, smooth, containing a pale reddish juice, base subfibrillose. Gills whitish, or paler than the p., edge black purple, adnate, linear, subdistant, the alternate ones
shorter. Flesh reddish, becoming whitish, very thin. Spores white, elliptical, pip-shaped, or pyriform, 8–9 × 4–6μ, 1–2-guttulate. Cystidia filled with a reddish juice, or colourless, flask-shaped, often prolonged at the base; apex long, conical, pointed, 35–50 × 6–8 × 1–2·5μ at apex. Gregarious or solitary. Amongst dead leaves in woods, especially coniferous woods, and in hedgerows. May—Dec. Common.

1259. M. crocata (Schrad.) Fr. Crocata, saffron yellow.

P. 1–2·5 cm., olivaceous, cinereous, or shining white, umbonate disc reddish, submembranaceous, conical, then campanulate, smooth; margin striate. St. 7–12·5 × 2–3 mm., saffron-blood-colour, especially towards the rooting, creeping, fibrillose base, slightly attenuated upwards, apex whitish, containing a saffron-blood juice that readily stains the rest of the fungus. Gills white, attenuato-adnexed, broader in front, subventricose, subdistant. Flesh saffron-blood-colour, yellowish in the centre of the st., thick at the disc. Spores white, broadly elliptical, or pip-shaped, 9–11 × 6–7μ, punctate. Basidia with 4-sterigmata. Cystidia “club-shaped, or somewhat pyriform set with minute wart-like setae, apex occasionally with a hair-shaped appendix” Lange. On dead leaves, and twigs in woods, especially beech. Sept. Uncommon. (v.v.)

1260. M. galopus (Pers.) Fr. Cke. Illus. no. 244, t. 207.

γάλα, milk; πτούς, foot.

P. 6–15 mm., fuscous, or greyish, the indistinct umbo darker, membranaceous, conical, then campanulate, striate, smooth, or pruinose. St. 5–11 cm. × 1–2 mm., fuscous, or grey, apex white, firm, somewhat fragile, smooth or pruinose; base thickened, white villose and rooting, containing a milk white juice. Gills white, sometimes becoming glaucescent, attenuated behind, slightly adnexed, broader towards the margin of the p. Flesh white, very thin. Spores white, oblong elliptic, 12–14 × 6–7μ. Cystidia hyaline, subulate, fusiform; apex acute, simple or forked, 30–90 × 10–12 × 2·5–3μ at apex. Amongst dead leaves, on twigs and stumps. Woods, hedgerows, and wood piles. July—Jan. Common. (v.v.)

var. alba Fl. Dan. Alba, white.

Differs from the type in being entirely white. In woods amongst leaves. Sept.—Nov. Not uncommon. (v.v.)

var. nigra Fl. Dan. (= Mycena leucogala Cke.) Cke. Illus. no. 1151, t. 653, as Mycena leucogala Cke. Nigra, black.

Differs from the type in the dark colour of all its parts. In woods, on stumps, twigs, and leaves. Aug.—Nov. Common. (v.v.)
VII. St. juiceless, glutinous, or viscid. Gills at length decurrent with a tooth.

1261. M. epityerygia (Scop.) Fr. Cke. Illus. no. 245, t. 208, upper figs. ἐπίτεριγια, upon; πτερόνων, a little wing.

P. 1–3 cm., cinereous, grey, or yellow, becoming whitish, membranaceous, campanulate, then more or less expanded, striate, covered with a viscid, separable pellicle; margin often denticulate. St. 5–8 cm. × 1–2 mm., yellow, sometimes cinereous, pallid, or whitish, covered with a viscid separable pellicle, equal, tough, often flexuose; base rooted, white fibrillose. Gills white, adnate with a decurrent tooth, straight, or slightly arcuate, little crowded. Flesh white, very thin. Spores white, oblong elliptic, 8–11 × 4–5 μ, 1-guttulate. Cystidia only on gill edge, subglobose, 10–13 μ, setulose, soon fugacious. "None" Lange. Smell none, or of rancid fat. Woods, pastures, and on leaves, and twigs. Aug.—Dec. Common. (v.v.)

1262. M. viscosa (Secr.) R. Maire.

V. viscosa, viscid.

P. 2–3 cm., whitish, pearl grey, then greyish brown, and finally reddish brown, hygrophanous, membranaceous, campanulate, then expanded, striate, covered with a viscid separable pellicle. St. 5–8 cm. × 1–2 mm., citron yellow, or golden, equal, viscid, apex whitish; base white fibrillose. Gills whitish, then greyish or flesh colour, adnate with a more or less decurrent tooth, slightly arcuate, narrow, little crowded. Flesh whitish, becoming reddish brown with age, thin. Spores white, shortly elliptic, 8–12 × 6–8 μ, 1-multi-guttulate. Cystidia none. Smell of rancid fat. On needles, and rotten stumps in coniferous woods. Sept.—Oct. Uncommon. (v.v.)


Epityerygia εἰδος, like the species M. epityerygia.

P. 1–2 cm., greenish yellow, disc darker, membranaceous, persistently hemispherical, depressed at the centre, viscid pellicle separable; margin striate, or sulcate, often crenate. St. 5–8 cm. × 1–2 mm., greenish, usually with reddish stains at the base, cylindrical, or compressed, hollow, viscid. Gills white, then delicate greenish yellow, adnate, with a decurrent tooth, subdistant, with intermediate shorter ones. Spores white, broadly elliptical, 9–10 × 7.5–8 μ, contents granular. Basidia 30 × 6.5 μ, with two prominent sterigmata. Cystidia on edge of gill brush-like; on gill face none. Damp places in pine woods. Oct.—Nov. Common. (v.v.)

1264. M. plicato-crenata Fr. (= Mycena plicata (Schaeff.) Qué.), Fr. Icon. t. 84, fig. 2.

Plicata, folded; crenata, crenate.

P. 6–10 mm., white, becoming yellow, membranaceous, conical, sub-umbonate, very sulcato-plicate, somewhat viscid; margin crenate. St. 4 cm. × 1–2 mm., pallid reddish, filiform, smooth, viscid. Gills white,
adnate, with a small decurrent tooth, narrow, attenuated behind, distant. Flesh of st. light yellow. Spores white, elliptical, “9-12 x 6μ” Sac. Amongst moss on heaths, and in coniferous woods. Sept.—Oct. Uncommon. (v.v.)

1265. **M. clavicularis** Fr. Fr. Icon. t. 84, fig. 1.

Clavicula, a small key.

P. 1–3 cm., whitish, or light yellowish, becoming fuscous, membranaceous, campanulate, then convex and unbonate, at length depressed, striate, dry. St. 5–8 cm. x 1–2 mm., whitish, or yellowish, equal, tough, smooth, slightly viscid, base fibrillose. Gills whitish, adnate, subdecurrent, often connected by veins. Flesh fuscous, very thin. Spores white, elliptical, 6 x 4μ, “cylindric-lanceolate, 10–12 x 3–4μ. Cystidia on gill edge vesiculose-bottle-shaped, 30–36 x 9–11μ, rarely lanceolate without a head” Rick. Woods, and damp places. Sept.—Oct. Uncommon. (v.v.)

1266. **M. pelliculosa** Fr. Cke. Illus. no. 246, t. 191, upper figs.

Pelliculosa, having a thin skin.

P. 1–2·5 cm., fuscous, then grey, membranaceous, campanulate, then convex, obtuse, lineato-striate to the middle, covered with a viscid, separable pellicle. St. 2–6 cm. x 2–3 mm., white-livid, becoming fuscous, viscid, rigid, tense and straight, smooth, apex somewhat thickened. Gills glaucous white, adnate, alternate, very distant, fold-like, joined in a collar behind, decurrent. Spores white, boat-shaped, 8–9 x 5–6μ, 2-guttulate. Cystidia “none” Rick. On heaths, and in heathy woods. Sept.—Oct. Not uncommon. (v.v.)


Vulgaris, common.

P. 6–10 mm., fuscous, or cinereous, sometimes whitish with the papilla fuscous, often rufescent when old; submembranaceous, campanulate, then convex, disc depressed, papillate, slightly striate, viscid pellicle separable. St. 2·5–5 cm. x 2 mm., cinereous, very viscid; base rooting and white strigose. Gills white, or grey, uncinato-adfixed, then decurrent, thin. Flesh whitish, thick at the disc. Spores white, elliptical, 6–9 x 3–4μ, 1-guttulate. Cystidia “globose, 10–12μ, provided with numerous short, spiny, protuberances” v. Hoehnel. Gregarious. Coniferous woods. July—Dec. Common. (v.v.)

1268. **M. citrinella** (Pers.) Fr. (= Mycena tenella (Batsch) Sacc.) Pers. Icon. et Desc. t. 11, fig. 3. Citrinella, lemon-coloured.

P. 4–10 mm., lemon yellow, disc often darker, membranaceous, campanulate, then hemispherical and flattened, striate, slightly viscid. St. 2–3 cm. x 1 mm., lemon yellow, filiform, viscid when moist, base villose. Gills shining white, uncinate, moderately broad, distant.
Flesh white, thin at the margin. Spores white, "broadly elliptical, 8-8.5 x 7 μ, or 6-8 x 4 μ (Britz.)" Sacc. Cystidia "filiform-clavate, or fusiform, 30-40 x 5-6 μ" Rick. Gregarious. On pine needles, and wood. Oct. Rare.

var. candida Fr.  
Candida, shining white.

Differs from the type in being shining white, and becoming yellow when dry.

**Rorida**, bedewed.

Entirely white, or with a greyish tinge, but varying with the p. becoming yellow. P. 3-8 mm., membranaceous, conico-campanulate, then convex, dry, sulcate when moist, even when dry; margin crenate. St. 1-3 cm. x 1 mm., filiform, covered over with a thick, fluid, hyaline gluten, base inserted. Gills arcuate, decurrent, distant, the alternate ones shorter. Flesh whitish, very thin. Spores white, oblong-elliptic, 8-12 x 4-5 μ. Cystidia "in dense, large groups, slightly conical, often somewhat ventricose, 18-25 x 6-9 μ, or threadlike, obtuse, slightly ventricose, 22-25 x 6-7 μ" v. Hoehnel. On twigs, in woods, hedge-rows, and wood heaps. May—Dec. Common. (v.v.)

VIII. St. dry, rootless, the base naked, and dilated into a disc, or strigose and swollen into a little bulb. Tender, solitary, becoming flaccid.

1270. M. stylobates (Pers.) Fr. Cke. Illus. no. 248, t. 249, fig. A.  
στύλος, a pillar; βάσις, a pedestal.

Entirely white, sometimes grey. P. 4-10 mm., membranaceous, campanulate, then convex, pellucidly striate, striae often dichotomous, generally sprinkled with spreading hairs. St. 2.5-5 cm. x 1 mm., filiform, equal, smooth, dry, arising from a round, striate, white-villose disc. Gills free, wholly separate behind, ventricose, broader in front, distant, alternate. Flesh white, very thin. Spores white, elliptical, 4 x 2 μ ("7-9 x 3.5-4.5 μ" Sacc.). Cystidia "on the edge of the gills hair-shaped" Schroet. On twigs, and leaves. June—Nov. Common. (v.v.)

**Dilatata**, spread out.

Wholly white. P. 5-10 mm., membranaceous, convexo-plane, obtuse, smooth; margin striate. St. 10-15 x 1 mm., filiform, straight, arising from a convex, smooth, glabrous, orbicular disc. Gills 5-1 mm. wide, sublinear, attached to a free collar behind. Flesh white, thin. Spores white, oblong, obtuse at both ends, 7-8 x 3.5 μ. Cystidia hyaline, clavate, obtuse, or produced into an acute point, 70-80 x 5-7 μ. Dead twigs and leaves in woods and hedgerows. Sept.—Dec. Not uncommon. (v.v.)
1272. **M. tenerrima** Berk. (= *Mycena setosa* (Sow.) Quél.) Berk. Outl. t. 6, fig. 6. *Tenerrima*, very delicate.


1273. **M. discopus** Lév. (= *Mycena setosa* (Sow.) Quél.) Cke. Illus. no. 249, t. 192, middle figs. *Δίσκος*, a disc; *πούς*, foot.

*Entirely shining white.* P. 2–4 mm., membranaceous, conical, obtuse, mealy-pulverulent. St. 1–2 cm. × 1 mm., very tender, mealy-pulverulent, inserted with a small hairy bulb. Gills adnate, few, fold-like, very distant. Flesh *white*, very thin. Spores white, globose, 3 μ. On twigs, and dead herbaceous stems. Sept.—Dec. Not uncommon. (v.v.)


*Whitish, everywhere beset with shining granules.* P. 4 mm., hemispherical. St. 4 × 1 mm., filiform, fixed at the base by a few flocci. Gills arcuato-decurrent, 8–9, very distant, rather thick, margin and surface granulated. Spores white, globose, 3 μ. On bramble, rose, furze, and nettle stalks. Nov.—March. Uncommon.


Diffs from the type in the sulcate p., and adnate gills. On dead furze, and sticks.

1275. **M. pterigena** Fr. Fr. Icon. t. 85, fig. 4. *Πτερίς*, a fern; *γύνωμαι*, I am born.

*Entirely rose colour.* P. 2–6 mm., globose, then campanulate, 4 mm. high, very tender, pellucidly striate, obtuse, sometimes at length umbilicate. St. 1–7.5 cm. × 1 mm., tense and straight, or flexuose, smooth; base bulbous, white strigose. Gills adnate, broad, distant, edge darker. Flesh pinkish, very thin. Spores white, pip-shaped, 9–12 × 4–6 μ. Cystidia “ovate, or subglobular with numerous, minute, erect setae, contents pinkish” Lange. On dead leaves, and dead fern stems. Sept.—Nov. Not uncommon. (v.v.)

IX. St. very thin, inserted (i.e. growing on other plants without a root, or tubercle, or flocci at the base), dry. Gills adnate, uncinate with a small decurrent tooth. *Very tender*, becoming flaccid as soon as the sun touches them.
1276. **M. corticola** (Schum.) Fr. Fr. Icon. t. 85, fig. 2.

*Corticola*, growing on bark.


1277. **M. hiemalis** (Osbeck) Fr. Fr. Icon. t. 85, fig. 1.

*Hiemalis*, pertaining to winter.

P. 3–7 mm., whitish, flesh colour, rufescent, rarely azure blue, or fuscous, membranaceous, campanulate, disc darker, slightly umbonate; margin striate. St. 2–3 cm. × 1 mm., white, ascending, incurved, pubescent downwards. Gills whitish, or flesh colour, adnate, and uncinate, narrow, linear. Flesh whitish, thin. Spores white, globose, 8–9 μ, or broadly elliptical, 10–12 × 8–10 μ. Basidia with two long, curved sterigmata. Cystidia on gill edge only, hyaline, cylindrical; apex obtuse, or acute, 20–34 × 3–8 μ. On trunks in woods. Sept.—March. Common. (v.v.)

1278. **M. codoniceps** Cke. Cke. Illus. no. 1149, t. 952, fig. B.

*κόδων*, a bell; *caput*, head.


1279. **M. setosa** (Sow.) Fr. (= *Mycena tenerrima* Berk.; *Mycena discopus* Lév. sec. Quél.) Cke. Illus. no. 251, t. 193, fig. 1.

*Setosa*, bristly.

Entirely white. P. 1–2 mm., very tender, often becoming fuscous, hemispherical, obtuse, smooth. St. 1–5–3 cm. × 5 mm., filiform, covered with distant spreading hairs. Gills distant. Spores white, pip-shaped, 7–8 × 3–4 μ. Amongst dead leaves, especially beech. Sept.—Nov. Not uncommon. (v.v.)

1280. **M. capillaris** (Schum.) Fr. Fr. Icon. t. 84, fig. 6.

*Capillaris*, hair-like.

Entirely white. P. ·5–2 mm., very tender, but tough, like a small pin’s head, then campanulate, rarely at length umbilicate, slightly striate when moist. St. 2–7 cm. × ·5 mm., filiform, flexuose, flaccid,
base inserted, rarely girt with radiating fibrils, apex becoming fuscous. Gills adnate, few, broad, equal in length. Spores white, "obovate-lanceolate, 7-5-9 × 3-3-7μ, or 9-11 × 3-3-7μ. Cystidia crowded, obovate globular, set with wart-like setae." Lange. On dead leaves, especially beech. Sept.—Dec. Common. (v.v.)

1281. **M. juncicola** Fr. Fr. Icon. t. 85, fig. 6.

Juncus, a rush; colo, I inhabit.

P. 2–3 mm., rufescent, or blood red, convex, striate, smooth. St. 12 × 5 mm., fuscous, filiform, inserted, smooth. Gills white, or yellowish white, adnate, distant. On dead rushes in bogs, and twigs. June—July. Rare.

Spores pink.

**Nolanea** Fr.

(Nola, a little bell.)

Pileus fleshy, or submembranaceous, regular; margin straight, at first adpressed to the stem. Stem central, cartilaginous. Gills adnate, adnexed, or sinuato-adnate. Spores pink, angular, elliptical, or globose, smooth, or rough, continuous. Growing on the ground, rarely on wood; solitary, or gregarious.

*Gills grey or fuscous. P. dark coloured, hygrophanous.


P. 2–8 cm., fuliginous when moist, hoary, or becoming pale fawn when dry, membranaceous, conical, then campanulate and more or less expanded, striate when moist, silky shining when dry. St. 3–8 cm. × 2–6 mm., pallid fuliginous, or silvery tinged with smoke colour, equal, or compressed, soft, silky-fibrous, striate. Gills grey, or whitish-fuliginous, sprinkled with the rosy spores, very much attenuated behind, almost free, crowded, thin, ventricose, or rather broader and obtuse towards the margin. Flesh whitish, fuliginous when moist. Spores pink, angular, oblong, 10–13 × 7–8μ. Woods, pastures, and roadsides. May—Nov. Common. (v.v.)

var. **umbonata** Quél. Quél. Jur. et Vosg. t. 6, fig. 5, as *Nolanea mammosa* Fr.

_Umbonata_, having an umbo.


P. 1-5–4 cm., grey, disc umber and villose, submembranaceous, scissile, campanulate, then expanded, very obtuse, striate at the margin when moist. St. 4–10 cm. × 2–5 mm., fuliginous-grey, dirty white, or
pale yellow, equal, slightly thickened at the base, very fragile, fibrillose, striate. Gills fuliginous, then greyish, becoming rosy, separating, free, subdistant, watery. Flesh pale, deeper coloured at the periphery, very thin. Spores pink, very angular, generally subquadrangular or stellate, 10–11 × 8–10 μ. Basidia generally with 2-sterigmata only. Woods, and pastures. June—Oct. Not uncommon. (v.v.)


*Versatilis*, variable.

P. 2:5–5 cm., livid aeruginous, fuscous when dry, submembraneous, convex, then expanded, obtuse, or obtusely umbonate, shining. St. 3–5 cm. × 2–4 mm., greyish white, with a silvery sheen when dry, rigid. Gills grey, then sprinkled with the rosy spores, adnate, ventricose, 3–4 mm. broad, widest in front. Flesh dark, fuscous. Spores pink, angular, oblong, 9–10 × 7 μ, 1-guttulate. Cystidia “abundant, clavate, 45–70 × 9–12 μ, with darkish olive, granular contents” Rick. Heaths, pastures, and lawns. Sept.—Oct. Uncommon. (v.v.)


Professor C. C. Babington, the eminent botanist.

P. 10–15 mm., cinereous, shining like silk, adorned with dark brown, fasciculate fibrils which are free at one end, conico-campanulate, disc rather squamulose. St. 2:5 cm. × 2 mm., clothed with dark brown down, equal, somewhat stipigose, slightly wavy. Gills cinereous, darker at the base, adnate, ventricose, distant, glittering with little points. Spores pink, angular, elliptical, 7–9 μ. Woods. Oct.—Nov. Rare.


*Araneosa*, full of spiders’ webs.

P. 1–2 cm., dark grey, membranaceous, campanulate, fibrillosely silky. St. 3:5–4 cm. × 2 mm., grey, with a greyish fugacious cortina, fragile, fibrillose. Gills greyish-bistre, then dusted with the rosy spores, adnate, 2–3 mm. wide. Flesh dark, then yellowish. Spores pink, angular, often pentagonal, oblong, 13–16 × 8–9 μ, 1-guttulate. Coniferous woods and under conifers. July—Oct. Uncommon. (v.v.)


*Strigosissima*, very rough haired.

P. 4–8 mm. broad, 3–5 mm. high, reddish brown, or ferruginous, somewhat fleshy, conical, densely clothed with erect, reddish brown strigose hairs; hairs elongate, apex blunt, septate, 450–600 × 15–20 μ; margin incurved. St. 1:5–2:5 cm. × 1 mm., concolorous, equal, slightly thickened at the base, densely clothed with similar hairs. Gills brown, becoming cinereous, pruinose with the spores, adnate, 1 mm. broad.


**Mammosa**, having large breasts.

P. 2–8 cm., umber, or fuliginous when moist, isabelline-silky when dry, submembranaceous, conico-campanulate, papillate, striate. St. 5–15 cm. × 1.5–3 mm., fuliginous-livid, or yellowish grey, rigid, very cartilaginous, equal, sometimes compressed; apex thickened, white-mealy; base enlarged, white tomentose. Gills grey, then hoary-rose-colour, adnexed, separating-free, ventricose, subdistant. Flesh concolorous. Spores pink, angular, oblong, 9–11 × 6–7μ, 1-guttulate. Smell none, or like rancid meal. Woods, pastures, and lawns. Feb.—Oct. Not uncommon. (v.v.)

1289. **N. papillata** Bres. Bres. Fung. Trid. t. 82, fig. 1.

**Papillata**, having a nipple.

P. 2–3 cm., fuscous bay, somewhat cinnamon when dry, submembranaceous, convexo-subcampanulate, then expanded, papillate, striate. St. 3–5 cm. × 2 mm., concolorous, shining, apex obsolescent white-mealy, base white-tomentose. Gills livid white, then fuscous flesh colour, sinuato-adenate, somewhat crowded. Flesh concolorous. Spores pink, angular, oblong, 8–11 × 6–7μ, 1-guttulate. Smell none, or pleasant. Pastures, and lawns. Sept.—Oct. Not uncommon. (v.v.)

1290. **N. juncea** Fr.

**Juncea**, like a rush.

P. 1.5–2 cm., umber-fuliginous, then livid when dry, hygrophanous, submembranaceous, conical, then expanded, disc somewhat umbilicate and somewhat squamulose, radiately striate. St. 7–8 cm. × 1–2 mm., fuscous, then livid-fuscous, cartilaginous, equal, round, or compressed. Gills grey, then hoary-rose-colour, adnexed, separating-free, ventricose, subdistant. Spores pink, "angular, globose, 11–13μ." Quél. In Sphagnum swamps, and in woods. Oct. Rare.

var. **cuspisata** Fr. Fr. Icon. t. 99, fig. 2. **Cuspidata**, having a point.

Differs from the type in the papillato-cuspidate pileus.

1291. **N. fulvo-strigosa** B. & Br. **Fulvus**, tawny; **strigosa**, strigose.

P. 18 mm., grey, conical, 12 mm. high, slightly wrinkled. St. 5 cm. × 2 mm., reddish, furfuraceous-squamulose, clothed at the base with rigid red hairs. Gills grey, adnate. Spores pink, 13 × 9μ. Woods. Sept. Rare.
**Gills becoming yellow, or rufescent.**

_N. nigripes_ (Trog) Fr. = _Naucoria Cucumis_ (Pers.) Fr.

_N. pisciodora_ (Ces.) Fr. = _Naucoria Cucumis_ (Pers.) Fr.


_Rufus, red; carnea, fleshy_

P. 2–3 cm., _red-brown_, submembranaceous, hemispherical, umbilicate, indistinctly fibrilloso-squamulose; margin striate. St. 5–6 cm. × 2–3 mm., _pale rufous_, incurred at the slightly thickened base, _minutely fibrillose_ under a lens, _apex nearly white_. Gills _rose colour_, adnate, ventricose, attenuated behind, slightly connected and traversed by veins. _Flesh white_. Spores pink, angular, broadly elliptical, or subglobose, 8–9 × 7 μ. Taste rather bitter. Heaths, and pastures. Sept.—Oct. Not uncommon. (v.v.)

1293. _N. vinaceus_ (Scop.) Fr. _Vinaceus_, a grape-stone.

P. 3–5 cm., _rufescent_, membranaceous, campanulato-convex, obtuse, slightly striate, shining. St. 5–7 cm. × 3–5 mm., _yellow_, smooth, glabrous, fistulose. Gills _whitish_, then _flesh colour_, adnate, or _emarginate_, distant, thin. _Flesh ochraceous_, thin. Spores “subglobose, 6–7 μ, the angles scarcely prominent” Rick. Amongst moss in woods. Sept.—Oct. Rare.

1294. _N. icterina_ Fr. Fr. Icon. t. 99, fig. 4. _иктрос, jaundice_.

P. 1–3 cm., _light yellow green_, more rarely _yellowish honey colour_, _disc often fuscos_, and _here and there fuscos-squamulose_, becoming _pale_ when dry, _hygrophanous_, submembranaceous, _campanulate_, _soon convex_, _obtuse_, or _papillate_, _often quite reflexed_, _pellucidly striate_, sometimes sprinkled with _superficial flocci_, _slightly silky_ when dry. St. 3–5 cm. × 2–6 mm., _concolorous_, or _fuscous_, _rigid_, _white-mealy_ _at the apex_, _equal_, _often compressed_. Gills _pallid_, becoming _saffron yellow_ when rotted, _adnexed_, _separating_, _sometimes free_ and _decurrent_, _ventricose_, _distant_, _sometimes connected by veins_, _even_, _crisped_ and _anastomosing_. _Flesh yellowish in the pileus, white in the stem_. Spores pink, angular, 10–12 × 7–8 μ, 1-guttulate. Woods, and gardens. Oct. Uncommon. (v.v.)


P. 2 cm., _yellowish_, rather _fleshy_, _hemispherical_, _rather viscid_. St. 3–4 cm. × 2 mm., _pale_, _equal_, _longitudinally striate_. Gills _ochraceous flesh-colour_, nearly _free_, _very broad_, _rhomboidal_, _convex_. _Flesh white, yellowish in the pileus_. Spores pink, _broadly elliptical, 9 × 7 μ_. On the ground. Sept.—Oct. Rare.
**Gills shining white, then rosy. P. hygrophanous.

*N. picea* Kalchbr. = *Naucoria Cucumis* (Pers.) Fr.

1296. **N. infula** Fr. Fr. Icon. t. 100, fig. 1. *Infula*, a fillet.

P. 1–4 cm., fawn, or fuliginous when damp, isabelline-livid when dry, shining in either state, membranaceous, plant, conical, or campanulate, often repand and irregularly shaped, centre at length depressed. St. 2·5–7·5 cm. × 2–3 mm., concolorous, cartilaginous, very tough, polished, striate, base white floccose with the mycelium. Gills shining white, then bright rose colour, adnexed, separating free, thin, narrow, very crowded. Flesh dark. Spores pink, angular, elliptical, 9 × 6 μ, 1-guttulate. Charcoal heaps, lawns, and woods. Sept.—Oct. Uncommon. *(v.v.)*

var. **versiformis** Fr. Versiformis, changing its shape.

P. 12 mm., convex, then depressed or even infundibuliform, persistently papillate, very densely striate, silky-shining when dry. Burnt ground.

****Whitish. P. not hygrophanous.

1297. **N. verecunda** Fr. Fr. Icon. t. 99, fig. 5. *Verecunda*, modest.

P. 1–2 cm., watery reddish, but very pallid, not changing colour when dry, submembranaceous, at first subumbonate, then rather obtuse, pellucidly striate to the middle when moist, obsoletely silky towards the flocculose margin. St. 4–5 cm. × 2–4 mm., becoming pale, slightly firm, cartilaginous, splitting into fibrils when crushed, apex mealy. Gills whitish, watery, adnate, separating, rather thick, distant, distinct, ventricose, in the form of a segment, 4–6 mm. broad. Spores “10–12 × 5–8 μ” Massee. Densely gregarious, or growing in troops amongst grass in pastures. Sept. Uncommon.

1298. **N. coelestina** Fr. Fr. Icon. t. 100, fig. 2. *Coelestina*, heavenly.

P. 2–4 cm., dark azure-blue, rugged disc darker or blackish, membranaceous, campanulate, then convex, obtuse, striate. St. 4 cm. × 1–2 mm., azure-blue-black, attenuated upwards, apex white pruinose. Gills hoary white, adnate, ventricose, very broad. Spores pink, angularly globose, 7–8 × 7 μ, rough. On old oak trunk, and in pine woods. Oct. Rare.


P. 12–18 mm., livid bluish grey, disc darker, papillate, membranaceous, conical, then expanded, striate. St. 5–6 cm. × 2 mm., bluish green, filiform, sticky. Gills whitish, then flesh colour, adnexed, 2–3 mm. wide, somewhat crowded. Flesh bluish. Spores pink, angular, 8–10 × 6–7 μ, 1-guttulate. Woods, and pastures. Sept.—Oct. Uncommon. *(v.v.)*

P. 8 mm., white or greyish, at length with a pale ruddy tinge, membranaceous, convex, at length umbilicate, finely silky. St. 3–4 × 1 mm., white, or greyish, thickest above, minutely silky. Gills whitish, then rose colour, adnate, broad, ventricose, attenuated behind, with frequently a more or less distinct tooth, sometimes subdeterminate. Spores pink, “elliptical, 4–5 × 3 μ, smooth. Cystidia none.” Masseee. Smell of new meal. Among grass in a conservatory. March—Nov. Rare.

1301. N. rhodospora Br. & W. G. Sm. ῥόδος, rose; σπόρα, seed.

P. 2–5 cm., sooty-fibrillose, or rufescent pilose. St. 3 cm. × 2 mm., white, subbulbous. Gills salmon or rose, sinuate or free. Spores pink. On earth, and wooden borders in stoves. May—Sept. Rare.

1302. N. minuta Karst. Minuta, small.


Spores ochraceous, or ferruginous.

Galera Fr.

(Galerus, a cap.)

Pileus fleshy, or submembranaceous; margin straight, at first adpressed to the stem. Stem central, cartilaginous. Gills adnate, or adnexed. Spores ochraceous, cinnamon, or ferruginous, elliptical, pruiniform, or almond-shaped; smooth; with a germ-pore, rarely continuous. Cystidia generally present. Growing on the ground.

*P. conico-campanulate, hygrophanous, rather even, when dry dotted with soft particles; st. tense and straight; gills ascending, inserted at the top of the cone, somewhat crowded. Veil none.

1303. G. hapala Fr. (= Bolbitius apalus (Fr.) Quéfl.) Fr. Icon. t. 127, fig. 1, as Galera apala Fr. ἀπαλός, tender.

P. 1–6 cm., livid becoming pale, quite white and shining when dry, submembranaceous, conico-campanulate, then campanulate, obtuse, regular, smooth, hygrophanous. St. 10–15 cm. × 2–4 mm., shining white, rather fragile, slightly and equally attenuated upwards, very straight, clothed with dense, erect, white floci, base sometimes subbulbous. Gills whitish, then bright ochraceous, adnexed, then free, very narrowly lanceolate, thin, crowded. Flesh concolorous, very thin. Spores tawny, pruiniform, “12–14 × 7–8 μ” Sacc. Rich grassy places. Sept. Rare.
1304. **G. lateritia** Fr. Fr. Icon. t. 127, fig. 2. *Lateritia*, brick-red.

P. 1–2.5 cm., ferruginous, or pale yellowish, ochraceous when dry, hygrophanous, submembranaceous, conico-campanulate, smooth, densely striate when moist. St. 7–11 cm. × 2 mm., whitish, attenuated upwards, tense and straight, very fragile, even, white pruinose. Gills cinnamon, or tawny ferruginous, adnexed, then free, ascending, very narrow, almost adpressed to the st. Flesh white, thin. Spores ochraceous, "elliptical, with a flattened germ-pore, 12–15 × 8–10 μ, smooth. Cystidia on edge of gill basidiate; apex prominent, small, stalked, capitulate" Rick. Rich pastures, and grassy places. June—Oct. Rare.


P. 1–2 cm., pallid ferruginous, becoming pale when dry, hygrophanous, submembranaceous, conico-campanulate, smooth, slightly striate when moist, opaque, somewhat atomate, or pulverulent. St. 7.5–10 cm. × 2 mm., concolorous, fragile, equal, or when larger thickened downwards, tense and straight, somewhat shining, striate upwards, pulvulent. Gills cinnamon, adnate, then free, ascending, linear, somewhat crowded. Flesh yellowish, slightly reddish in the st., thin. Spores pale ferruginous, elliptical, with a flattened germ-pore, 14–15 × 8–9 μ. Cystidia on gill edge flask-shaped, apex subglobose, or obtuse; 18–20 × 9–10 × 4–6 μ at apex. Woods, pastures, roadsides and gardens. April—Dec. Common. (v.v.)


P. 1–1.5 cm., ferruginous, ochraceous when dry, fleshy membranaceous, campanulate, obtuse,pellucidly striate when moist. St. 2–
3 cm. × 1.5 mm., pallid, becoming ferruginous, equal, flexuose, white fibrillose, apex white pruinose. Gills pallid, becoming ferruginous, adnate, crowded, oblong. Spores 10–12 × 5–6 μ. Amongst grass and rotten wood. May—Sept. Rare.

1308. **G. siliginea** Fr.  
Siligo, a kind of very white wheat.

P. 1–2 cm., pallid grey, membranaceous, globoso-campanulate, then convex and expanded, unequal, smooth; margin often flexuose. St. 5–7 cm. × 1–2 mm., whitish, or pallid, equal, often flexuose, sprinkled with white pruina. Gills pallid ochraceous, broadly adnate, broadly linear, somewhat crowded. Flesh pallid, thin. Spores ochraceous, broadly elliptical, 10–12 × 6–7 μ. Cystidia “stalked, capitate” Rick. Pastures and roadsides. Sept.—Oct. Uncommon. (v.v.)

1309. **G. campanulata** Massee. Cke. Illus. no. 1174, t. 1156, as Galera siliginea Fr.  
Campanula, a little bell.

P. 1–2 cm., deep cinnamon, almost white and atomate when dry, persistently campanulate, subacute, smooth, hygrophanous, slightly rugulose. St. 5 cm. × 1–2 mm., pallid, base darker, whitish when dry, equal, or slightly incrustated at the base, flexuose, almost glabrous. Gills tawny cinnamon, adnate, 2 mm. broad, rather crowded. Flesh white when dry, thin. Spores ochraceous, elliptical, ends rather acute, 12 × 7 μ. Smell strong. Gregarious. Road scrapings, and dry places by roadsides. Sept.—Uncommon. (v.v.)

1310. **G. ovalis** Fr. Cke. Illus. no. 519, t. 462.  
Ovalis, oval.

P. 2–3 cm., ferruginous, becoming yellow when dry, submembranaceous, ovato-campanulate, obtuse, smooth; margin straight and adpressed to the st. St. 7–10 cm. × 2–3 mm., concolorous, equal, tense and straight, slightly striate, very fragile. Partial veil here and there in the form of a ring, fugacious. Gills ferruginous, somewhat free, very ventricose and broad, crowded, subdeliquescent. Flesh reddish, thin. Spores ferruginous, elliptical, 10 × 6 μ. Pastures, and on dung. Sept.—Oct. Not uncommon. (v.v.)

1311. **G. antipus** (Lasch) Fr. Fr. Icon. t. 128, fig. 2.  
ἀτρι, opposite; ποδός, foot.

P. 1–3 cm., deep ochraceous, pale almost white when dry, hygrophanous, fleshy, campanulate, then expanded, disc prominent, smooth. St. 2.5–8 cm., paler than the p., tense and straight, equal, or bulbous at the ground level, then continued into a long, tortuose, smooth, tail-like root, apex white-mealy. Gills light yellowish ochraceous, then cinnamon, almost free, attenuated behind, semi-lanceolate, crowded. Flesh white when dry, thick at the disc. Spores cinnamon, “nearly angular-lemon-shaped, 8–10 × 6–7 μ. Cystidia on edge of gill, basidia-like-pyriform, apex prominent, small, stalked, capitate, stalk very short,
head 4–5µ, base 12 × 9µ” Rick. Pastures, bare soil in gardens, and on dung. March—Sept. Uncommon. (v.v.)


*Conferta*, crowded.


1313. **G. spicula** (Lasch) Fr. Quél. Jur. et Vosg. i, t. 7, fig. 5, as *Naucoria furfuraceus* Pers.  

*Spiculum*, a little sharp point.


1314. **G. spartea** Fr.  

*σπάρτος*, esparto grass.


1315. **G. pygmaeaoaffinis** Fr. Fr. Icon. t. 128, fig. 1.

*Affinis*, allied to *Naucoria pygmaea*.

P. 2–4 cm., *subfuscous, or honey colour, then tan*, fleshy membranaceous, campanulate, then flattened, *dry, delicately and—under a lens—conspicuously reticulato-wrinkled*, almost rugged or minutely granular. St. 5–7½ × 2 mm., *shining white*, fragile, equal, *often striate and pruinose at the apex*. Veil scarcely any. Gills *clay-ochraceous, then ferruginous ochraceous*, just reaching the st., *almost free*, thin,

**P. membranaceous, campanulate, striate, smooth, hygrophanous, even when dry, opaque, slightly silky; st. thin, lax, flexile; gills broadly and planely adnate, broad, somewhat denticulate; cortina very fugacious. Slender, growing amongst moss.


Vitta, a fillet; forma, shape.

P. 1–2.5 cm., date brown, tawny, or reddish, membranaceous, conical, then hemispherical, obtuse, rarely papillate, pellucid, disc even, smooth; margin striate, often delicately villose. St. 4–7.5 cm. × 1–2 mm., rubiginous, opaque, equal, somewhat straight, smooth, or sometimes pubescent or pruinose, slightly striate under a lens. Veil scarcely conspicuous. Gills watery cinnamon, then ferruginous, adnate, ventricose, subdistant. Flesh concolorous, very thin. Spores pale ferruginous, “almond-shaped, 11–15 × 7–9 µ, rough. Cystidia lanceolate, 50–60 × 10–12 µ, with a long, blunt point” Rick. Among moss and on burnt ground in pastures. May—Nov. Uncommon.

1317. G. rubiginosa (Pers.) Fr. Fr. Icon. t. 128, fig. 3, as var. major.

Rubiginosa, rusty.

P. 6–30 mm., cinnamon, or honey colour, tan colour when dry, hygrophanous, membranaceous, campanulate, obtuse, striate throughout, smooth. St. 5 cm. × 1–2 mm., bay brown, or dark ferruginous, equal, tough, flaccid, shining, smooth or pubescent under a lens. Gills ochraceous, adnate, ascending, rather broad, but almost linear. Flesh concolorous, becoming pale, thin. Spores ferruginous, elliptical, 10 × 5 µ. Woods, heaths, and pastures. Sept.—Oct. Not uncommon. (v.v.)


Hypnum, a moss.

P. 6–12 mm., ochraceous pale yellowish, or watery cinnamon, tan when dry, hygrophanous, membranaceous, campanulato-convex, often papillate at theumbo, or obtuse, lineato-striate except at the disc, smooth. St. 5 cm. × 1–2 mm., slightly tawny, lemon yellow, or ochraceous, equal, flexuose, lax, smooth, apex pruinose. Gills cinnamon tawny, adnate, broad, ventricose, distant, often connected by veins, edge flocculose. Flesh yellowish, thin. Spores ferruginous, almond-shaped, 11–15 × 6–8 µ. Cystidia fusiform, ventricose, 50–65 × 15–17 × 5–7 µ at apex. Woods, heaths, and pastures. May—Nov. Common. (v.v.)
var. **bryorum** (Pers.) Fr.  
* Bryum, a moss. 
Diffsers from the type in its larger size, and rather horny papilla. Woods, heaths, and hedgerows. Sept.—Oct. Not uncommon. (v.v.)

var. **sphagnorum** (Pers.) Fr.  
* Sphagnum, a moss. 
Diffsers from the type in being twice or thrice as large, and in the long, subfibrillose tawny st. Bogs, and amongst Sphagna in woods. June—Oct. Uncommon. (v.v.)

1319. **G. mniophila** (Lasch) Fr. Cke. Illus. no. 524, t. 466, upper figs.  

P. 1–1.5 cm., fuscous light yellowish, almost clay colour when dry, membranaceous, campanulate, almost papillate, striate, disc even. St. 4–7.5 cm. × 2 mm., yellow, equal, flexible, fibrillose, apex mealy, base floccose. Gills light yellow ochraceous, then often fuscous clay colour, obtusely adnate, plano-ascending, broad, subdistant. Flesh whitish, thick at the disc. Spores ochraceous, oblong elliptical, 10–12 × 6μ. Cystidia “on edge of gill cylindrical-filiform, 30–36 × 3–4μ” Rick. Amongst mosses especially Mnium. Sept.—Nov. Uncommon. (v.v.)


Minuta, little.  
P. 2–3 mm., ochraceous flesh colour, or chamois-bistre, membranaceous, campanulate, glabrous, striate. St. 1 cm. × 1 mm., tawny, shining, smooth, arising from an arachnoid white pellicle. Gills cream bistre, adnate, triangular, edge minutely fringed under a lens. Spores ochraceous, pruniform, 6μ. In troops. Amongst moss, and on the ground. Sept.—Oct. Rare.

***P. submembranaceous, veil manifest, superficial, separating, at the first (chiefly round the margin) silky, and squamulose.

1321. **G. pityria** Fr.  

P. 2.5 cm., lurid, or becoming ferruginous, pallid tan when dry, fleshy-membranaceous, campanulate, then expanded, obtuse, smooth, viscid; margin appendiculate with the fugacious, partial veil, at length striate. St. 5–6 cm. × 4–6 mm., silvery-shining, firm, cartilaginous, but at length splitting into fibrils, tough, equal, smooth, rarely fibrillose, apex white pulverulent. Gills watery cinnamon, then ferruginous, slightly adnexed, ascending, crowded. Spores ferruginous, “almond-shaped, 12–13 × 8–9μ, verrucose. Cystidia on edge of gill filiform-clavate, 36–45 × 4–7μ” Rick. Damp, frondose woods. Oct.—Nov. Rare.

1322. **G. ravida** Fr. Cke. Illus. no. 525, t. 467, fig. A. Ravida, greyish.  
P. 1–4 cm., of a peculiar greyish colour, dirty ochraceous when dry, fleshy membranaceous, campanulate, then hemispherical, moist,
somewhat slightly viscid, very hygrophanous, somewhat silky when dry, margin appendiculato-toothed with the white veil when young. St. 4–7.5 cm. × 2 mm., pallid, becoming somewhat yellow, but silvery shining, very fragile, ascending, or twisted, equal, fibrillosely striate, apex somewhat pruinose. Gills ochraceous saffron, or pale yellowish, somewhat free, broad, ventricose, distant. Flesh white, thick at the disc. Spores ochraceous, “subfusiform-elliptical, 8–9 × 4–5 μ, smooth” Rick. Gregarious. Amongst chips, or rotten wood. Sept.—Oct. Uncommon.

1323. G. mycenopsis Fr. Fr. Icon. t. 129, fig. 1.

Mycena δψής, like a Mycena.

P. 6–20 mm., pallid honey colour, slightly fleshy membranaceous, subglobose, then campanulate, at length conve xo-plane, obtuse, or gibbous with a broadly elevated disc, naked at the disc, striate and silky to the middle with superficial, white, villose down; margin often clothed with little white scales the remains of the veil. St. 5–7.5 cm. × 2–4 mm., yellowish, white silky with adpressed, villose down, attenuated upwards, straight or undulated, soft, apex obsolescently pruinose, or slightly furrowed, base white villose. Gills pallid, adnexed, then free, so ventricose at the middle as almost to be triangular, distant. Flesh greyish in the p., whitish in the st., thick at the disc. Spores deep ochraceous, elliptical, 9–13 × 5–8 μ. Cystidia bottle-shaped, apex often globose, base ventricose, 46–52 × 15–18 × 6–10 μ at apex. Sphagnum swamps and in woods. Aug.—Oct. Uncommon. (v.e.)


P. 4–8 mm., tawny chestnut, honey colour when dry, disc brighter coloured, membranaceous, campanulate, often acutely conical, smooth, hygrophanous, striate; margin at first covered with silky, fugacious fibrils. St. 1–3 cm. × 1–2 mm., amber coloured, shining, filiform, fragile, fibrillosely. Gills cream colour, then tawny ochraceous, adnate, 1 mm. broad, crowded. Flesh yellowish, very thin. Spores tawny ochre, oval, 9–11 × 6–7 μ, with an apical germ-pore. On mossy stumps, especially fir. May—Sept. Uncommon. (v.e.)

Spores purple, or fuscous.

Psathyra Fr.

(ψαθυρός, fragile.)

Pileus fleshy, or submembranaceous, regular; margin straight, at first adpressed to the stem. Stem central, cartilaginous. Gills adnate, adnexed, or free. Spores purple, fuscous, or cinereous purple; elliptical, oval, or oblong elliptical; smooth; with an apical germ-pore. Cystidia present. Growing on the ground, or on wood; solitary, or caespitose.
P. sarcocephala (Fr.) Quél. = Psilocybe sarcocephala Fr.
P. canobrunnea (Batsch) Quél. = Psilocybe canobrunnea (Batsch) Fr.
P. spadicea (Fr.) Quél. = Psilocybe spadicea Fr.
P. cernua (Fl. Dan.) Quél. = Psilocybe cernua (Fl. Dan.) Fr.
P. foenisecii (Pers.) Quél. = Psilocybe foenisecii (Pers.) Fr.

I. P. conico-campanulate, gills ascending, adnexed, often free.
St. tense and straight. Veil none.

1325. P. elata Masssee. (=Psathyra conopilea Fr. var. superba (Jungh.) Cke.) Cke. Illus. no. 1185, t. 1158, as Psathyra conopilea Fr. var. superba Jung. Elata, tall. P. 2-5-5 cm., dark clear brown, pale ochraceous and minutely atomate when dry, submembranaceous, obtusely campanulate, very symmetrical, smooth. St. 10-17-5 cm. x 5-6 mm., snow white, silky shining, slightly and uniformly attenuated upwards, straight, rigid, smooth. Gills whitish, then purplish brown, broadly adnate, 3-4 mm. broad, soft, crowded. Flesh brownish, becoming whitish, thin at the margin. Spores brown with a purple tinge, elliptical, 18 x 8-9 µ. Amongst grass in hedge banks. Aug. Rare.

1326. P. conopilea Fr. (= Psathyra superba Jungh. sec. Quél.) Cke. Illus. no. 609, t. 575. kōvōs, a cone; pileus, cap. P. 2-5 cm., bay brown, then pale ochraceous when dry, submembranaceous, conico-campanulate, scarcely expanded, obtuse, smooth, fragile. St. 10-15 cm. x 2-4 mm., silvery-shining, becoming yellowish, slightly attenuated upwards, tense and straight, polished, smooth. Gills white, then flesh colour and finally fuscous purple, adnexed in the top of the cone, 4-5 mm. broad, only slightly ventricose, crowded. Flesh yellowish, then whitish, thin. Spores fuscous purple, broadly elliptical, 12-15 x 7-8 µ. Pastures, roadsides, ditches. Sept.—Nov. Uncommon. (v.v.)

1327. P. mastigera B. & Br. Cke. Illus. no. 610, t. 591, fig. A. μαστός, a breast; gero, I bear. P. 2-3 cm., dark rich brown, umber tan when dry, fleshy, nearly cylindrical, obtuse, conico-campanulate, with a strong mammiform umbo, repand; margin straight. St. 6-8 cm. x 3-4 mm., white, attenuated upwards, smooth, or fibrillose and furfuraceous. Gills umber, edge paler, affixed, ascending, rather narrow. Flesh pale umber, thick at the disc. Spores fuscous, “elliptical, 15-16 x 7-8 µ,” Massee. Roadsides amongst grass. July—Nov. Rare.

1328. P. Loscosii Rabenh.
P. 5 cm., greyish fuscous, membranaceous, campanulate, then expanded, radiately sulcate, folds at length granularly crenate; margin Francisco Loscos.


Corrugis, full of wrinkles.

P. 1–4 cm., rose colour, or pallid flesh colour, becoming pale when dry, submembranaceous, fragile, campanulate, often subumbonate, smooth, slightly striate when moist, wrinkled when dry, sprinkled with shining atoms. St. 4–10 cm. × 2–5 mm., whitish, or rufescent, equal, tense and straight, slightly firm, smooth. Gills white, then violaceous, at length blackish, edge white, adnate, or sinuato-adnate, ventricose. Flesh whitish, thin. Spores brownish purple, elliptical, 12–14 × 6–7 μ. Cystidia "ventricose-fusiform, 60–75 × 10–12μ, often with a clavate, swollen apex" Rick. Woods, pastures, hedgerows, and gardens. April—Jan. Common. (v.v.)


var. gracilis B. & Br.

Gracilis, thin.

Differs from the type in being more slender. Gardens, and roadsides. Aug.—Oct. Not uncommon. (v.v.)

These forms are not really worthy of varietal names.


πελλός, dark coloured; σπέρμα, seed.

P. 1·5–3 cm., white, or ochrey white, becoming fuliginous with age, subcampanulate, or subovate, smooth, then striate, sometimes rugose. St. 6–12 cm. × 2–3 mm., white, or concolorous, nearly equal, naked. Gills cinereous, then fuliginous, at length black, free, broad, much narrowed at the tips. Flesh white, thin. Spores cinereous fuscous, elliptical, 8 × 4–5μ. Woods, and gardens. Sept.—Oct. Uncommon.


γυρός, round; flexa, bent.

P. 1–1·5 cm., white, then pallid, or greyish, disc rufescent, submembranaceous, conical, then campanulate, obtuse, smooth, atomate; margin striate. St. 4–5 cm. × 1–2 mm., white, shining, fragile, flexuose, twisted, smooth. Gills greyish, then purple, adnate, ascending, broad. Flesh white, thin. Spores "brown, elliptical, 9–10 × 5–6μ, smooth. Cystidia on edge of gill ventricose-flask-shaped, 36–40 × 10–15μ, blunt" Rick. Scattered, or subcaespitose. Pastures, and at the roots of trees. Aug. Uncommon.
1332. **P. tenuicula** Karst.  
*Tenuicula,* slight.  
*P. whitish, then livid, or smoky, pale when dry, campanulate, then somewhat expanded, everywhere striate. St. hyaline, pellucid, usually wavy. Gills *pallid, then grey,* adnate. Flesh, very thin. Spores, elliptical, 5–6 × 3μ.*

II. *P. campanulo-convex,* flattened, smooth, or atomate; gills plano- or arcuato-adfixed. Veil none.

1333. **P. spadiceo-grisea** (Schaeff.) Fr.  
*Spadicea,* date brown; *grisea,* grey.  
*P. 3–6 cm., date brown, whitish grey when dry, very hygrophanous, submembranaceous, very fragile, campanulate, then convex, at length flattened, obtuse, or with a darker umbo, smooth; margin striate. St. 4–7.5 cm. × 4–6 mm., whitish, shining, equal, apex striate, sometimes pulverulent, base slightly swollen and white hairy. Gills umber fuscous, adnexed, attenuated behind, at first ascending, narrow, crowded. Flesh *more or less fuliginous,* becoming whitish, rather thick. Spores brownish purple, oblong-elliptic, 8–11 × 4–6μ, 1-multi-guttulate. Cystidia “on surface of gill ventricose-cylindrical, 40–50 × 9–12μ, on edge of gill vesiculose-clavate, 30–40 × 15–20μ” Rick. Taste mild. Edible. Solitary, or gregarious. On stumps, or at the base of trees. Woods, and plantations. March—Nov. Uncommon. (v.v.)

1334. **P. obtusata** Fr.  
*Cke. Illus. no. 615, t. 593. Obtusata,* blunted.  
*P. 1–3 cm., date brown fuscous, or umber fuscous, paler at the margin, somewhat shining, submembranaceous, conical, then convex, at length flattened, obtuse, wrinkled, disc even, hygrophanous; margin striate. St. 5–7.5 cm. × 2–4 mm., whitish, equal, round, fragile, fibrilloso-silky. Gills cinereous fuscous, then umber, adnate, broad, distinct, subdistant. Flesh concolorous, very thin. Spores “reddish brown under the microscope, elliptical, 9–10 × 5μ, smooth. Cystidia lanceolate-flask-shaped, 45–60 × 12–15μ” Rick. Solitary, or caespitose. On oak trunks, and on the ground. Woods, and hedgerows. Aug.—Nov. Uncommon.

var. **minor** (Vaill.) Fr.  
*Minor,* smaller.  
Differs from the type in its smaller size.

1335. **P. neglecta** Massee.  
*Neglecta,* overlooked.  
*P. 6–8 mm., pale ochraceous, white when dry except the disc, convex, then almost plane, smooth, atomate when dry. St. 2–3 cm. × 1–2 mm., white, tinged with rufous below, pellucid, rather wavy, smooth. Gills *purple brown at maturity,* slightly attached, rather broad, ventricose, crowded. Spores purple brown, elliptical, 12 × 6μ. On the ground. Gardens. Oct.—Nov. Rare.
III. P. and st. at the first floccose or fibrillose from the universal veil.

1336. **P. frustulenta** Fr.  
*Frustulenta*, full of small pieces.  
P 2–3 cm., watery ferruginous, but somewhat pallid, becoming pale when dry, submembranaceous, very fragile, campanulate, then hemispherical, obtuse, somewhat striate when moist, whitish floccose at or about the margin. St. 5–7.5 cm. × 2 mm., whitish, equal, somewhat undulate, fibrillose, or sprinkled with white flocci. Gills watery cinnamon, then fuscous, adnate, ascending, crowded. Flesh thin at the disc. Spores “brown, short, elliptical, almost round, 6–7 × 4–5 μ, smooth. Cystidia fusiform, 45–50 × 10–12 μ” Rick. Amongst damp gravel. Woods. Sept. Rare.

1337. **P. bifrons** Berk. Cke. Illus. no. 616, t. 594, fig. A.  
*Bifrons*, with two faces.

P. 5–20 mm., ochraceous brown, tinged with red, pale tan when dry, submembranaceous, campanulate, obtuse, slightly wrinkled, covered with a delicate evanescent veil when young; margin thin, transparent. St. 4–6 cm. × 2–3 mm., white, thickest at the base, straight, very brittle, minutely satiny, naked. Gills pinkish cinereous, adnate, moderately broad; edge white, composed of minute wavy teeth. Flesh yellowish, thin. Spores cinereous purple, elliptical, obtuse at the one end, subapiculate at the other, 9–10 × 4–5 μ. Cystidia “on edge of gill subulate, 36–40 × 6–8 μ, blunt” Rick. Woods, hedgerows, and wood heaps. Aug.—Oct. Not uncommon. (v.v.)

var. **semitincta** Phill. Cke. Illus. no. 616, t. 594, fig. B.  
Semi-, half; *tincta*, dyed.

Differs from the type in the *pinkish p., with ochraceous disc*. Woods, and hedgerows. Sept.—Oct. Not uncommon. (v.v.)

1338. **P. fatua** Fr. (*= *Hypholoma fatuum* (Fr.) Quéél.) Cke. Illus. no. 618, t. 595, fig. A.  
*Fatua*, foolish.

P. 3–8 cm., tan fuscous, ochraceous clay when dry, submembranaceous, oval, then campanulate, at length expanded, obtuse, everywhere adpressedly fibrillose when young (the fibrils soon fugacious), then smooth, rugulose and whitish clay colour when full grown; margin somewhat undulate, sometimes appendiculate with the veil. St. 5–7.5 cm. × 4–6 mm., shining white, somewhat firm, soon smooth, apex striate and white mealy, base white villose. Gills white, then fuscous, adnate, linear, 3–4 mm. broad, crowded, edge often white. Flesh concolorous, thin. Spores brownish purple, elliptical, “12–13 × 6–7 μ” Sacc. Caespitose, rarely solitary. Thickets, gardens, and rich pastures. Sept.—Oct. Uncommon.

P. 1–2 cm., dark brown, becoming pale, ovate, obtuse, sprinkled with little snow-white fibrils more than half way up. St. 5–7 cm. × 3 mm., snow-white, with a pale under tinge of brown, nearly straight, fibrilloso-silky, the walls within white with down. Gills umber brown, tinged with the dark spores, adnate, ascending, broad behind. Flesh white, thick at the disc. Spores brownish purple, elliptical, 10–12 × 5 μ. Cystidia “fusiform, 45–60 × 10–13 μ” Rick. Caespitose, or solitary. Amongst grass. Rich pastures, and woods. Aug.—Oct. Uncommon. (v.v.)

1340. **P. fibrillosa** (Pers.) Fr. ( = *Hypholoma fibrillosum* (Pers.) Quél.) Cke. Illus. no. 618, t. 596, fig. B.

Fibrillosa, full of fibrils.

P. 2–3 cm., livid, or becoming white, submembranaceous, fragile, campanulate, then convex, at length flattened, obtuse, striate, covered with long, white, fugacious fibrils, soon smooth. St. 6–10 cm. × 4–6 mm., white, equal, fragile, clothed throughout with fibrilloso-fasciculate, spreading, fugacious, white squamules, then smooth. Gills cinereous, then becoming black purple, adnate, broader behind, 6–10 mm. broad, at length plane, edge often white. Flesh greyish, becoming white, thin at the margin. Spores black purple, pip-shaped, 6 × 3 μ. Cystidia “on edge of gill, vesiculose-clavate” Rick. Solitary. Woods. Sept.—Nov. Not uncommon. (v.v.)

1341. **P. Gordonii** B. & Br. ( = *Hypholoma Gordonii* (B. & Br.) Big. & Guillem.) Cke. Illus. no. 620, t. 580, fig. A.

Marchioness of Huntly.

P. 2–4 cm., pale cinereous, then white, membranaceous, campanulate, sulcato-striate, sprinkled with white floccose scales. St. 4–5 cm. × 3 mm., white, equal, brittle, transversely undulated, white pruinose above, floccose below, becoming at length smooth and shining. Gills cinereous, narrowly adnate, ascending, moderately broad, distant. Flesh yellowish, somewhat thick at the disc. Spores “broad, elliptical, 11–13 × 7–8 μ, smooth, subopaque” Rick. Smell faint, nauseous. Densely caespitose. Stumps, and amongst chips. Oct. Rare.

1342. **P. glareosa** B. & Br. Cke. Illus. no. 610, t. 591, fig. B.

Glareosa, belonging to gravel.

P. 12–15 mm., grey, disc pale chestnut, campanulate, obtuse, or unbonate, striate, with flocci like little crumbs. St. 2–5–5 cm. × 2 mm., brown, clothed with white fibrils. Gills umber, adnate, broad behind. Flesh brown, especially close to the gills. Spores black. On gravelly soil after wet weather. June. Rare.

R. B. B.
1343. *P. helobia* Kalchbr. (= *Psathyra corrugis* (Pers.) Fr. see. Rick.)
Kalchbr. Icon. t. 17, fig. 4. Æros, a marsh; ßeos, life.
P. 4–6 cm., fuliginous umber, becoming pallid clay colour, or somewhat rufescent when dry, scarcely fleshy, hygrophanous, campanulate, soon plane or depressed, slightly umbonate, radiately rugose, with concentric, elevated ridges towards the spreading, sistrate margin. St. 10–20 cm. × 2–3 mm., paler umber than the p., rufescent, becoming pallid when dry, equal, undulate, flexuose, covered with lax, whitish, fugacious flocci, fragile. Gills fuliginous, adnate, rounded behind, ventricose, somewhat crowded. Flesh watery reddish. Spores black, "elliptical, ends rather acute, 12 × 6 μ" Massee. Gregarious. Moist places in pine woods. Sept. Rare.

1344. *P. pennata* Fr. (= *Hypholoma pennatum* (Fr.) Quél.) Cke.
Illus. no. 620, t. 580, fig. B. Pennata, feathered.
P. 2–3 cm., inclining to livid, then white, or becoming fuscous-brick when young, submembranaceous, ovate, then campanulate, 12 mm. high, for a long time densely clothed with white, fugacious, plumose scales towards the margin, at length naked. St. 2.5–4 cm. × 2–4 mm., white, then silvery, fragile, equal, villose, apex white pulverulent. Gills livid, then fuscous blackish, adnexecl, ventricose, 4–5 mm. broad, crowded, edge often white. Flesh pallid, thin at the margin. Spores blackish purple, pip-shaped, 8–10 × 4–5 μ, 1-guttulate. Cystidia "on surface of gill lanceolate-pointed, 50–70 × 10–20 μ, on edge of gill vesiculose-clavate, 40–50 × 8–10 μ, sometimes with reddish contents" Rick. Gregarious. Burnt soil, and sawdust. Woods and gardens. June—Oct. Uncommon. (v.v.)

1345. *P. gossypina* (Bull.) Fr. (= *Hypholoma gossypinum* (Bull.) Quél.) Cke. Illus. no. 621, t. 612, fig. A. Gossypina, cottony.
P. 1.5–3 cm., ochraceous clay, disc darker, submembranaceous, campanulate, then expanded, tomentose with white, fugacious flocci, soon becoming smooth; margin striate. St. 4–5 cm. × 3–4 mm., whitish, densely tomentose with white, erect flocci, equal, or slightly attenuated at the base, fragile. Gills white, then fuscous-black, adnate, 3–4 mm. broad, ventricose, crowded. Flesh yellowish, thick at the disc. Spores purple, elliptical, 8–9 × 4 μ. Subcaespitose. On the ground, and on twigs. Woods and heaths. May—Oct. Not uncommon. (v.v.)

1346. *P. noli-tangere* Fr. (= *Hypholoma noli-tangere* (Fr.) Quél.) Fr.
Icon. t. 138, fig. 3. Noli-tangere, touch not.
P. 1–2.5 cm., pallid umber, or dark fuscous, becoming pale when dry, very hygrophanous, fragile, membranaceous, campanulate, then expanded, obtuse, smooth, striate throughout, becoming even when dry, covered with white, fugacious, thin flocci round the margin. St. 2–4 cm. × 1–2 mm., pallid fuscous, base darker, equal, very fragile, often

1347. *P. microrhiza* (Lasch) Fr. Cke. Illus. no. 622, t. 596, fig. A. μικρός, small; ἱέα, root.


Spores black, or blackish.

Psathyrella Fr.

(Diminutive of *Psathyra*.)

Pileus fleshy, or submembranaceous, regular; margin straight, at first adpressed to the stem. Stem central, confluent with the pileus. Gills adnate, or free. Spores black, or fuscous black, elliptical, or oval; smooth; with an apical germ-pore. Cystidia present. Growing on the ground, or on wood; solitary, or caespitose.

*St. tense and straight, smooth.

1348. *P. subatratata* (Batsch) Fr. Fr. Icon. t. 139, fig. 1.

Sub, somewhat; atrata, clothed in black.

P. 2–5–5 cm., umber-rufescent, fuliginous, or somewhat olivaceous, pallid rufescent when dry, membranaceous, campanulate, 2–5 cm. high, then expanded, obtuse, or somewhat umbonate, smooth, slightly striate round the margin. St. 2–5–12–5 cm. × 2–4 mm., becoming pale white, tense and straight, equal, smooth. Gills fuliginous blackish, almost umber, adnexed in the top of the cone, adnate when the p. is more expanded, linear, usually 2 mm. broad, sometimes ventricose, 4 mm. broad. Flesh yellowish white, somewhat fuliginous under the cuticle of the p., thin. Spores fuliginous black, elliptical, 14–17 × 7–9 μ. Cystidia "on edge of gill bluntly fusiform, 45–55 × 8–15 μ." Rick. Taste bitter. Gregarious. Rich pastures, woods, and hedgerows. Sept.—Oct. Uncommon. (v.v.)


P. 1–4 cm., fuliginous, livid, or pale grey, tan, rosy, or whitish when dry, hygrophanous, membranaceous, campanulate, obtuse, smooth,

1350. **P. hiascens** Fr. (= *Coprinus hiascens* (Fr.) Quél.) Cke. Illus. no. 636, t. 635. *Hiascens*, splitting.

P. 2–3 cm., livid, then becoming yellow, membranaceous, conico-campanulate, 2-5 cm. high, obtuse, smooth, soon split and opening in furrows often to the middle, the divided margin at length revolute. St. 4–7.5 cm. × 2–3 mm., whitish, tense and straight, rigid-fragile, naked, smooth. Gills whitish, then shining black, at length very dead black, adnate, narrow, linear, or somewhat attenuated in front, distant. Flesh white, very thin at the margin. Spores black, “wedge-shaped-rounded, 10–12 × 7–11 μ” Karst. Grassy places, hedgerows, damp woods, and rubbish heaps. April—Nov. Rare.


P. 2 cm., bright brown, membranaceous, campanulato-conic, 2-5 cm. high, rather acute, deeply sulcate. St. 12.5 cm. × 2–3 mm., white, thickened at the base, smooth. Gills purplish black, quite free, lanceolate. Flesh concolorous at the disc, thin at the margin. Under hedges. Sept.—Oct. Rare.

1352. **P. trepida** Fr. Fr. Icon. t. 139, fig. 2. *Trepida*, trembling.

P. 2–3 cm., fuliginous, disc dark brown, membranaceous, very fragile, campanulate, obtuse, smooth, slightly but densely striate up to the even disc. St. 6–7.5 cm. × 1–2 mm., whitish, diaphanous, equal, tense and straight, rarely flexuose, quite smooth, naked. Gills greisy, then fuliginous shining black, adnate, crowded, ventricose, very thin. Flesh brownish in the p., very thin. Spores dead black, “elliptical, 12–14 × 6–7 μ, smooth, opaque. Cystidia on edge of gill fusiform, 40–50 × 9–10 μ” Rick. Muddy marshes, and on twigs in woods. July—Oct. Uncommon. (v.v.)


P. 2–3 cm., rufescent, becoming greyish towards the margin, submembranaceous, conico-campanulate, disc broad, obtuse, smooth, at length expanded and revolute; margin striate, at first appendiculate with the fugacious veil. St. 6–7.5 cm. × 2–3 mm., white, fragile, straight,

**St. flexuose, pruinulate at the apex.

1354. P. caudata Fr. (= Panaeolus caudatus (Fr.) Quél.) Cke. Illus. no. 639, t. 637. 
Caudata, having a tail.

P. 2–5 cm., date brown, tan colour obsolescent turning to flesh colour when dry, membranaceous, very tender, conical, then campanulate, at length flattened, smooth, disc subgibbose, even, otherwise pellucidly striate, dry, often splitting and subdeliquescent in wet weather. St 7–11 cm. × 3–4 mm., whitish, attenuated upwards from the thickened, rooting, fibrillose base, very fragile, curved, at length twisted, undulate, apex white pruinose. Gills grey, then cinereous black, adnate, 8 mm. broad. Spores fuscous black, “elliptical, 13–17 × 8–9 μ, smooth, opaque. Cystidia on edge of gill, ventricose-fusiform, 30–40 × 9–10 μ,” Rick. In troops, or caespitose. Gardens, charcoal heaps, and stumps of a wooden pavement. May—Dec. Uncommon. (v.v.)

1355. P. prona Fr. (= Psathyrella prona Fr. var. Smithii Massee.) Fr. Icon. t. 139, fig. 3. 
Prona, bending downwards.

P. 5–12 mm., fuliginous, hoary when dry, hygrophanous, membranaceous, campanulate, then hemispherical, very obtuse, smooth, pellucidly striate, obsolescent silky-atomate and opaque when dry. St. 4 cm. × 1 mm., white, hyaline, becoming pale, equal, flexuose, lax, very smooth, apex pruinose. Gills greyish, then livid fuliginous, adnate, plane, subtriangular, 4 mm. broad, distant, edge often rose-coloured. Flesh yellowish, very thin. Spores very dead black, “elliptical, 12–16 × 7–8 μ, smooth, opaque. Cystidia on edge ventricose-fusiform, 40–60 × 8–10 μ” Rick. Rich pastures, and in nuts of roads in woods. May—Oct. Rare.

1356. P. empyreumatica B. & Br. Cke. Illus. no. 641, t. 657, fig. A. 
ςμυρος, burnt.

P. 4 cm., rufous, then becoming pale, hygrophanous, membranaceous, expanded, atomate; margin crenate. St. 6 cm. × 3 mm., pallid, silky furfuraceous. Gills rufous, then brown purple, adnate, with a decurrent tooth, 4 mm. broad, thick, distant, connected by veins, edge pallid. Flesh concolorous, thin. Spores black. Smell strong. Wooden pavement. Oct. Rare.

1357. P. atomata Fr. (= Panaeolus atomatus (Fr.) Quél.) 

ήσμος, an atom.

P. 1–3 cm., livid, or reddish, becoming pale tan or pale flesh colour
when dry, hygrophanous, membranaceous, campanulate, obtuse, slightly striate, slightly wrinkled and without striae when dry, sprinkled with shining atoms. St. 4-7 cm. × 3-4 mm., white, equal, lax, fragile, slightly bent, apex white pulverulent. Gills whitish, then cinereous-blackish, adnate, broad, ventricose, slightly distant. Flesh pallid, thin. Spores black, elliptical, 11-15 × 6-8 μ. Cystidia "fusiform, 40-50 × 8-10 μ" Rick. Solitary, or gregarious. Woods, pastures, roadsides, and hedgerows. May—Dec. Common. (v.v.)

var. expolita Fr. 


1358. P. crenata (Lasch) Fr. (= Coprinus crenatus (Lasch) Rick.) Cke. Illus. no. 643, t. 847. 

Crenata, notched.

P. 1-3 cm., ochraceous, or rufescent, then pale, hygrophanous, membranaceous, hemispherical, sulcate, atomate, crenate at the margin. St. 4-10 cm. × 2-4 mm., whitish, or brownish, fragile, equal, base thickened and villose, striate and mealv above. Gills yellowish fuscous, then blackish, adnate, subventricose. Flesh yellowish in the p., thin. Spores brownish black, elliptical, 9-12 × 6 μ. Cystidia "bottle-shaped, 50-150 × 22-33 μ" Rick. Woods, pastures, roadsides, and amongst beech leaves. Sept.—Nov. Not uncommon. (v.v.)

1359. P. disseminata (Pers.) Fr. (= Coprinus disseminatus (Pers.) Quél.) Boud. Icon. t. 140. 

Disseminata, spread abroad.

P. 1-2 cm., whitish, or yellowish, then becoming cinereous, commonly livid, disc becoming yellow, membranaceous, oval, then campanulate or convex, scurfy, then becoming smooth, deeply striate, sulcate. St. 2-5-6 cm. × 2 mm., white, fragile, often curved, lax, somewhat flexuose, slightly scurfy, then smooth, arising from a byssoid, white mycelium. Gills whitish, then blackish, adnate, linear, 2 mm. broad. Flesh white, yellowish at the disc, very thin. Spores black, pip-shaped, 9-10 × 5-6 μ. Cystidia "cylindrical-vesiculose, 60-75 × 8-12 μ" Rick. Densely crowded, or caespitose. Old stumps, and bare ground. April—Nov. Common. (v.v.)

**Gills decurrent.

Spores white.

Omphalia (Pers.) Fr. 

(δμφαλός, the navel.)

Pileus fleshy, or submembranaceous, often umbilicate. Stem central, cartilaginous. Gills decurrent. Spores white, rarely yellowish, elliptical, reniform, pip-shaped, boat-shaped, subglobose, or oblong
elliptical; smooth, punctate, verrucose, or echinulate; continuous. Cystidia present, or absent. Growing on the ground, or on wood; solitary, caespitose, subcaespitose, or fasciculate.

I. P. at the first spread out, margin incurved.

A. Generally comparatively large; gills narrow, very crowded.

1360. O. hydrogramma (Bull.) Fr. Fr. Icon. t. 71.

\[\text{Livid, or whitish livid when moist, whitish when dry.} \]

P. 5–7 cm., submembranaceous, flaccid, deeply umbilicate, very hygrophanous; margin spreading, undulate, striate. St. 6–8 cm. × 6 mm., very cartilaginous, smooth, generally compressed, undulated, base rooted and white tomentose. Gills livid-whitish, deeply decurrent, very crowded, narrow, arcuate, very unequal. Flesh white, thick at the disc. Spores white, elliptical, 5 × 3 μ. Subcaespitose. Amongst dead leaves, especially beech. Oct. Uncommon. (v.v.)

1361. O. detrusa Fr. Fr. Icon. t. 73, fig. 1. Detrusa, thrust down.

P. 2–5 cm., dark cinereous, subzonate, somewhat fleshy, convex, then umbilicate. St. 2.5–3.5 cm. × 4 mm., concolorous, firm, attenuated upwards, smooth, whitish at the base. Gills whitish, decurrent by a tooth, thin, crowded. Flesh whitish, thin at the margin. Spores white, "7–8 × 4 μ" Sacc. Woods. Sept.—Oct. Rare.

1362. O. umbilicata (Schaeff.) Fr. Schaeff. t. 207.

Umbilicata, having a navel.

P. 2–3 cm., livid when moist, the disc becoming somewhat fuscos, whitish or yellowish when dry, hygrophanous, submembranaceous, convexo-plane, deeply umbilicate at first, then infundibuliform, smooth. St. 2.5–3 cm. × 2–4 mm., white, here and there flexuose, twisted, or incurved, apex silky-striate with white fibrils, base somewhat rooting, or cohering with villose down. Gills whitish, at first shortly, then deeply decurrent, crowded, thin, unequal. Spores white, "kidney-shaped, 6–8 × 2.5–4 μ" Sacc. Caespitose. In woods amongst moss. Sept. Uncommon.

1363. O. maura Fr. Fr. Icon. t. 73, fig. 2. Maura, Moorish.

P. 2–4 cm., fuliginous and striate when moist, livid and silky shining when dry, hygrophanous, submembranaceous, convex, deeply umbilicate, smooth. St. 2.5–5 cm. × 2 mm., fuliginous-blackish, very cartilaginous, somewhat horny, rigid, smooth. Gills shining white, very acutely and deeply decurrent, arcuate, attenuated at both ends, very crowded. Flesh fuliginous, thin at the margin. Spores white, subglobose, 5–6 × 5 μ, punctate. Smell none, or of new meal. Pastures, heaths, and lawns. Sept.—Nov. Not uncommon. (v.v.)
1364. **O. offuciata** Fr. Fr. Icon. t. 72, fig. 3. *Offuciata*, painted.

P. 2–3 cm., dark, then pale flesh colour, becoming pale and almost whitish when old and dry, hygrophanous, slightly fleshy, convex, then plano-depressed, smooth. St. 2–5 cm. × 2–4 mm., reddish, or concolorous, very cartilaginous, round, then compressed, equal, apex obsolesly pruinose, smooth. Gills of the same colour as the pileus, moderately decurrent, narrow, straight, crowded. Under beech. Oct.—Nov. Uncommon.

1365. **O. scyphoides** Fr. Fr. Icon. t. 75, fig. 3, as *Omphalia scyphiformis*.

*Shining white, becoming yellowish when dry.* P. 8–50 mm., membranaceous, umbilicate, then infundibuliform, undulate, silky. St. 2–5 cm. × 1–3 mm., flexuose, villose; base white, tomentose. Gills decurrent, narrow, crowded, linear. Flesh white, thin at the margin. Spores white, boat-shaped, 8–9 × 5 μ, and 6 × 2–3 μ, 1-guttulate. On bare soil and amongst leaves in woods. Aug.—Oct. Uncommon. (v.v.)

B. Medium size; gills rather distant, narrow, attenuated at both ends.

1366. **O. chrysophylla** Fr. (= *Flammula chrysophylla* (Fr.) Quél.) Fr. Icon. t. 74, fig. 1.

*χρυσόσ, gold; φύλλον, leaf.*


W. B. Allen, the mycologist of Bent hall, Broseley, Shropshire.

P. 1–2 cm., olive-greenish, whitish when dry, hygrophanous, convex, then plane, somewhat umbilicate, thin. St. 2–4 cm. × 2–5 mm., lemon-yellow, cylindrical, subcartilaginous; base white, strigose. Gills lemon-yellow, decurrent, very narrow, somewhat thick, subdistant, unequal, more or less undulating, united by veins. Flesh yellow in the stem, greenish yellow in the pileus. Spores white, elliptical, 6.5–7.5 × 3.5–4 μ. Cystidia none. Taste mild. On a stump of a deciduous tree. Sept. Rare. (v.v.)

1368. **O. Postii** Fr. Fr. Icon. t. 74, fig. 2.

H. von Post, the Swedish mycologist.

P. 2–6 cm., bright orange, membranaceous, at first umbilicate, then depressed, convex, smooth, striate towards the margin. St. 5–8 cm. ×

var. aurea Massee. Cke. Illus. no. 1151, t. 1152, fig. B, as Omphalia Postii Fr. Aurea, golden.

P. 2-5-5 cm., golden-yellow, very regular, infundibuliform, margin drooping. St. 5 cm. x 3-4 mm., concolorous; base white, tapering. Gills white, slightly decurrent, crowded. Spores white, elliptical, 7 x 3.5μ. On Sphagnum in swamps. Rare.

1369. O. pyxidata (Bull.) Fr. (= Omphalia hepatica (Batsch) Quél.) Cke. Illus. no. 254, t. 194, lower figs. Pyxidata, box-shaped.

P. 2-3 cm., brick-rufescent, or rufousfuscous and radiato-striate when moist, becoming pale, opaque, flocculose or slightly silky when dry, membranaceous, pellucid, umbilicate, then infundibuliform. St. 2.5 cm. x 2 mm., pallid, then rufescent, tough, sometimes pruinose. Gills flesh colour, then pale yellowish, decurrent, subdistant, narrow. Flesh pallid, thin. Spores white, elliptical, 6-7 x 4-5μ, 1-guttulate. Amongst grass on lawns, and in woods. July—Nov. Common. (v.v.)

1370. O. leucophylla Fr. Fr. Icon. t. 73, fig. 4.

λευκός, white; φύλλον, leaf.

P. 2-3 cm., dark cinereous, submembranaceous, infundibuliform; margin reflexed, involute. St. 4 cm. x 2 mm., cinereous, slightly rigid. Gills shining white, decurrent, arcuate, subdistant. Spores white, elliptical, 6-7 x 3-4μ. Woods, and pastures. April—Oct. Uncommon. (v.v.)


tελματιαῖος, marshy.

P. 2-6 cm., brown, then mouse-coloured, rather membranaceous, soon infundibuliform, silky, margin reflexed. St. 3-4 cm. x 3-6 mm., cinereous, compressed; base white, tomentose. Gills pallid, decurrent, distant. Flesh brownish, thick at the disc. Spores white, “elliptical with an oblique apiculus, 7 x 4μ” Massee. On Sphagnum. Aug. Rare.

1372. O. striaeplea Fr. Fr. Icon. t. 73, fig. 3.

Strix, a furrow; pileus, a cap.

P. 2-3 cm., livid fuscosus, becoming pale-white when dry, submembranaceous, convex, then flattened, umbilicate, the whole elegantly striate, smooth. St. 5 cm. x 2 mm., becoming fuscosus, slightly tough, often flexuose. Gills whitish, slightly decurrent, somewhat crowded, 2-3 mm. broad. Flesh whitish, thin at the margin. Spores white,

1373. **O. epichysium** (Pers.) Fr. Pers. Icon. pict. t. 13, fig. 1.

επίχυς, a vessel for pouring out.

P. 1–3 cm., cinereous-fuliginous and striate when moist, becoming pallid, silky, or floculosesquamous when dry, membranaceous, somewhat plane, umbilicate; margin somewhat reflexed. St. 2–5–3 cm. × 2 mm., cinereous, tough, base white tomentose. Gills whitish cinereous, shortly plano-decurrent. Spores white, elliptical, 8–10 × 4–5 μ. On rotten stumps, and logs. Sept.—Oct. Uncommon. (v.v.)

1374. **O. sphagnicola** Berk. (= Omphalia philonotis (Lasch) Quél.)

Cke. Illus. no. 257, t. 289, upper figs.

*Sphagnum, Sphagnum; colo, I inhabit.*


1375. **O. philonotis** (Lasch) Fr. (= Omphalia sphagnicola Berk. sec. Quél.) Fr. Icon. t. 76, fig. 1.

φιλος, loving; νησις, wet.

Cinereous-fuliginous, fragile. P. 1–3 cm., membranaceous, the whole deeply infundibuliform, hygrophanous, floccose when dry; margin erect. St. 4 cm. × 2 mm., sometimes attenuated upwards; base white, floccose. Gills deeply decurrent, subdistant, narrow, lanceolate. Flesh greyish, thin at the margin. Spores white, elliptical or pip-shaped, 7–8 × 4–5 μ. On *Sphagnum* in bogs and amongst short grass. May—Sept. Uncommon. (v.v.)

1376. **O. oniscus** Fr. (= Omphalia caespitosa Bolt. sec. Quél.) Fr. Icon. t. 76, fig. 3.

ὀνισκος, a wood-louse.

P. 2–3 cm., dark cinereous, becoming pale, grey-hoary when dry, submembranaceous, flaccid, fragile when old, convexo-umbilicate, or infundibuliform, often irregular, undulato-flexuose or lobed, smooth; margin striate. St. 2–5–3 cm. × 2 mm., grey, somewhat firm, tough, sometimes compressed, curved. Gills cinereous, shortly decurrent, sub-distant. Flesh grey, thick at the disc. Spores white, elliptical, 7–8 × 4–5 μ, 1-guttulate. Woods, and boggy places. Oct.—Dec. Uncommon. (v.v.)

1377. **O. Luffii** Massee.

P. 2–3 cm., pallid, then white, convex, then depressed; margin upturned at extreme edge. St. 2–3 cm. × 2 mm., pallid, thickened above,
polished, often wavy. Gills pallid, decurrent, crowded. Flesh white, very thin. Spores white, elliptical, $5 \times 3 \mu$. Smell fragrant, of anise. Amongst grass. Rare.

1378. **O. caespitosa** (Bolt.) Cke. (= *Omphalia oniscus* Fr. sec. Quéll.)


P. 1–2.5 cm., yellowish-white, opaque white when dry, submembranaceous, sulcate nearly to the disc, convex, subhemispherical, umbilicate; margin crenate. St. 1–2 cm. $\times$ 3 mm., concolorous, generally curved, base subbulbose. Gills whitish, shortly decurrent, very broad, very distant, triangular. Spores white, “subglobose, $6 \times 5 \mu$” W. G. Sm. Moors, and on peat in sandy heaths. May—Oct. Uncommon. (v.v.)

1379. **O. glaucophylla** (Lasch) Fr. Cke. Illus. no. 1153, t. 959, fig. B. γλαυκός, pale green; φιλλον, a leaf.


1380. **O. rustica** Fr. Cke. Illus. no. 1153, t. 959, fig. C. *Rustica*, belonging to the country.

P. 1 cm., fuscous, then grey and striate when moist, becoming either fuscous, or silky and hoary when dry, membranaceous, umbilicate at the disc, otherwise convex. St. 10–15 $\times$ 1 mm., fuscous, then grey, polished, equal, often thickened upwards, base white, villose. Gills grey, decurrent, thick, subdistant, edge arcuate. Flesh white, thin at the margin. Spores white, elliptical, 8–10 $\times$ 4–5$\mu$, often curved, 2–many-guttulate. Woods, and pastures. Aug.—Oct. Common. (v.v.)

1381. **O. scyphiformis** Fr. οκύφος, a cup; forma, shape.

**Entirely snow-white.** P. 5–20 mm., membranaceous, convex, then infundibuliform, pellucid; margin striate, crenulate. St. 3–4 cm. $\times$ 2 mm., flexuose, apex thickened. Gills very decurrent, distant, thin. Spores white, elliptical, 8 $\times$ 4$\mu$, 1-guttulate. Flesh white, very thin at the margin. On bare ground, and amongst moss in deciduous woods. Sept.—Oct. Uncommon. (v.v.)

1382. **O. alutacea** Cke. & Massee. (= *Clitocybe alutacea* Cke. & Massee.)

Alutacea, like tanned leather.

P. 10–15 mm., tan-coloured, membranaceous, convex, then umbilicate; margin incurved. St. 3–4 cm. $\times$ 1–2 mm., rather paler than the pileus. Gills paler than the pileus, decurrent, narrow, crowded, arcuate. Spores white, elliptical, 6 $\times$ 4$\mu$. Amongst grass, and moss in woods. Sept. Uncommon. (v.v.)

1 By an oversight this species was described under *Clitocybe* (no. 823), but its correct position is here.
C. Gills very distant, broad, generally thick.

1383. O. atropuncta (Pers.) Quél. (= Eccilia atropuncta (Pers.) Fr.) Boud. Icon. t. 70.

P. 1–1.5 cm., cinereous, or grey fuliginous, campanulate, then depressed and cup-shaped, often slightly squamulose. St. 2–4 cm. × 2–3 mm., blackish grey, apex paler, covered with black punctiform squamules, thickened upwards; base pulverulent, white. Gills greyish flesh colour, decurrent, thick, narrow, distant. Flesh of pileus pale fuliginous, blackish towards the basal portion of the stem. Spores white or yellowish, subglobose, or angularly-globose, 4.5–5.5 × 4–5 μ, 1–many-guttulate. Smell unpleasant. Woods, and heaths. Sept.—Oct. Uncommon. (v.v.)

1384. O. demissa Fr. (= Ag. rufulus B. & Br.) Bres. Fung. Trid. t. 35, fig. 1.

Demissa, let down.


1385. O. hepatica (Batsch) Fr. (= Omphalia pyxidata (Bull.) Fr. sec. Quél.; Omphalia subhepatica (Batsch) Sacc.) Cke. Illus. no. 259, t. 250, fig. B.

Hepatica, like liver.

P. 1–4 cm., rufous-flesh-colour when moist, slightly tawny, or tan and somewhat shining when dry, coriaceo-membranaceous, tough, umbilicato-convex, then infundibuliform, often undulato-lobed, smooth. St. 2.5 cm. × 2 mm., fuscous-flesh-colour, very tough, becoming compressed, broader and dilated at the apex, rarely white-pruinose. Gills whitish, becoming pale, deeply decurrent, distant, prominently connected by veins, narrow, linear, sometimes crisped. Spores white, elliptical, 5–8 × 4–5 μ. On lawns, and amongst short grass in woods. Sept.—Dec. Uncommon. (v.v.)

1386. O. muralis (Sow.) Fr. Cke. Illus. no. 259, t. 250, fig. C.

Muralis, belonging to a wall.

P. 8–20 mm., rufous brown, submembranaceous, tough, convex, umbilicate, then infundibuliform, radiato-striate, smooth; margin crenulate. St. 6–12 × 1–2 mm., concolorous, equal, smooth; base white, floccose. Gills pallid, or flesh colour, decurrent, distant. Flesh concolorous, thin. Spores white, elliptical, with an oblique basal apiculus, 9–10 × 4.5–5 μ. On old walls, sandy banks, and bare soil in woods. Jan.—Dec. Common. (v.v.)
1387. O. umbellifera (Linn.) Fr. (= Omphalia pseudoandrosacea Bull. sec. Quél.) Boud. Icon. t. 69. *Ombelilera*, umbel-bearing.

P. 1–2 cm., grey, bistre, straw colour, whitish or ochraceous, becoming whitish, slightly fleshy-membranaceous, convex, then plane, broadly obconic, faintly umbilicate, rayed with darker striae; when dry silky, flocculose, rarely squamulose; margin inflexed at first, crenate. St. 2.5–3 cm. × 2 mm., concolorous, dilated towards the apex into the pileus, sometimes pubescent, base white villose. Gills white, then cream, or yellowish, decurrent, very broad behind, triangular, very distant, sometimes dichotomous, connected by veins. Flesh *pallid*, thick at the disc. Spores white, elliptical, 7–9 × 4–5 μ, 2–3-guttulate. Boggy ground in woods and on mountains, also on rotten wood. April—Dec. Common. (v.v.)


Differs from the type in being entirely snow white. In bogs. Not uncommon. (v.v.)

var. *citrina* Quél. *Citrina*, citron yellow.

Differs from the type in being glabrous, citron yellow, and pellucid.


Differs from the type in being pubescent, and bluish, then greenish. Boggy ground, in woods and on hills. Sept. Uncommon. (v.v.)

var. *chrysoleuca* (Pers.) Fr. (= var. *abiega* B. & Br.) *Χρυσόσ, gold; λευκός, white.*

Differs from the type in being bright yellow then whitish. Growing on fir stumps.


Differs from the type in being entirely pale grey. Bogs in woods. Not uncommon. (v.v.)


Differs from the type in the golden yellow p. and st. On mountains. Uncommon. (v.v.)


Differs from the type in being entirely dark umber. Rotten beech trunks and shady places.

1388. O. myochroa (Fr.) Rea. *Μουσ, mouse; χρῶς, colour.*

P. 5–15 mm., reddish brown, or rufescent, becoming whitish with age, somewhat fleshy, convex, then plane, umbilicate, striate to the middle, margin crenulate. St. 1–2 cm. × 2–4 mm., whitish, apex rufescent; base white, strigose. Gills yellowish, narrow, furcate at the margin,


*Velutina*, velvety.  

P. 10–12 mm., greyish, or yellowish grey, convex, umbilicate, striate. St. 10–15 × 1–2 mm., concolorous, finely tomentose; base covered with the white mycelium, often subbulbose. Gills yellowish grey, narrow, 1–2 mm., arcuate, distant. Flesh dark grey. Spores white, ovoid pruniform, 10 × 6 μ, 1–2-guttulate. Parks, heaths, and woods. Sept.—Oct. Uncommon. (v.v.)

1390. **O. infumata** B. & Br.  

*Infumata*, smoked.  

P. 4 mm., greenish, then smoky, obtuse. St. 2-5 cm. × 1–2 mm., yellow, base dilated, tomentose especially below. Gills yellow, decurrent, few, broad, distant. On bark amongst moss. Sept. Rare.

1391. **O. retosta** Fr. Fr. Icon. t. 76, fig. 2.  

*Retosta*, scorched.  


*Buccinalis*, trumpet-like.  

Entirely white. P. 5–10 mm., trumpet-shaped, plane, or depressed. St. 5–15 × 1–2 mm., expanding into the pileus. Gills deeply decurrent, triquetrous, distant. Spores white. On twigs, etc. Common.

1393. **O. abhorrens** B. & Br. Cke. Illus. no. 261, t. 272, fig. C.  

*Abhorrens*, disgusting.  

P. 1–1·5 cm., fuscous, then pale, umbilicate. St. 2 cm. × 1–2 mm., concolorous, apex thickened, sometimes pruinose when young, base white-tomentose. Gills pale, decurrent, distant, thick, narrow. Spores white. Smell very foetid, stercoraceous. Caespitose. On lawns under yews. Oct. Rare.

1394. **O. pseudoandrosacea** (Bull.) Fr. (= *Omphalia umbellifera* (Linn.) Fr. sec. Qué.)  

*Ψυχευβή*ς, false; *androsacea*, *Androsaceus androsaceus*.  

Entirely whitish, or grey. P. 8–15 mm., fleshy-membranaceous, convex, deeply umbilicate, at length infundibuliform, smooth, striatoplicate; margin crenulate. St. 2–3 cm. × 1–2 mm. Gill deeply de-

1395. **O. griseo-pallida** (Desm.) Fr. (= Omphalia griseola (Pers.) Quél.)

Griseo, grey; pallida, pallid.

P. 5–10 mm., fuscos-grey, then becoming hoary, slightly fleshy, convex, then plane, umbilicate, smooth, slightly shining; margin deflexed. St. 8–12 × 2 mm., fuscos, firm, equal, or thickened upwards, smooth. Gills concolorous when moist, darker when dry, decurrent, broader behind, distant, rather thick. Flesh fuscos, thin at the margin. Spores white, pip-shaped, or elliptical with an oblique basal apiculus, 9–11 × 6–7 μ, 1-guttulate. On the ground, rubbish heaps, and mossy wall tops. Sept.—Dec. Not uncommon. (v.v.)

1396. **O. albidopallens** Karst.

Albido, whitish; pallens, becoming pallid.

P. 1 cm., hyaline white, or pallid, convex, orbicular, slightly umbilicate, pellucidly striate. St. 3–4 cm. × 1–2 mm., pallid. Gills pallid, adnate, decurrent, crowded. Spores white, elliptical, 4–5 × 3 μ. Amongst moss. Aug.—Sept. Rare.

O. bibula Quél. = **Hygrophorus Wynnieae** B. & Br.

1397. **O. stellata** Fr. Cke. Illus. no. 262, t. 241, bottom figs.

**Stellata**, set with stars.

Entirely white and diaphanous. P. 6–10 mm., membranaceous, convex, umbilicate, striate, smooth. St. 2–2.5 cm. × 1 mm., filiform, equal, fragile, the dilated base strigoso-radiate. Gills decurrent, distant, broad, thin. Spores white, “subglobose, irregular, 4–6 μ, or 6–8 × 3–5 μ” Sacc. On twigs, dead wood, and herbaceous stems. Feb.—Nov. Not uncommon. (v.v.)

II. P. at the first campanulate, margin straight, pressed to the stem.

A. Gills broad, perfect, unequal.

1398. **O. campanella** (Batsch) Fr. Cke. Illus. no. 263, t. 273, top figs.

**Campanella**, a little bell.

P. 1–2 cm., yellow-ferruginous, hygrophanous, membranaceous, tough, campanulate, then soon convex, umbilicate, striate. St. 2.5–3 cm. × 2 mm., date brown, horny, rigid, polished, attenuated, rooted, apex paler; base tawny, strigose. Gills yellow, deeply decurrent, somewhat crowded, prominently connected by veins. Spores white, elliptical, “8–9 × 3–4 μ” Maire. Caespitose. On stumps of firs. Aug.—Sept. Not uncommon. (v.v.)

var. **badipus** Fr.

Badius, bay; πούς, foot.

Differs from the type in the thickened base of the st. being clothed with ferruginous down.
var. papillata Fr.  
  Papillata, having a nipple.  
  Differs from the type in the acutely conical p., and papillate umbilicus.

var. myriadea Kalchbr.  
  myriās, ten thousand.  
  Differs from the type in being half the size, densely caespitose, and pale tawny in colour with gills pale brick-red with a fleshy tinge.

1399. O. Kewensis Massee.  
  Kewensis, belonging to Kew.  
  P. 3–5 mm. high, ochraceous, becoming whitish, somewhat fleshy, cylindrically-campanulate, very smooth, deeply sulcate; margin crenate.  
  St. 2–3 cm. × 1–2 mm., pale, round, more or less flexuose.  
  Gills white, elliptical, “7–10 × 4 μ, minutely echinulate” Sacc.  
  On twigs, and on dead rhizomes in Filmy Fern House.  
  Rare.

1400. O. picta Fr. Fr. Icon. t. 77, fig. 4.  
  Picta, painted.  
  P. 4–8 mm., fuscosus, the umbilicate disc generally light yellow, deeply campanulate, 5–9 mm. high, striate, membranaceous; margin paler.  
  St. 5–8 cm. × 1–2 mm., date brown, horny, rigid, smooth; apex thickened, paler; inserted at the base and arising from a little, fuscosus tawny, radiating membrane.  
  Gills whitish, turning light yellow, adnate, subdecurrent, distant, membranaceous, edge entire.  
  Spores white, elliptical, “7–10 × 4 μ, minutely echinulate” Sacc.  
  On twigs, and on rotten wood in mixed woods.  
  Aug.—Oct. Uncommon. (v.v.)

1401. O. camptophylla Berk. (= Omphalia speirea (Fr.) Quél.; Mycena speirea Fr. sec. Quél.) Cke. Illus. no. 264, t. 210, upper figs.  
  P. 12 mm., brown, with a grey margin, convexo-plane, deeply striate, smooth.  
  St. 5–6 cm. × 1–2 mm., at first yellow, then pale above, rufescens below, subflexuose, somewhat rigid, minutely pubescent, base radiato-strigose.  
  Gills white, at first adnate, nearly plane, then ascending and suddenly decurrent, subdistant.  
  Spores white, elliptical, 8–10 × 6–8 μ.  
  On twigs, and on sticks.  
  Aug.—Oct. Uncommon. (v.v.)

1402. O. umbratilis Fr. Fr. Icon. t. 77, fig. 3, as Omphalia umbratilis var. minor.  
  Umbratilis, remaining in the shade.  
  P. 1–3 cm., black-fuscosus, or umber-fuscosus, hoary when dry, submembranaceous, obtusely campanulate, then convex and umbilicate, smooth; margin striate.  
  St. 2·5–5 cm. × 2 mm., fuscosus-black, becoming greyish, tough, smooth.  
  Gills becoming fuscosus-white, adnate-decurrent, crowded, arcuate, broad, acute at both ends.  
  Flesh concolorous.  
  Spores white, pip-shaped, 8–9 × 5 μ, 1-guttulate.  
  In pastures, and on roadsides.  
  Sept.—Nov. Uncommon. (v.v.)
1403. **O. grisea** Fr. Fr. Icon. t. 78, fig. 1.  
Grisea, grey.

P. 1–2 cm., livid grey, then hoary, submembranaceous, campanulate, then convex, subpapillate and at length slightly umbilicate, smooth, striate. St. 5–7 cm. × 2 mm., whitish-cinerous, slightly firm, smooth, shining, longitudinally brittle, apex slightly thickened, base white-floccose. Gills whitish-grey, shortly decurrent, distant, broad, rather thick. Spores white, elliptical, 6–9 × 4 μ, 1-guttulate. Woods, and hedgerows. Aug.—Nov. Not uncommon. (v.v.)

1404. **O. fibula** (Bull.) Fr. Quél. Jur. et Vosg. i, t. 4, fig. 3.  
Fibula, a pin.

P. 4–20 mm., generally orange-yellow, becoming pale when dry, membranaceous, campanulate, then umbilicate, and finally infundibuliform, smooth, striate when moist. St. 3–4 cm. × 1–2 mm., colorless, bristle-like, weak, often pubescent under a lens. Gills whitish, or yellowish, deeply decurrent, broad, distant. Spores white, elliptical, 3–4 × 2 μ. Cystidia “on edge of gill sparse, subulate” Rick. Woods, pastures, heaths, and charcoal heaps. Jan.—Dec. Common. (v.v.)

var. **nivalis** Fl. Dan. (= var. candida Sacc.) Fl. Dan. t. 1072, fig. 2.  
Nivalis, snowy.

Differs from the type in the whitish, or yellowish p. and white, or tinged with orange yellow st. Amongst moss, and on charcoal heaps. July—Nov. Not uncommon. (v.v.)

var. **Swartzii** Fr. Fr. Icon. t. 75, fig. 4, as Omphalia setipes var. Fr. O. Swartz.

Differs from the type in the firmer, at length plane p. with umbilicate, fuscous disc, and in the whitish st. externally and internally violaceous at the apex. Spores white, elliptical, 4–5 × 2.5–3 μ. Cystidia fusiform, apex subcapitate, 8–9 μ in diam., base ventricose, 50–55 × 12–14 μ. Amongst moss, short grass, and on charcoal heaps. Aug.—Dec. Not uncommon. (v.v.)

1405. **O. directa** B. & Br.  
Directa, straight.

White, very slender. P. 1–3 mm., nail-shaped, apex plane. St. 2.5 cm. × 1 mm., slightly rufous, filiform, ascending, clothed with long hairs towards the base. Gills deeply decurrent. Spores white. On dead leaves. May—Nov. Rare.

1406. **O. pseudo-directa** W. G. Sm. Cke. Illus. no. 266, t. 251, upper figs., as Omphalia directa B. & Br.  
Ψευδής, false; directa, Omphalia directa.

P. 2 mm., white-pruinose. St. 12 mm. × 2 μ, white, mealy-granular below, springing from a white, floccose, evanescent disc or volva. Gills white, then saffron, few, adnate, pruinose-sparkling. On Encephalartos cone. May. Rare.

R. B. B.
1407. O. Belliae Johnst. Cke. Illus. no. 266, t. 251, lower figs.

The Misses Bell, of Coldstream.

P. 12 mm., of a pale wood-brown hue, membranaceous, inverted, deeply cyathiform; margin waved, furrowed. St. 4 cm. × 2 mm., white, or very pale wood-brown above, dark brown towards the base, becoming paler when dry, then apparently mealy, erect, stiff, elastic; root slightly incrassated, bent, fixed by a dense cottony web. Gills dull chalky white, decurrent, 2 mm. wide, rather distant, thick, more or less undulated, wrinkled on the sides and in the interstices with flexuose veins, once or twice divided near the edge. Spores white, oblong. On dead stems of reed. Oct. Rare.


Gracilis, thin.

Entirely snow-white. P. 3-8 mm., membranaceous, campanulate, papillate, striate, transparent. St. 20-30 × 1 mm., filiform, transparent, pruinose, base fibrillose. Gills 1 mm. wide, very decurrent, distant, thin. Spores white, oblong, or pip-shaped, 8 × 3-3.5 μ, 1-2-guttulate. On dead grass leaves, and twigs. Sept.—Nov. Uncommon. (v.v.)

1409. O. gracillima (Weinm.) Fr. Cke. Illus. no. 267, t. 252, top figs.

Gracillima, very thin.

Entirely snow-white. P. 4-6 mm., membranaceous, hemispherical, either minutely papillate, or umbilicate, flocculose, striate; margin sulcate. St. 6-12 × 1 mm., bristle-like, inserted by a floccose base. Gills subdecurrent, broad, distant, thin, the alternate ones dimidiate. Spores white, oblong-elliptical, 11-12 × 4-5 μ. On twigs, dead herbaceous stems, and dead bramble stalks. Aug.—Oct. Uncommon. (v.v.)

1410. O. bullula (Brig.) Cke. Cke. Illus. no. 267, t. 252, middle figs.

Bullula, a watery vesicle.


B. Gills fold-like, narrow.

1411. O. integrella (Pers.) Fr. Fr. Icon. t. 75, fig. 6.

Integrella, entire.

Entirely white. P. 3-6 mm., membranaceous, conical, then hemispherical, most frequently irregularly shaped, when flattened 12 mm. broad, umbilicate, pruinose, diaphanous; margin sulcate. St. 1.5-2.5 cm. × 1-2 mm., pruinose, pellucid, slightly firm, with a small villose bulb at the base. Gills decurrent, narrow, fold-like, distant, often branched, commonly disappearing short of the margin of the pileus,
edge acute. Spores white, pip-shaped, 6–7 × 4–5 μ, with a large central gutta. On twigs, and amongst leaves in woods, and hedgerows. May—Nov. Common. (v.v.)


**πολυάδελφος**, with many brothers.


1413. **O. Nevillae** Berk.

Lady Dorothy Neville.

P. 1–1.5 cm., brown, hemispherical, disc *depressed*, *rugose*, minutely granulated, striate, margin *becoming pale*. St. 2–3 cm. × 1 mm., brownish, rough with black granules, base rather dilated and clothed with villose hairs. Gills *white*, arcuato-decurrent, *interstices and sides venoso-rugose*. Flesh of stem *white*. Spores *white*. On *Sphagnum*, in an orchid pot.

Spores pink.

**Eccilia** Fr.

*Εγκωλος*, hollowed out.)

Pileus fleshy, or submembranaceous, umbilicate; margin incurved. Stem central, cartilaginous. Gills decurrent. Spores pink, angular, continuous. Cystidia rarely present. Growing on the ground, rarely on wood.

1414. **E. parkensis** Fr. Fr. Icon. t. 100, fig. 5.

*Parkensis*, belonging to a park.


*Carneus*, fleshy; *grisea*, grey.

1416. **E. griseorubella** (Lasch) Fr.  Fr. Icon. t. 100, fig. 4.

*Griseus*, grey; *rubella*, reddish.

P. 2–3 cm., *umber, or fuscous when moist, grey when dry, hygrophanous*, membranaceous, deeply umbilicate, at first convex at the circumference, then plane, striate. St. 3–5 cm. × 2–3 mm., *concolorous, or a little paler*, equal. Gills *grey*, then flesh colour, slightly decurrent, subdistant. Spores pink, angular, elliptical, or subglobose, 7–9 × 7 μ, 1-guttulate. Woods, and amongst pine leaves. Sept.—Oct. Not uncommon. (v.v.)


1417. **E. atrides** (Lasch) Fr.  

Ater, black.


**E. atropuncta** (Pers.) Fr. = *Omphalia atropuncta* (Pers.) Quél.

1418. **E. nigrella** (Pers.) Gillet.  

*Nigrella*, blackish.

P. 10–15 mm., *reddish black, blackish with a tinge of lilac*, becoming blackish, submembranaceous, convex, then plane, deeply umbilicate, slightly striate, covered with an adnate, fibrillose silk, or whitish striate with blackish; margin incurved, violé, finally scaly. St. 2–3 cm. × 2 mm., *pale, grey horn colour, or pale lilac grey, punctate with black above*, base white-cottony. Gills *lilac* or *flesh colour*, decurrent, fairly thick, *edge toothed black*, or *blackish*. Spores pink. Pastures. Sept.—Oct. Rare.

1419. **E. rhodocylix** (Lasch) Fr.  Fr. Icon. t. 100, fig. 6, as *Eccilia rhodocalix* Lasch.

ρόδος, rose; κυκλίξ, cup.

P. 12–15 mm., *somewhat fuscous when moist, grey when dry, hygrophanous*, membranaceous, deeply umbilicate, or *rather infundibuliform* with the margin reflexed, remotely striate when moist, flocculose when dry. St. 2–3 cm. × 1–2 mm., *cinereous, tough, thickened upwards*. Gills *whitish*, then flesh colour, deeply decurrent, very distant, broad, few, the alternate ones shorter. Spores pink, “subspherec, pentagonal, 8–10 μ. Cystidia coarsely hair-shaped” Lange. On rotten wood, alder stumps, and wall tops. Sept. Rare.

1420. **E. flosculus** W. G. Sm. Cke. Illus. no. 369, t. 613, fig. B.  

*Flosculus*, a little flower.

P. 1½–2 cm., *black-brown, becoming white with age, submembranaceous, deeply umbilicate, somewhat irregular, pruinoso-crystalline.
ECCILIA. TUBARIA

St. 2 cm. × 1 mm., reddish, cartilaginous, attenuated downwards, pruinose, or innato-fibrillose. Gills pink, decurrent, somewhat waved, thick. Trama dark brown. Spores pink, nodulose. On the ground, at the foot of and upon the stems of tree ferns in conservatories. June. Rare.

1421. E. acus W. G. Sm. Cke. Illus. no. 369, t. 613, fig. C.  

Acus, a needle.

P. 5–15 mm., snow-white, submembranaceous, deeply umbilicate, densely pruinose; margin incurved, striate. St. 2–3 cm. × 1 mm., white, cartilaginous. Gills pink, deeply decurrent, thick, distant. Spores pink, nodulose. Amongst germinating coffee-seeds in coconut fibre in conservatories. Aug. Rare.

Spores ochraceous, or ferruginous.

Tubaria W. G. Sm.  
(Tuba, a trumpet.)

Pileus fleshy, or submembranaceous; margin incurved. Stem central, cartilaginous. Gills decurrent, or broadly adnate. Spores ochraceous, ferruginous, or rarely fuscous; elliptical, pip-shaped, or almond-shaped; smooth, continuous. Cystidia present. Growing on the ground, or on wood.

1422. T. cupularis (Bull.) Fr. (= Lactarius cupularis (Bull.) Quél.)  
Cke. Illus. no. 526, t. 602, as var.  
Cupularis, cup-shaped.

P. 1–2 cm., rufescent, tawny, or reddish yellow, becoming light yellowish, slightly fleshy, convex, then plane, obtuse, disc sometimes depressed, smooth. St. 3–6 cm. × 3–4 mm., tawny, or reddish tawny, rarely whitish, attenuated upwards, naked. Gills tawny, or a little deeper coloured than the p., decurrent, crowded, thin, edge often serrulate. Spores “rusty, elliptical, 6 × 3 μ” Massee. Mountainous heaths, amongst grass, and under firs. Aug.—Oct. Rare.

1423. T. furfuracea (Pers.) W. G. Sm. (= Naucoria pellucida (Bull.) Quél.)  
Boud. Icon. t. 129.  
Furfuracea, scurfy.

P. 1–4 cm., pale cinnamon, or tawny, becoming pale, hoary tan when dry, fleshy, convex and obtuse, then flattened and sometimes umbilicate, slightly and somewhat pellucidly striate when moist, even and slightly silky when dry, covered round the margin with the hoary, silky squamulose, fugacious veil, very hygrophanous. St. 2–5 cm. × 2–4 mm., concolorous, but deeper in colour as the pileus becomes pale, equal, floccosely furfuraceous when young, base villose with the effused white mycelium. Gills concolorous, or bright cinnamon, sub-decurrent, broad near the st., more or less distant. Flesh concolorous,

var. heterosticha Fr. ἐπερος, different; στίχος, rank.

Diffs from the type in the umbonate and depressed pileus, and the somewhat naked st. Woods, and heaths. July—Nov. Not uncommon. (v.v.)

var. trigonophylla (Lasch) Fr. Cke. Illus. no. 528, t. 483.

τρίγωνος, triangular; φύλλον, a leaf.

Diffs from the type in its smaller size, in becoming pale, and in the very broad, triangular, more distant, somewhat tawny ochraceous gills. Waysides, charcoal heaps, and old brick pits. July—Nov. Not uncommon. (v.v.)

1424. T. anthracophila Karst. ἀνθραξος, charcoal; φίλος, loving.

P. 1-4 cm., yellowish or ferruginous cinnamon, becoming paler when dry, fleshy, convex, then expanded, often irregular, and repand, flexuose, dry; margin pellucidly striate when moist, covered with concentric, white, fugacious squamules. St. 2-4 cm. × 3-5 mm., ferruginous, becoming paler, equal, or enlarged upwards, flexuose, curved, sometimes twisted, at length often compressed, white fibrillos, apex somewhat naked and striate, base white villose. Gills pallid, then concolorous, adnate, broadest behind or at the middle, somewhat crowded, edge unequal, often dentate and floccosely crenate. Flesh concolorous, becoming paler when dry, thin. Spores pale ferruginous, broadly elliptical, or pip-shaped, 6-8 × 4-5 μ, with a large central gutta. Charcoal heaps, footpaths, and burnt places. Aug.—Oct. Not uncommon. (v.v.)

1425. T. paludosa Fr. (= Galera paludosa (Fr.) Quél.) Fr. Icon. t. 129, fig. 3. Paludosa, marshy.

P. 5–15 mm., pale yellowish fuscous, or honey colour, submembraneous, conical, then convex, umbo late with a very prominent papilla, everywhere silky with superficial, fugacious, pallid flocci. St. 4–8 cm. × 1–2 mm., ochraceous, attenuated at the apex, flexuose, paler, white villose below, flocculose above with the remains of the veil, which often forms a ring-like zone. Gills watery ochraceous, decurrent, very broad behind, triangular and with a decurrent tooth, thin, crowded. Flesh concolorous, very thin at the margin. Spores pale ferruginous, elliptical, or almond-shaped, 9–10 × 4–5 μ. Cystidia “on edge of gill filiform-subulate” Rick. Sphagnum swamps, and boggy ground. May—Oct. Not uncommon. (v.v.)
1426. **T. stagnina** Fr. (= *Galera stagnina* (Fr.) Quèl.) Fr. Icon. t. 129, fig. 2. *Stagnina*, belonging to swamps.

P. 6–20 mm., bay-brown-ferruginous, or brown, somewhat ochraceous when dry, submembranaceous, conical, then hemispherical, obtuse, sometimes rather depressed at the centre, somewhat viscid, slightly striate when moist; margin elegantly clothed and appendiculate with floccose, superficial, fugacious, concentric, white scales. St. 9–17·5 mm. × 2–3 mm., rubiginous, then date brown, slightly tough, equal, apex somewhat pruinose; base attenuated, white villose. ("Veil forming a membranaceous, fugacious, white ring" Quèl.) Gills ferruginous, decurrent, very broad, triangular. Flesh concolorous, very thin at the margin. Spores dingy ferruginous, almond-shaped, 10–15×5–6μ. Bogs, and amongst *Sphagnum* in woods. July—Sept. Uncommon. (v.v.)


P. 2–3 cm., tawny brown, then honey yellow, or wax colour, membranaceous, campanulate, then convex, hygrophanous, striate. St. 5 cm. × 1·5 mm., cream colour, then ochraceous, base tawny brown, soft, fibrillosely silky. Gills yellow, then rust colour, uncinato-adnate, broad, ventricose, thick, distant. Spores "ferruginous, elliptical, 8–9μ" Quèl.; "6–8×4μ" Sacc. Amongst mosses in damp places, and on trunks of trees. July—Sept. Rare.

1429. **T. embola** Fr. Cke. Illus. no. 531, t. 514, fig. A. ομος, a wedge.

Entirely pale yellowish tawny when mature. P. 12 mm., ochraceous tan when dry, membranaceous, hygrophanous, campanulate, then hemispherical, obtuse, smooth, lineato-striate. St. 5 cm. × 2–3 mm., shining yellow when dry, base becoming ferruginous, thickened upwards, smooth, naked. Gills tawny cinnamon when dry, adnate, very broad behind, triangular, thick, very distant. Spores cinnamon, elliptical,

1430. **T. autochthona** (B. & Br.) W. G. Sm. (= *Naucoria autochthona* (B. & Br.) Quéel.) Cke. Illus. no. 531, t. 514, fig. B.

*aütrós*, self; *χθών*, earth.

P. 6–12 mm., ochrey white, hemispherical, obtuse, then plane, silky; margin striate, *flocculose*. St. 1.5–2.5 cm. × 1 mm., white, equal, or thickened upwards, flexuose, pruinose, villose above; base thickened, white woolly. Gills *honey colour*, then *tawny*, adnate with a tooth, horizontal, *edge often white*. Flesh white, very thin. Spores *ochraceous*, elliptical, or pip-shaped, 6–7 × 3–4 μ, 1-guttulate, minutely punctate. Naked, soil, and open downs. June—Oct. Not uncommon. (v.v.)

1431. **T. crobulus** Fr. (= *Naucoria crobulus* (Fr.) Quéel.) Cke. Illus. no. 532, t. 496.

*κρωβύλος*, a braid of hair gathered to a knot on the crown of the head.


1432. **T. inquilina** (Fr.) W. G. Sm. (= *Naucoria inquilina* (Fr.) Quéel.)

Cke. Illus. no. 533, t. 497.  *Inquilina*, a lodger.


**var. ecbola** Fr.

*ἐκβόλος*, thrown out.

Differs from the type in the *clay coloured* p., *the rooting*, *equal* st., and *the crowded*, ferruginous gills. On grass roots. Sept.—Oct. Uncommon.
D. Pileus confluent with the excentric, or lateral stem, dimidiate, sessile, or resupinate.

Spores white, gill edge entire.

**Pleurotus** Fr.

(πλευρόν, side; οὐς, ear.)

Pileus fleshy, or submembranaceous, excentric, dimidiate, or resupinate. Stem excentric, lateral, or wanting; with or without a ring. Gills sinuate, adnate, decurrent, or radiating from a central point. Spores white, rarely pink, yellowish, lilac, or dingy; elliptical, globose, subglobose, pip-shaped, oblong elliptical, cylindrical, or reniform, smooth, granular, verrucose, or echinulate; continuous. Cystidia present, or absent. Growing on wood, more rarely on the ground, or on dung.

I. P. entire, laterally extended, excentric, not truly lateral. Lignicolous.

A. Veil forming a ring.

1433. **P. corticatus** Fr. (= Pleurotus dryinus (Pers.) Fr. sec. Quél.)

Boud. Icon. t. 76. **Corticatus**, possessed of a bark.

P. 5–20 cm., whitish grey, sometimes becoming yellowish, covered with dense grey down which separates into floccose scales, very compact, convex, then flattened, somewhat disc-shaped, horizontal, always entire although excentric, rarely infundibuliform; margin involute, often denticulate with the remains of the ring. St. 2.5–9 × 2.5–3 cm., whitish, hard, rooted, more or less excentric, curved-ascending, squamuloso-fibrillose. Ring white, silky-floccose, moderately thick, ruptured in a torn manner, adhering to the st. and the margin of the p., at length vanishing. Gills white, becoming yellow when old, deeply decurrent, dichotomously branched, anastomosing at the base, subdistant. Flesh white, hard. Spores white, oblong, cylindrical, often slightly curved and apiculate at the base, 13–15 × 4–5 μ, or 9–10 × 3–4 μ, often with a large central gutta. Smell and taste pleasant, rather strong. Edible. Caespitose. On trunks of ash, elm, lime, and apple. Sept.—Oct. Not uncommon. (v.v.)

var. **Albertinii** (Fr.) Quél. (= Pleurotus corticatus Fr. var. tephrotrichus Fr. sec. Quél.) Bres. Fung. Trid. t. 80, as Pleurotus corticatus Fr. var. tephrotrichus Fr.

J. Albertini, an early mycologist.

Differs from the type only in its smaller size, p. 7–10 cm., in the densely villose p., soon covered with subfuscous squamules, the hairy stem, and villose edge of the gills. Solitary. At the base of fir trunks, and on oak piles. July—Sept. Uncommon.


1435. **P. spongiosus** Fr. *Spongiosus*, spongy.

P. 5–18 cm., at first whitish, tomentose with persistent, cinereous down, then becoming brownish and fibrillose with age, excentric, somewhat lateral, pulvinate; margin paler. St. 1–3 × 1–4 cm., white, becoming greyish, very excentric, incurved, tomentose, base abrupt. Ring white, soon torn, appendiculate at the margin of the p., fugacious. Gills whitish, becoming beautifully yellow when old and dried, 3 mm. broad on one side of the st., 20 mm. wide on the other, *sinuato-adnexed*, crowded. Flesh spongy, greyish marbled in the p., tinged yellowish in the st. Spores white, oblong, cylindrical, rounded, or sometimes pointed at one end, 12–14 × 4 μ, 1–2-guttulate. On rotten beech, and mossy trunks. Oct.—Nov. Rare. (v.v.)

B. Veil none; gills sinuate, or obtusely adnate.


*Ulmarius*, belonging to elm.

P. 6–20 cm., ochraceous becoming pale-livid, often marbled with round spots, convex, then plane, disc-shaped, compact, horizontal, often cracked in a tesselated manner, smooth. St. 5–11 × 1.5–4 cm., white, becoming tinged with yellow, firm, elastic, subexcentric, curved, ascending, base somewhat fusiform, or thickened and tomentose, often villose throughout. Gills pale ochraceous, or whitish emarginate, broad, somewhat crowded. Flesh white, tough. Spores white, globose, 5–6 μ. Smell pleasant, or somewhat acid, taste pleasant. Edible. On trunks, especially elm. June—Dec. Common. (v.v.)


*Tesselatus*, checkered.

P. 5–10 cm., grey, becoming pale tawny, convex, then plane, and in a form somewhat lateral, depressed behind, irregular, horizontal, variegated with round and hexagonal spots. St. 2–3 × 1.5 cm., white, compact, equal, or attenuated at the base, very excentric, curved-ascending, smooth. Gills white, or becoming yellow, sinuate behind,

P. decorus Fr. = Tricholoma decorum (Fr.) Quél.

1438. P. palmatus (Bull.) Fr. (= Pleurotus subpalmatus Fr.; Pluteus reticulatus Cke.; Entoloma Cookei Rich.) Cke. Illus. no. 273, t. 255, as Pleurotus subpalmatus Fr.

Palmatus, having the shape of a hand. Entirely more or less rufescent. P. 5–12 cm., of a beautiful orange-buff or nankeen colour, convex, then flattened, obtuse, imbricated and glued together, horizontal, more or less excentric, pruinose; margin involute, reticulato-corrugated. Cuticle gelatinous, thick, tough, diaphanous, distilling limpid rufescent drops with an astringent taste. St. 3–7 × 1–1.5 cm., whitish, becoming rufescent, fibrilloso-striate, pruinose, equal, curved-ascending. Gills paler than the pileus, joined in a collar behind, sinuate, connected by veins, broad, crowded. Flesh white, then tinged with red. Spores pink, or pale yellowish, globose, 4–6 μ, verrucose, 1-guttulate. Smell pleasant, taste bitter and acrid. Caespitose. On elm trunks, old posts and beams. Sept.—Jan. Not uncommon. (v.v.)

1439. P. craspedius Fr. Fr. Icon. t. 86, fig. 2. κράσπεδος, the margin of a thing.

P. 7–13 cm., brick colour, becoming pale tan, sometimes cinereous, more or less excentric, sometimes sublateral, but marginate behind, thin, at length almost membranaceous towards the margin, flaccid, plane, depressed behind when very excentric, smooth, somewhat moist; margin at first involute, then evolute, elegantly crenato-lobed, fimbriate. St. 2.5–7.5 × 1–2.5 cm., pallid, firm, elastic, very unequal, either thickened at the base, or equal, sometimes villose at the base. Gills shining white, wholly adnate, very thin, crowded, narrow, at length lacerated. Flesh watery, white when dry. Spores white, "5 × 4–5 μ" Sacc. Smell "strong, of cucumber" W. G. Sm. Caespitose. On rotten wood, and trunks, especially old poplars. Sept.—Oct. Rare.

1440. P. fimbriatus (Bolt.) Fr. (= Clitocybe fimbriata (Bolt.) Quél.)

Cke. Illus. no. 275, t. 178, fig. 1. Fimbriatus, fringed.

P. 5–8 cm., whitish, hyaline, hygrophanous, slightly fleshy, convexo-plane, then infundibuliform, more or less excentric, occasionally lateral, pruinose; margin sinuato-lobed, incised. St. 1–4 cm. × 4–10 mm., concolorous, tough, round, or compressed, base pubescent. Gills white, wholly adnate, very narrow, very thin, very crowded. Flesh thin, tough, watery-pallid. Spores white, "oval, 3–5–5 × 2–5–3 μ, minutely rough" Sacc. Smell of new meal. Edible. On dead trunks, especially beech. Aug.—Jan. Rare.
1441. P. Ruthae B. & Br. Cke. Illus. no. 275, t. 178, fig. 2.
Miss Ruth Berkeley.

P. 4 cm., whitish, or yellowish buff, fan-shaped, slightly hispid above the gelatinous stratum; margin very thin, striate. St. 1–3 cm. × 5–6 mm., reddish, lateral, hispid, arising from a fibrous mycelium. Gills white with a reddish tinge, rather broad, acute behind, anastomosing, interstices veined. On sawdust. Oct. Rare.

1442. P. lignatilis Fr. (= Clitocybe lignatilis (Pers.) Quél.) Saund. & Sm. Myc. Illus. t. 6, figs. 4–6. Lignatilis, woody.

Dingy whitish. P. 3–10 cm., rarely central, generally more or less excentric, occasionally wholly lateral, often reniform, thin but compact, tough, convex, then plane, obtuse, often umbilicate, flocculoso-pruinose; margin involute, then expanded and undulato-lobed. St. 5–7.5 × 1–3 cm., 6–8 × 3–4 mm., sometimes absent, unequal, curved, or flexuosous, tough, pruinose villose; base rooting, somewhat tomentose. Gills shining white, often with a tinge of yellow, adnate, very crowded, narrow, divergent in the lobes, undulate. Flesh white, firm. Spores white, subglobose, 4 × 3 μ. Smell strong of new meal. On trunks especially beech, and on rotten wood. Sept.—Oct. Uncommon.

var. tephrocephala Fr. 

τέφρος, ash-coloured; κεφαλή, head.

Differs from the type in the more compact p., the black disc becoming cinereous, and the white margin.

1443. P. circinatus Fr. (= Clitocybe circinata (Fr.) Quél.) Fr. Icon. t. 88, fig. 1. Circinatus, rounded.

Entirely white. P. 6–9 cm., orbicular, horizontal, tough, convex, then plano-disc-shaped, obtuse, covered with a shining whitish, slightly silky lustre. St. 3–8 cm. × 6–10 mm., elastic, central, or slightly excentric, generally straight, sometimes curved, bluntly or attenuato-rooted at the base. Gills adnate, slightly decurrent, crowded, broad. Flesh white, firm. Spores white, subglobose, 3–4 μ. Smell pleasant. On beech, and brick stumps. Sept.—Oct. Uncommon.

C. Veil none; gills deeply decurrent; stem distinct, somewhat vertical.

1444. P. sapidus Schulz. (= Pleurotus cornucopiae (Paul.) Quél.) Kalchbr. Icon. t. 8, fig. 1. Sapidus, pleasant.

P. 5–12 cm., white, or light yellow, becoming fuscous, or umber, excentric, lateral, subsessile, deformed, convex, disc depressed. St. 2.5–5 cm. × 6–16 mm., white, or pallid yellow, incrassated upwards and dilated in the pileus, often branched, curved, ascending, arising from a fleshy, bulbous, white base. Gills pallid, decurrent, rather distant,

1445. **P. pantoleucus** Fr. Fr. Icon. t. 88, fig. 2.

Entirely white. P. 4-8 cm. excentric, dimidiate, spathulate, slightly convex, subdepressed and marginate behind. St. 2-3 × 1-1.5 cm., ascending, very excentric, equal, or attenuated downwards. Flesh white, compact. Gills decurrent, somewhat crowded, broad. On trunks, willow. Oct. Uncommon.

1446. **P. mutilus** Fr. (= *Omphalia mutila* (Fr.) Quél.) Fr. Icon. t. 88, fig. 4.

Entirely white. P. 1-3 cm., very excentric, or wholly lateral, soft, tough, reniform, spathulate, and depressed behind, subumbilicate, otherwise ascending, silky when dry. St. 6-8 × 2-4 mm. erect, or ascending, excentric, or somewhat lateral, round, tough, base villose. Gills decurrent, somewhat crowded, narrow, thick. Flesh white, thin. Spores white, pip-shaped, 6-7 × 4 μ, 1-guttulate. Pastures, and hillsides. July—Dec. Not uncommon. (v.v.)

D. Veil none; gills deeply decurrent; p. lateral, sessile, or extended behind into a short, oblique stem-like base.

1447. **P. ostreatus** (Jacq.) Fr. Ostreatus, rough.

P. 7-13 cm., when young almost black, soon becoming pale, fuscouscinereous, passing into yellow when old, soft, conchate, somewhat dimidiate, ascending, moist, cuticle sometimes torn into squamules. St. 2-4 × 2 cm., often wanting, white, firm, elastic, ascending obliquely, dilated upwards into the pileus, base strigosely villose. Gills white, becoming yellowish, margin sometimes umber, decurrent, anastomosing at the base, subdistant, broad. Flesh white. Spores lilac in the mass, elliptical, 9-11 × 4.5-6 μ, 1-many-guttulate. Taste and smell pleasant. Edible. On stumps, trunks, and logs. Jan.—Dec. Common. (v.v.)

var. *glandulosus* (Bull.) Fr. Glandulosus, having glands.

Differs from the type in the glandular gills. On stumps. July—Nov. Uncommon. (v.v.)


Differs from the type in its strong smell like that of tarragon. Poisonous. On elm stumps. April—Oct. Not uncommon. (v.v.)
var. columbia (Quél.) Cke. (= Pleurotus columbia Quél.) Bres. Fung. Trid. t. 6, as Pleurotus columbia Bres.

Columbia, pertaining to a pigeon.


1448. P. revolutus Kickx.

Revolutus, rolled back.


var. anglicus Massee. Cke. Illus. no. 281, t. 180, as Pleurotus revolutus Kickx.

Anglicus, English.

Differs from the type in the margin of the pileus being only very slightly, or not at all incurved, and in its pallid ochraceous gills. On trunks. Rare.


Salignus, belonging to willow.

P. 5–8 cm., fuliginous-cinereous, or ochraceous, compact, spongy, subdimidiate, horizontal, at first pulvinate, at length depressed behind, here and there strigose. St. 1–1.5 × 3–4 cm., tan, firm, more or less tomentose. Gills dingy-fuliginous, horizontal, branched in the middle, crowded, edge often eroded. Spores dingy, "oblong cylindrical, often curved, 8–14 × 3–4.5 μ, 1-guttulate" Karst. On willow, and alder trunks. Sept.—Jan. Uncommon.

1450. P. acerinus Fr.

Acerinus, belonging to maple.

Entirely shining white, tough. P. 2.5–10 cm., thin, unequal, silky-villose. St. 1 × 1 cm., often obsolete, somewhat lateral, whitish, villose. Gills white, becoming yellow, decurrent, crowded, thin. Spores white, elliptical, 6 × 3 μ, or 6–7 × 4–5 μ, 1–2-guttulate. On trunks, and logs of maple, ash, and hornbeam. Sept.—Oct. Uncommon. (v.v.)

II. Pileus definitely lateral, immarginate behind, not resupinate at first.


πέταλον, a leaf; eidos, like.

P. 2.5–5 cm., fuscous, becoming pale, dimidiate, somewhat spathulate, continuous with the stem; margin at first involute, then expanded. St. 1.5–2.5 × 1.5–2.5 cm., sometimes very short, whitish, firm, compressed, channelled when larger, villose. Gills white, or yellowish, then cinereous, decurrent, very crowded, very narrow, very unequal. Flesh
of the pileus with a gelatinous layer under the cuticle. Spores white, elliptical, 6–8 × 4–5μ, granular. Cystidia fusiform, 50–60 × 12–15μ, apex pointed, very thick walled. On stumps, and on the ground. Aug.—Jan. Rare. (v.v.)

1452. P. pulmonarius Fr. Pulmonarius, belonging to the lungs.

P. 4–8 cm., cinereous, then tan colour, continuous with the stem, soft but tough, flaccid, obovate, or reniform; margin plane, or reflexo-concave. St. 1–5 cm. × 12 mm., or wanting, exactly lateral, horizontal, or ascending, expanded into the pileus, round, villose. Gills whitish, then livid, or cinereous, decurrent, but ending determinately, moderately broad. Spores white, “8–10 × 2–3μ, or 10–12 × 3–4μ” Sacc. On beech, and birch stumps. Sept. Rare.

var. juglandis Fr. Fr. Icon. t. 87, fig. 2. Juglans, a walnut.

Sessile, smaller than the type, caespitose. P. greyish-brown, obovate, attenuated into a very short stem-like base. Gills concolorous, or paler. On walnut trunks. Rare.

1453. P. serotinus (Schrad.) Fr. Pat. tab. anal. t. 629. Serotinus, late.

P. 3–7 cm., yellow-green, fuliginous olive, then olive, thick, gibbous-convex, then plane and ascending, reniform, or obovate, pellicle viscid in wet weather; margin involute, then expanded and revolute. St. 1–2.5 × 1 cm., or wanting, lateral, yellow, dotted with fuliginous or brownish squamules, forming a fuliginous zone near the gills. Gills bright yellow, adnate, narrow, crowded, often branched. Flesh white, with a gelatinous layer under the cuticle of the p. Spores white, sausage-shaped, curved, 5–6 × 1.5–2μ, becoming 2-septate. Cystidia abundant on gill edge, scattered elsewhere, with yellowish contents in the upper part, cylindrical, or subsfusiform, obtuse, or slightly clavate at the apex, base ventricose, or attenuated; 40–53 × 8–10 × 5–8μ at apex. On trunks and fallen logs. Sept.—Dec. Uncommon. (v.v.)

var. Alménii (Fr.) Big. & Guill. Fr. Icon. t. 87, fig. 3, as Agaricus (Pleurotus) Alménii Fr. Professor A. Almén.

Diffsers from the type in its larger size, tawny fuscos p. and paler st. and gills. Fallen logs. Nov. Rare. (v.v.)

1454. P. mitis (Pers.) Berk. Outl. t. 6, fig. 9. Mitis, mild.

Entirely white, or becoming rufescent. P. 1–2 cm., thin, continuous with the st. in a straight line, horizontal, reniform. St. 6–12 × 6–12 mm., definitely lateral, compressed and dilated upwards, sprinkled with white, mealy squamules. Gills adnate, linear-lanceolate, very crowded. Flesh white, with a gelatinous layer under the cuticle of the p. Spores white, reniform, 4 × 2μ. On coniferous twigs and stumps. Sept.—Dec. Common. (v.v.)

P. 3-4 mm., white, disc salmon, membranaceous, diminidiate, or reniform, convex, very glutinous when moist; margin incurved. St. 4-6 x 5 mm., reddish, viscus, becoming recurved, base white downy. Gills white, interstices pale salmon, adnate, broad, distant. Flesh of stem salmon-red, centre white. Spores white, oblong, 2-2.5 x 0.75 μ. On wood. Sept.—Oct. Rare.

1456. *P. gadinoides* W. G. Sm. Cke. Illus. no. 286, t. 276, top figs.

*Gadinia, a species of bivalve; eldos, like.*

Entirely white. P. 1-1.5 cm., diminidiate, shell-shaped, hygrophanous, smooth, or clothed with fine adpressed flocci. St. minute, lateral, or none. Gills adnate, somewhat crowded, slightly branched. Spores white, elliptical, 7 x 3 μ. On tree-fern stems. May. Rare.

1457. *P. limpidus* Fr. Fr. Icon. t. 88, fig. 3.

*Limpidus, clear.*

Entirely hyaline white, shining white when dry. P. 2-3 cm., obovate, or reniform, horizontal, narrowed behind into a stem-like base, pruinose; margin shortly inflexed, very thin. Gills decurrent at the base, crowded, thin, linear. Spores white, "globose, 6 μ, with a large central gutta" Quél.; "subcylindrical, obtusely rounded at both ends, obliquely apiculate at the base, 7-8 x 3-4 μ" Sacc. On ash, beech, and willow stumps. Nov.—Jan. Uncommon. (v.v.)

1458. *P. reniformis* Fr. Fr. Icon. t. 89, fig. 3.

*Reniformis, kidney-shaped.*


*Cerasus Laurocerasus, the cherry laurel.*

P. 2-3 cm., brown, oyster-shaped, sulcate, cuticle very thin, cracking at the furrows. St. obsolete. Gills pinkish, adnate, connected by veins, broad. Spores white, ovate, 8 x 5 μ. On a trunk of cherry laurel. Oct. Rare.


*Tremulus, shaking.*

P. 1-4 cm., fuscous-grey, becoming pale, submembranaceous, somewhat horizontal, reniform, plane, sometimes infundibuliform and lobed, hygrophanous, diaphanous, tomentose under a lens. St. 8-12 x 4-6 mm., grey, exactly lateral, ascending-vertical, round, dilated
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1461. **P. acerosus** Fr. Fr. Icon. t. 89, fig. 2.

Acerosus, acerose, coniferous.


1462. **P. dictyorhizus** (DC.) Fr. (= Calathinus dictyorhizus (DC.) Quél.) Bolt. Hist. Fung. t. 72, fig. 2.

Entirely shining white. P. 5–1 cm., orbicular, or dimidiate, lobed, membranaceous, very delicate, villosely silky, reticulately fibrillose at the base. St. 1–3 × 0.5 mm., generally wanting, villose. Gills extending to the base, distant, linear, lancelolate. Flesh white, thin. Spores white, pip-shaped, 6–7 × 4 μ, 1-guttulate. On twigs, and dead wood. Oct. Uncommon. (v.v.)

III. P. at first resupinate, then reflexed, sessile; gills meeting at an excentric point.

A. P. fleshy, uniform in texture.

1463. **P. porrigens** (Pers.) Fr. (= Calathinus porrigens (Pers.) Quél.) Cke. Illus. no. 288, t. 259, fig. A. Porrigens, stretching out.

Entirely shining white. P. 2.5–10 cm., at first resupinate, sessile, adnate behind, forming excentric orbicular shields, with the gills concurrent in an umbilicus, soon extended laterally, ascending, ear-shaped, narrow at the base, dilated above, at length undulato-lobed, tough, flaccid, pruinose, tomentose towards the base, diaphanous. Gills at first concurrent, then decurrent, often branched, somewhat veined, very narrow, crowded, linear. Flesh white, thin, compact. Spores white, subglobose, 7–8 × 6 μ. On coniferous stumps. June—Nov. Common in Scotland, uncommon elsewhere. (v.v.)

1464. **P. septicus** Fr. (= Calathinus pubescens (Sow.) Quél.) Cke. Illus. no. 288, t. 259, fig. B. Σηπτικός, putrefying.

Entirely shining white. P. 2–10 mm., at first resupinate, attached to the wood, then reflexed and appearing sessile with flaxy rootlets, villose. St. 2–4 × 0.5 mm., filiform, incurved, villose, becoming erect and at length vanishing. Gills converging round the rudiment of a
stem, comparatively broad, somewhat distant. Flesh white, thin at the margin. Spores elliptical, 9–10 × 5μ, often depressed on the one side. On dead twigs, decayed wood, rabbit dung and fungi. March—Nov. Not uncommon. (v.v.)


B. P. fleshy, striate, with an upper gelatinous layer, or viscous pellicle.

1465. P. mastrucatus Fr. (= Calathinus mastrucatus (Fr.) Quél.) Cke. Illus. no. 289, t. 243, upper figs.

Mastrucatus, clothed in a sheep-skin.

P. 3–12 cm., mouse grey, as if prickly with floccose, squarrose, concolorous scales, obovate, or tongue-shaped, soft, flaccid; margin involute, lobed. Gills whitish-grey, concurrent in an excentric umbilicus, then converging to the base of the pileus, broad, somewhat distant. Flesh, upper layer gelatinous, mouse-fuscous, the lower a little thicker, pallid. Spores white, “pruniform, 7–9μ” Quél. On old beech stumps. Rare.

1466. P. atrocaeruleus Fr. (= Calathinus atrocaeruleus (Fr.) Quél.) Cke. Illus. no. 289, t. 243, lower figs.

Atcr, black; caeruleus, azure-blue.

P. 2.5–5 cm., dark azure-blue, rarely fuscous, at first resupinate, soon reflexed, horizontal, obovate, or reniform, villose, slightly wrinkled when dry. Gills whitish, becoming light yellow, at first concurrent, then reaching the base, broad. Flesh, upper layer toughly gelatinous, as much as 4 mm. thick, fuscous-blackish, the lower thinner, whitish. Spores white, elliptical, 7–8 × 4–5μ, often depressed on one side, with a large central gutta. Cystidia abundant, fusiform, 46–60 × 8–11μ, very thick walled, sometimes septate at the base, encrusted in the upper portion. Smell sometimes pleasant. On beech, birch, and poplar stumps. Oct.—Dec. Uncommon. (v.v.)


The Rev. W. A. Leighton, the eminent Shropshire lichenologist.

P. 10 mm., umbre, then lead-coloured, at first cyphellaeform, obliquely conical, furfuraceous, with short, scattered, black bristles intermixed. Gills pallid tan colour, rather thick, distant, somewhat forked at the base, slightly undulated, obscurely wrinkled at the base, the interstices scarcely reticulated. Flesh, upper layer gelatinous, of the colour of the pileus, the lower white. Spores white, “somewhat sausage-shaped, slightly curved, 10 × 3μ” Sacc. On wood, rotten rails. Dec. Rare.

1468. P. algidus Fr. (= Calathinus algidus (Fr.) Quél.) Cke. Illus. no. 290, t. 260, lower figs. Algidius, cold.

P. 1–5 cm., umbre, or rufous brown, at first resupinate, then ex-
P. **fluxilis** Fr. (= *Calathinus fluxilis* (Fr.) Quél.) Cke. Illus. no. 291, t. 244, top figs.

P. 2–3 cm., somewhat umber, pale grey, or olivaceous, thin, dimidiate, sessile, reniform, covered with a fluid, gelatinous stratum. Gills whitish, linear, 2 mm. broad, rounded behind, distant. Flesh thin, soft, yellowish. Spores white, "elliptical-oblong, 10 μ, guttate" Quél. On mossy beech trunks, and on wood, and sawdust. Oct. Rare.

1470. **P. cyphellaeformis** Berk. (= *Dictyolus cyphellaeformis* (Berk.) Cost. & Duf.) Cke. Illus. no. 291, t. 244, middle figs.

P. 4–10 mm., cinereous, cup-shaped, then dependent, very minutely strigose, especially at the base; margin paler, sprinkled with a few meal-like scales. Gills pure white, rather distant, the alternate ones shorter, narrow, linear. Flesh, upper layer gelatinous, cinereous, the lower white and very thin. Spores white, sausage-shaped, curved, 7–8 × 4 μ, 2-guttulate. On dead herbaceous stems, and sticks. Feb.—Oct. Uncommon. (v.v.)

1471. **P. applicatus** (Batsch) Berk. (= *Calathinus applicatus* (Batsch) Quél.) Cke. Illus. no. 291, t. 244, bottom figs.

Entirely dark cinereous. P. 4–7 mm., cup-shaped, orbicular, adnate behind, villose at the base, then reflexed, slightly villose, or subpruinose, substrata when moist. Gills whitish at the edge, few, radiating from a white umbilicus, rather thick, broad. Flesh grey, upper layer gelatinous. Spores white, elliptical, 7–9 × 4–5 μ, often depressed on one side, 1–3-guttulate. On dead branches, and twigs. Jan.—Dec. Common. (v.v.)

C. P. membranaceous, not viscid.

1472. **P. Hobsonii** Berk. Cke. Illus. no. 292, t. 212, fig. A.

1473. *P. striatulus* Fr. (= *Calathinus striatulus* (Fr.) Quél.) Fr. Icon t. 89, fig. 5. *Striatulus, somewhat striate*.


1474. *P. hypnophilus* Berk. (= *Calathinus hypnophilus* (Berk.) Quél.) Cke. Illus. no. 292, t. 212, fig. C. *Hypnum, the name of a moss genus; ϕίλος, loving.*


Spores white, gill edge longitudinally split.

Schizophyllum Fr.

(σχίζω, I split; ϕύλλον, a leaf.)

Pileus coriaceous, resupinate. Stem lateral or none. Gills radiating from a central point, becoming longitudinally split and revolute at the edge. Spores white, cylindrical, smooth, continuous. Cystidia none. Growing on wood.


P. 1–3 cm., greyish, or flesh colour, becoming white, more or less fan-shaped, or reniform, often much lobed, very arid, pendulous, commonly extended behind into a stem-like base, covered with white-grey down, then strigose. Gills fuscous-grey, then purplish, or whitish, splitting and revolute at the edge, radiating, narrow. Flesh brownish, becoming whitish. Spores white, cylindrical, straight, or curved, 6 × 3 μ. On fallen trunks, and dead branches in woods, also in timber yards on imported timber. May—Jan. Not uncommon. (v.v.)
Spores pink.

**Claudopus** W. G. Sm.

(Clauðus, lame; πόσ, foot.)

Pileus fleshy, excentric, lateral, or resupinate. Stem lateral, or none. Gills radiating from a central point, or decurrent. Spores pink, elliptical, globose, oblong, smooth, angular or verrucose, continuous. Cystidia present. Growing on wood, or on the ground.

1477. **C. variabilis** (Pers.) W. G. Sm. (= Crepidotus variabilis (Pers.) Quél.) Cke. Illus. no. 371, t. 344, top figs.

Variabilis, variable.

P. 1–2 cm., white, slightly fleshy, resupinate, then reflexed, tomentose, putting forth from the centre a short, incurved, villose stem which is obliterated when the pileus is reflexed. Gills *whitish, then rubiginous*, at first concurrent in an excentric point, then reaching the base, broad, distant. Flesh *white*. Spores pink, elliptical, 5–6 × 3 μ, "warted" Maire. Cystidia "on edge of gill clavate-bottle-shaped, 36–45 × 7–9 μ" Rick. On dead sticks, fallen branches, and leaves, in woods, hedgerows, and wood-yards. Jan.—Dec. Common. (v.v.)

var. **sphaerosporus** Pat. οἶδα, a ball; σπόρα, seed.

Differs from the type in the *subglobose* spores, 7–8 × 6–7 μ. Woods, and hedgerows. Sept.—Dec. Not uncommon. (v.v.)

1478. **C. depluens** (Batsch) W. G. Sm. Cke. Illus. no. 371, t. 344, middle figs.

Depluens, raining down.


1479. **C. byssisedus** (Pers.) Fr. Pers. Icon. et Descr. t. 14, fig. 4.

βύσσις, fine flax; σεδέο, I sit.

P. 1–4 cm., grey, *becoming pale when dry*, slightly fleshy, at length *horizontal, reniform*, plane, villose. St. 12 mm. long, *incurved, villose, attenuated upwards, zoned at the base with white cottony fibrils*. Gills *whitish-cinereous*, then *rubiginous with the spores, adnato-decurrent*, ventricose, rather broad. Flesh *concolorous*, thin. Spores pink, angular, broadly elliptical, 10–11 × 7 μ, 1–2-guttulate. On dead beech, and wood of hornbeam, also on the ground. Sept.—Oct. Uncommon. (v.v.)
Spores ochraceous.

Crepidotus Fr.

(κρηπιδίτης, a man's boot; οὐς, ear.)

Pileus fleshy, excentric, lateral, or resupinate. Stem lateral, or none. Gills more or less decurrent, or radiating from a central point. Spores ochraceous, ferruginous, or fuscescent; elliptical, subglobose, oval, or fusiform; smooth, granular, verrucose, or echinulate; continuous. Cystidia present. Growing on wood, rarely on the ground.

C. palmatus (Bull.) Fr. = Pleurotus palmatus (Bull.) Quél.


P. 1–8 cm., yellow, or yellow orange, becoming pale, fleshy, resupinate, cup-shaped, then expanded and reflexed, dimidiate, kidney-shaped, sessile, tomentose, the tomentum concolorous, or becoming whitish; margin inrolled, often lobed and orange-coloured. Gills orange tawny, at first concurrent, then adnate, 2–4 mm. broad, subdistant, often veined on the sides. Flesh yellowish, becoming whitish when dry, staining paper a yellow colour, thick, soft. Spores bright ochraceous, broadly elliptical, 5–6 × 4 μ. Smell pleasant, “of melon” Quél. Gregarious, sometimes imbricate. On rotten pine, and beech wood. Sept.—Oct. Uncommon. (v.v.)


P. 2–6 cm., ochraceous fuscous, occasionally becoming olive at the margin, becoming pale when dry, fleshy, obovate, somewhat cuneiform, sometimes repand, rather plane, moist, smooth, dimidiate, laterally somewhat sessile, or extended behind with a short, stem-like tomentoso-villosus base and horizontal. Gills clay-fuscous, determinate, 4 mm. broad, crowded. Flesh whitish, thick, soft. Spores brownish, elliptical, 8–10 × 6 μ. Stumps and logs, especially oak. Aug.—Nov. Not uncommon. (v.v.)


P. 3–7 cm., pallid, then becoming hoary, fleshy, convexo-plane, obovate, or reniform, undulate and lobed when larger, flaccid, smooth, dimidiate, subsessile, or extended behind into a short, 12 mm., strigose st., often imbricated. Gills whitish grey, then watery cinnamon, commonly decurrent to the base, linear, 2–4 mm. broad, often branched. Flesh watery whitish, subgelatinous especially under the cuticle, thick. Spores ochraceous, elliptical, 8–9 × 5 μ. Cystidia “on edge of gill cylindrical-filiform, 45–54 × 5–6 μ” Rick. Taste mild. Edible. Stumps, twigs, fallen branches, and sawdust. May—Dec. Common. (v.v.)
1483. **C. applanatus** (Pers.) Fr.  
**Applanatus**, flattened.

P. 1–8 cm., *watery cinnamon, or fuliginous, whitish when dry, very hygrophanous, fleshy, fragile, wholly plane and horizontal, extended behind in a straight line into a very short, white, tomentose st., reniform, or cuneiform, at length depressed behind, subsessile, minutely tomentose; margin slightly striate when moist. Gills *whitish, then watery cinnamon*, ending determinately behind, linear, crowded, thin. Flesh *whitish, watery, soft*. Spores brownish, elliptical, 7–8 × 5 μ, with a large central gutta. Cystidia “on edge of gill cylindrical-filiform, 36–40 × 5–7 μ” Rick. On twigs and dead wood. Oct. Uncommon. (v.v.)

1484. **C. calolepis** Fr. Fr. Icon. t. 129, fig. 4.

**καλός**, beautiful; **λεπίς**, scale.

P. 1–7 cm., *cream, or pale yellow, beautifully variegated with minute, crowded, rufescent scales*, fleshy, reniform, convex, almost shell-shaped, dimidiate, sessile on a small villose knot, margined with white behind. Gills *pallid fuscous, then fuscous ferruginous, concurrent at the base, rounded behind, comparatively broad*. Flesh *white, firm*, fairly thick. Spores brownish, elliptical, 7–9 × 5–6 μ. Stumps, and fallen branches, especially poplar, and ash. Common. (v.v.)

1485. **C. putrigenus** Berk. & Curt.  
**Puter**, rotten; **genus**, birth.


1486. **C. versutus** Peck.  
**Versutus**, deceitful.

P. 9–20 mm., *white, resupinate, then reflexed, sessile, thin, covered with a soft villose tomentum; margin incurved*. Gills *pallid, then ferruginous, concurrent in an excentric point, rounded behind, rather broad, subdistant*. Flesh *white, thin*. Spores ferruginous brown, subelliptical, 9–10 × 4–5 μ. On dead wood, and rotten branches. June—Nov. Not uncommon. (v.v.)

1487. **C. epigaeus** (Pers.) B. & Br. Cke. Illus. no. 537, t. 516, fig. A. 
**ἐπιγαίος**, upon the earth.

P. 1–2 cm., *reddish grey, fragile, reniform, or flabellate; base whitish, downy*. Gills *watery rufescent, divergent, narrow*. Flesh *pallid*, very thin. Spores pale cinnamon, broadly elliptical, 10 × 7 μ. On marlstone clay. Nov. Rare.

1488. **C. haustellaris** Fr. (= **C. flurstedtiensis** (Batsch) Sacc.) Cke. Illus. no. 536, t. 515, fig. A.  
**Haurio**, I draw water.

P. 2–3 cm., *pale yellowish tan, becoming pale, but often cinnamon when old, fleshy, almost pellucid, flaccid, exactly lateral, reniform,

*C. Rubi* Berk. = *Naucoria effugiens* Quél.


1489. **C. chimonophilus** B. & Br. Cke. Illus. no. 536, t. 515, fig. D.


1490. **C. epibryus** Fr. Cke. Illus. no. 537, t. 516, fig. C.


1491. **C. pezizoides** (Nees) Fr. Cke. Illus. no. 537, t. 516, fig. D.

P. 4–6 mm., *whitish*, or *reddish*, sessile, thin, *cup-shaped*, *then reflexed*, *mealy subtomentose*. Gills *olivaceous fuscous*, *then tawny*, concurrent at the centre, *subdistant*. Gregarious. On rotten branches, and old wood. Rare.

1492. **C. Phillipsii** B. & Br. Cke. Illus. no. 536, t. 515, fig. C.

W. Phillips of Shrewsbury, the eminent mycologist.


1493. **C. Ralfsii** B. & Br. Cke. Illus. no. 537, t. 516, fig. B.

J. Ralfs, an eminent botanist.

P. 5–15 mm., *yellow*, or *fuscous*, semi-reflexed, *delicately furfuraceous*, *slightly hispid*, the involute margin spreading, adfixed by

1494. *C. luteolus* Lamb.  

*Luteolus*, yellowish.

P. clear yellow, then pale, thin, stipitate at first, then resupinate and st. disappearing, *tomentose*. Gills *orange yellow*, then *cinnamon*, crowded. Spores rusty.

1495. *C. Parisotii* Pat.  

Parisot.

P. 5–6 mm., *bright lemon yellow*, sessile, *velvety tomentose with simple, or branched thin hairs*; margin incurved, attached to the support above by some white fibrils, with an extremely short stem below which terminates on the under side of the p. in a yellowish white, projecting, velvety heap. Gills *reddish, unequal*, the longer ones reaching the central mass, *very distant*, thick. Spores ochaceous, hyaline, or granular, oval, apiculate, 4–5 × 2 μ. On twigs. Rare.

1496. *C. proboscideus* Fr.  

προβοσκίς, an elephant’s trunk.

P. 2–3 cm., *ochraceous*, sometimes white, fleshy, elongate shell-shaped, or trumpet-shaped, more prolonged on the one side, *cottony*. St. conical, very short, really only a continuation of the p., *base cottony*. Gills *whitish*, then *concolorous*, or *watery cinnamon*, thin, fairly distant. Rotten wood, fallen branches, and wooden ceiling. Dec. Rare.

II. Receptacle fleshy, trama vesiculose, and traversed by lacticiferous vessels. Spores white, or yellow.

Latex watery, uncoloured.

**Russula** Fr.  

(Russulus, reddish.)

Pileus fleshy, regular. Stem central, fleshy. Gills adnate, sinuato-adnate, adnexed, free, or decurrent, rigid, fragile, edge acute. Spores white, or yellow, rarely greenish; globose, subglobose, or elliptical, echinulate, verrucose, subreticulate, or with anastomosing ridges and spines, continuous. Cystidia present, or absent. Growing on the ground, rarely on wood.

I. P. fleshy throughout, margin *more or less involute*, *pellicle slightly developed*, dry, adnate. Flesh compact, firm. Gills unequal, *alternate*. Spores white in the mass.

*Flesh not changing colour, gills narrow, decurrent.


*Delica*, weaned.

P. 5–8 cm., *white*, becoming *spotted with light brown*, convex, um-
bicipitate, then somewhat infundibuliform, at first delicately tomentose, then only in little patches. St. 2–3:5 × 0.5–2 cm., white, becoming somewhat light brown, attenuated at the base, finely tomentose under a lens. Gills white, exuding watery drops when young, decurrent, or adnate, crowded, narrow, sometimes branched near the margin, rarely bifid at the base. Flesh white. Spores hyaline, subglobose, 8–9 × 7–8 μ, verrucose, with a large central gutta. "Hyphae containing oil globules traverse the tissue and terminate in cystidio-like bodies, 60–70 × 6–8 μ." Bres. Smell pleasant, taste slowly acrid. Deciduous, and pine woods. Aug.—Oct. Not uncommon. (v.v.)


P. 6–15 cm., pallid then ochraceous, convexo-plane, then somewhat infundibuliform, pubescent, soon smooth, areolately cracked in dry weather. St. 3–6 × 2–3:5 cm., white then concolorous, the extreme apex incircled by a greenish zone, equal, or attenuated at the base, rugulose. Gills whitish, or greenish, becoming pallid and often spotted fuscos in old age, subdecurrent, or sinuato-adsnate, broad, somewhat crowded, connected by veins. Flesh white, cheesy. Spores hyaline, subglobose, 8–11 × 8–10 μ, echinulate. Cystidia fusiform, 70–90 × 8–12 μ. Smell at length unpleasant, taste acrid. Woods. Aug.—Dec. Common, especially in some years. (v.v.)

1499. R. elephantina Fr. (= Russula chloroides Krombh. sec. Bataille.)

P. 7:5 cm., fuscos-tan, paler at the margin, convexo-umbilicate; margin undulated, exceeding the gills. St. 5–7:5 × 2:5 cm., shining white, obese, very hard. Gills white, spotted pale yellowish when touched, obtusely or sinuato-adsnate, arcuate, somewhat crowded, thin, divided behind. Flesh of stem shining white. Spores "14 × 10 μ" Sacc. Woods. Sept. Rare.

**Flesh becoming black.

1500. R. nigricans (Bull.) Fr. Cke. Illus. no. 970, t. 1015.

Nigricans, becoming black.

P. 5–20 cm., olivaceous-fuliginous, at length black, convex, then flattened and umbilicato-depressed, slightly viscid when moist, at length rimoso-squamulose. St. 3–7 × 2:5 cm., pallid, at length black, equal. Gills ochraceous, reddening when touched, rounded behind, slightly adnexed, thick, distant, wide. Flesh firm, white, becoming red on exposure to the air, and finally black. Spores white, globose, 8–9 μ, verrucose, with a large central gutta. Cystidia "only on edge of gill, vesiculose, then ventricose, pointed, 45–60 × 15–30 μ." Rick. Taste mild, then acrid. Woods. June—Dec. Common. (v.v.)
1501. **R. adusta** (Pers.) Fr. (= *Russula albo-nigra* Krombh. sec. Quél.)  
Cke. Illus. no. 972, t. 1051.  
Adusta, scorched.  

P. 8–15 cm., pallid, or whitish, becoming cinereous-fuliginous, convex, then depressed, and somewhat infundibuliform. St. 3–5 × 2–3 cm., concolorous, obese. Gills white, then dingy, adnate, then de- 
current, thin, crowded, narrow. Flesh white, then brownish, and finally 
black. Spores white, globose, 8 μ, verrucose. Cystidia "sparse, subu-

(var. **caerulescens** Fr.)  
Caerulescens, becoming blue.  

Diffs from the type in the flesh becoming dark blue when cut or 
broken. Deciduous woods. Rare. (v.v.)  

(var. **albo-nigra** (Krombh.) Fr. Cke. Illus. no. 971, t. 1016.  
Albus, white; nigra, black.  

Diffs from the type in the white pileus becoming smoky near the 
margin, the stem fuscescent from the first, and the flesh immedi-
ately becoming black when broken. Cystidia "only on the edge of the gill, 
subulate-pointed, 75–90 × 9–10 μ, filled with dark juice" Rick.  

1502. **R. densifolia** (Secr.) Gill. Cke. Illus. no. 973, t. 1017.  
Densus, crowded; folium, leaf.  

P. 7–10 cm., whitish, then dingy brown, and finally black, convex, 
then depressed, slightly viscid at first; margin elastic, villose, white.  
St. 3–5 × 1–2 cm., white, then concolorous, equal, pruinose. Gills 
white, becoming grey when touched, then dingy, and finally black, adnate, 
decurrent by a tooth, narrow, crowded, thin. Flesh white, becoming red 
when broken, and finally black. Spores white, globose, 7–8 μ, echinu-
late, 1-guttulate. Smell pleasant, taste slowly acrid. Woods. Aug.— 
Oct. Not uncommon. (v.v.)  

1503. **R. semicrema** Fr. Fr. Icon. t. 172, fig. 1.  
Semi, half; crema, burnt.  

P. 6–11 cm., persistently white, convex then plane, disc umbilicate.  
St. 5–8 × 5–6 cm., white, becoming black, firm. Gills persistently white, 
decurrent, crowded, thin. Flesh of pileus persistently white, becoming 
black in the stem. Spores white, globose, 8–9 μ, verruculose. Taste 

II. Pellicle of the pileus dry, adnate, rarely possessing cystidia, 
usually breaking up into floci, granules, or areolae. Margin 
rounded, never striate (except 1511), or involute. Gills with a very 
broad, rounded apex. Spores whitish cream-colour in mass.  

1504. **R. lactea** (Pers.) Fr.  
Lactea, milk-white.  

P. 5–12 cm., milk-white, then tan-white, convex, then plane, often 
excentric, pruinose, appearing as if stippled under a lens, then
RUSSULA


**Incarnata**, flesh-colour.


1506. **R. virescens** (Schaeff.) Fr. Cke. Illus. no. 991, t. 1039.

**Virescens**, green.

P. 6–12 cm., deep or pallid green, globose, then expanded, at length depressed, often unequal, the floculose cuticle broken up into patches, or warts. St. 5–10 × 2–3 cm., white, or whitish cream colour, firm, pruinose, *subrivulose*. Gills white, then whitish cream colour, free, or adnate, thick, somewhat crowded, sometimes forked. Flesh white, not very compact. Spores very pale ochraceous, globose, 6–8μ, verrucose, 1-guttulate. Cystidia narrowly fusiform, apex obtuse, 2–3μ in diam., 55–65 × 8–10μ. Taste mild. Edible. Woods. July—Oct. Common. (v.v.)

1507. **R. lepida** Fr. (= *Russula lepida* Fr. var. *pulcherrima* Gillet.) Bres. Fung. Trid. t. 204.               

**Lepida**, charming.

P. 5–10 cm., blood-red-rose, becoming pale, and somewhat tan-leather colour at the disc, convex, then expanded, rarely depressed, pruinose, appearing under a lens as if stippled, at length often rimoso-squamulose. St. 3.5–7 × 1.5–2 cm., white, often tinged with rose colour, especially on one side, or at the base, equal, or attenuated at the base, very firm. Gills whitish cream colour, the edge often minutely dentate and red, especially towards the margin of the pileus, rounded behind, or attenuate, rather thick, somewhat crowded, often forked, connected by veins. Flesh white, firm, cheesy. Spores very pale ochre in the mass, hyaline under the microscope, globose, 8–10μ, echinulate. Cystidia "cylindrical, rounded, 60–90 × 15μ" Rick. Smell pleasant. Taste pleasant, then very slowly acrid. Edible. Woods. Aug.—Oct. Common. (v.v.)

var. **alba** Quél.               

Alba, white.

1508. **R. Linnaei** Fr. Fr. Icon. t. 172, fig. 3.

Carlos Linnaeus, the eminent Swedish botanist.

P. 7–12 cm., **unicolorous, dark purple, blood-red, or bright rose**, opaque, **not becoming pale**, convex, then plane and depressed, sometimes repand, **dry**, **pruinose**. St. **4–6 × 2–3 cm., blood-red, rarely white**, somewhat ventricose, firm, spongy within, **absolutely fibrillosoreticulate**. Gills **white, then ochraceous, adnate, subdecurrent**; **either thick, broad, fragile**; **or attenuated behind**, somewhat anastomosing behind. **Flesh white, compact, firm. Spores pale ochraceous, elliptically globose, echinulate, 8–11 × 8 μ. Cystidia “on surface of gill sparse, cylindrical, pointed, 50–60 × 8–12 μ.”** Rick. **Taste mild. Woods. Oct. Rare.**


**Azurea, sky-blue.**


1510. **R. olivacea** (Schaeff.) Fr. Cke. Illus. no. 1001, t. 1041.

**Olivacea, olivaceous.**

P. 6–12 cm., **dingy purple, then olivaceous, or wholly fuscos-olivaceous, convex**, then plane and depressed, fleshy, **slightly silky and squamulose**. St. **5–8 × 1.5–2 cm., rose colour, or pallid, firm, ventricose. Gills bright yellow, adnexed, wide, with shorter and forked ones intermixed, crowded. Flesh white, becoming yellowish. Spores pale ochraceous, globose, 10 μ, punctate. Cystidia “subulate, 50–75 × 8–12 μ.”** Rick. **Taste mild. Edible. Fir woods. Aug. Uncommon.**


**Elegans, neat.**

P. 3–5 cm., **bright rosy flesh colour, soon becoming ochraceous at the circumference, convex, then somewhat depressed, fleshy, thin, viscid, everywhere densely granulate; margin tuberculously striate when old. St. 3–5 × 1 cm., white, becoming ochraceous at the somewhat thickened base, rather rugulose. Gills whitish, becoming either wholly, or partially orange ochre, attenuated behind, adnexed, or slightly rounded, very crowded, equal, rarely furcate. Flesh white, becoming ochraceous with age. Spores whitish in the mass, pale greenish hyaline or yellowish under the microscope, globose, 8–10 μ, strongly echinulate, 1-guttulate. Cystidia “sparse, subulate, 50 × 8–9 μ.”** Rick. **Taste acrid when old. Coniferous woods. Sept. Uncommon.**

_**Serotina**, late._

P. 2–3 cm., violet, lilac, bistre, or olivaceous, margin lilac with the extreme edge white, globose, then plane, white pruinose at first. St. 2–3 cm. × 3–4 mm., white, minutely pubescent, equal. Gills white, then tinged yellowish, adnate, crowded. Flesh white. Spores pale ochraceous, globose, 7μ, echinulate. Taste acrid. Beech woods, and on old willow, and poplar stumps. Aug.—Sept. Uncommon. (v.v.)


1513. **R. cyanoxantha** (Schaeff.) Fr. Cke. Illus. no. 1007, t. 1076.

küavos, blue; ἕανθος, yellow.

P. 5–15 cm., lilac, or purplish, then olivaceous green, disc commonly becoming pale, often yellowish, margin commonly becoming azure-blue, or livid-purple, convex, then plane and depressed, or infundibuliform, viscid, sometimes wrinkled, or streaked. St. 5–9 × 2–3 cm., white, rarely tinged with lilac, elastic, equal. Gills shining white, rounded behind, connected by veins, forked, broad, not much crowded. Flesh white, purple or reddish under the pellicle. Spores white, globose, 7–10μ, verrucose. Cystidia abundant, conical, 70–80 × 7–8μ. Taste pleasant. Edible. June—Nov. Common. (v.v.)


_**Lilacea**, lilac-coloured._

P. 4–8 cm., violet, or lilac, often brownish, margin becoming whitish, convex, then depressed, thin, viscid; margin striate, thin. St. 4–6 × 1.5–2 cm., white, often rosy at the base, corticate, fragile, apex pruinose, wrinkled-striate. Gills white, free, ventricose, connected by veins, often forked. Flesh white, violet under the pellicle. Spores white, sub-globose, 8–9μ, verrucose. Smell pleasant, of apple. Taste mild. Edible. Aug.—Sept. Uncommon. (v.v.)


_Citrina_, lemon yellow.

P. 5–10 cm., bright citron yellow, colour usually uniform, sometimes paler at the margin, occasionally with a greenish tint, disc at length becoming pale ochraceous, convex, then more or less depressed in the centre, slightly viscid, pellicle separable; margin thin, becoming tuberculously striate with age. St. 5–8 × 1–1.5 cm., white, equal, or slightly attenuated at the base, striate. Gills white, slightly decurrent, forked at the base, and sometimes also near the middle, attenuated at both ends. Flesh white. Spores white, globose, 7–8μ, verrucose.


Fingibilis, imaginary.

P. 5 cm., yellow, disc darker, convex, then plane or depressed, fleshy at the disc, viscid. St. 2.5–4 × 1 cm., white, equal, soft. Gills white, narrowed behind, almost free, rather crowded, unequal, thin. Flesh white. Spores white, broadly elliptical, 9 × 7 μ, minutely echinulate. Taste mild. Amongst grass under trees. July. Uncommon.


P. 6–12 cm., green, becoming somewhat ochraceous at the disc with age, convex, then plane or depressed, sometimes infundibuliform, fleshy, viscid in wet weather, polished in dry weather; margin thin. St. 4–6 × 1.5–2 cm., white, equal, or attenuated downwards, firm. Gills shining white, sometimes becoming spotted with brown when old, attenuated at both ends, adnato-decurrent, forked from the base, more rarely higher up, somewhat distant, rather thick. Flesh white, brownish under the separable pellicle. Spores white, globose, 6–8 μ, minutely verrucose, 1-guttulate. Cystidia clavate, 45–60 × 8–11 μ. Taste mild, becoming slightly bitter when old especially in the gills. Woods, and lawns. Aug.—Oct. Common. (v.v.)

var. pictipes Cke. Cke. Illus. no. 979, t. 1086.

Pictus, painted; pes, foot.

Differs from the type in the slightly striate margin of the pileus, in the stem being rosy at the apex and tinted with green at the base, and in the rosy flesh beneath the cuticle of the pileus. Woods and under trees. Aug.—Sept. Uncommon. (v.v.)

var. ochroviridis Cke. Cke. Illus. no. 980, t. 1100.

ὀξρός, pale yellow; viridis, green.

Differs from the type in the paler greenish ochre pileus, the narrower gills, rugose stem, and fuliginous flesh when cut. Woods. Aug.


P. 6–8 cm., disc yellowish, surrounded by purplish mouse colour, or pale rose and purple, becoming yellowish towards the circumference, convex, then plano-expanded and depressed, spongy but firm, viscid, pellicle easily separable; margin thin, pellucidly striate, tuberculate when old. St. 4–5 × 1.5 cm., white, attenuated downwards, rugulose. Gills white, then tinged faint straw colour, adnate, attenuated at both ends, branched from the base or higher up, scarcely any intermediate


&P. 5–8 cm., greenish or yellowish brown, disc becoming ochraceous, very variable in colour but *never* becoming reddish or purple, fleshy, firm, convex, then plane and depressed; margin thin, sometimes densely but slightly striate. St. 2–5 × 1–5–2–5 cm., shining white, equal, or attenuated at the base, firm, delicately striate. Gills shining white, decurrent, very narrow, very crowded, thin, often forked. Flesh white. Spores white, globose, 6–7 μ, verrucose. Cystidia "on edge of gill filiform-clavate, often constricted and capitate, 50–60 × 7–9μ" Rick. Smell and taste pleasant. Edible. Woods. July—Oct. Uncommon. (v.v.)

1520. **R. galochroa** Fr. Cke. Illus. no. 1011, t. 1089. 

γάλα, milk; χρώς, colour.

&P. 4–6 cm., milk white, then greenish, convex, then plane, viscid in wet weather, sometimes sprinkled with white floccose spots; margin sometimes striate. St. 2–5–5 × 1–1–5 cm., white, firm. Gills white, adnate, crowded, narrow, more or less forked. Flesh white. Spores white, globose, 6–7 μ, verrucose. Taste mild. Edible. Woods. Aug.—Oct. Not uncommon. (v.v.)


*Virginea*, maidenly.

*Entirely pure white.* P. 5 cm., convex then depressed, fleshy, firm, viscid when moist, polished when dry. St. 5 × 2 cm., attenuated upwards, firm, finely rugulose. Gills subdecurrent, very narrow, 1–2 mm. wide, repeatedly forked, connected by veins, brittle, crowded. Spores white, globose, 4 μ, minutely apiculate at the base, almost smooth. Cystidia none. Taste mild. Woods. Oct. Rare. (v.v.)

IV. Pellicle of the pileus viscid, more or less separable, possessing cystidia, yellowish, ochraceous, or brownish, sometimes olivaceous brown, never red or violet. Margin straight, more or less striate, subacute. Taste acrid. Spores pure white, or cream.


*Foetens*, stinking.

&P. 8–15 cm., dingy yellow, often becoming pale, thinly fleshy, globose, then expanded and depressed, rigid, viscid in wet weather; margin broadly membranaceous, at first incurved, at length tuberculately-striate. St. 5–9 × 1–3 cm., whitish, ventricose. Gills whitish, or straw colour, often dingy when bruised, at the first exuding watery drops,

1523. R. consobrina Fr. (= Russula livescens (Batsch) Quél.) Cke. Illus. no. 1012, t. 1055.

Consobrina, cousin. P. 7-12 cm., dark cinereous, or fuscous olivaceous, fleshy, fragile, campanulate, then expanded, at length depressed, viscid; margin membranaceous. St. 5-8 × 2-2.5 cm., white, at length becoming cinereous, equal. Gills white, then greyish, free, forked, broad, crowded, thick. Flesh white, cinereous under the pellicle. Spores pale ochraceous, globose, 10 μ, verrucose. Smell faint, taste very acrid. Coniferous woods. July—Oct. Not uncommon. (v.v.)

var. sororia (Larb.) Fr. (= Russula consobrina Fr. var. intermedia Cke.) Fr. Icon. t. 173, fig. 1.


1524. R. pectinata (Bull.) Fr. (= Russula consobrina Fr. var. sororia (Larb.) Cke.) Cke. Illus. no. 1024, t. 1101.

Pectinata, like the teeth of a comb. P. 4-8 cm., toast brown, becoming pale tan, disc always darker, fleshy, viscid, rigid, convex, then flattened and depressed, or concavo-infundibuliform; margin thin, tuberculately-sulcate. St. 3-5 × 1-2.5 cm., shining white, equal, or attenuated at the base, rigid, substriate longitudinally. Gills whitish, attenuato-free, broader towards the margin, equal, somewhat crowded. Flesh white, light yellowish under the pellicle. Spores pale ochraceous, subglobose, 6-8 × 6-7 μ, verrucose. Cystidia sparse, conico-cylindrical, 40-50 × 8-13 μ, obtuse. Smell unpleasant. Taste very acrid. Woods, and pastures. Aug.—Oct. Not uncommon. (v.v.)


≠κρός, sallow; λευκός, white. P. 3-9 cm., yellow, becoming pale, convex, then flattened or depressed, polished, viscid. St. 4-7 × 1.5-2 cm., white, becoming cinereous, firm, equal, sometimes enlarged at the base, slightly reticulately rugose. Gills white, becoming pale, rounded behind, free, broader in front, somewhat equal, fragile. Flesh white, yellowish under the pellicle. Spores white, globose, 8-11 μ, echinulate. Smell pleasant, taste acrid. Cystidia conical, 55-70 × 8-10 μ. Beech, and coniferous woods. July—Dec. Common. (v.v.)
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var. claro-flava (Grove) Cke. Cke. Illus. no. 1198, t. 1196.

\textit{Clerus}, bright; \textit{flavus}, yellow.

Differs from the type in the bright chrome-yellow pileus, and in the gills becoming pale lemon-yellow. Amongst grass in damp places.

var. granulosa (Cke.) Rea. Cke. Illus. no. 1026, t. 1038.

\textit{Granulosa}, mealy.

Differs from the type in the cuticle of the pileus and stem breaking up into minute granules, which are snow-white at the apex of the stem, fuscous below. Woods, and pastures. Aug.—Sept. Not uncommon. (v.v.)

1526. \textbf{R. fellea} Fr. Fr. Icon. t. 173, fig. 2. \textit{Fellea}, full of gall.

Entirely straw-colour. P. 3–9 cm., often with a deeper yellowish tinge, disc darker, thinly fleshy, convex, then plane, viscid; margin striate when old. St. 5–6 × 1–2.5 cm., equal. Gills exuding watery drops, then spotted with yellow, adnate, crowded, thin, narrow, forked, obsoletely connected by veins. Flesh \textit{whitish}, then \textit{concolorous with the gills}. Spores very pale ochraceous, globose, 8 μ, echinulate, 1-guttulate. Cystidia conical, 55–65 × 7–9 μ. Taste very acid and bitter. Beech woods. Aug.—Dec. Common. (v.v.)


\textit{Sub}, somewhat; \textit{foetens}, stinking.

P. 4–8 cm., yellowish white, then ochraceous, especially on the disc, firm, rigid, convex, then plane or depressed, viscid; margin thin, translucid, tuberculately sulcate. St. 5–6 × 1–2.5 cm., white, becoming tinged with yellow, subequal, or attenuated at the base, firm. Gills white, becoming yellow, adnate, thick, distant, narrow, branched. Flesh \textit{white}. Spores white, subglobose, 7–8 × 6–7 μ, echinulate. Smell somewhat disagreeable, taste slightly acid. Grassy places, and on lawns under beeches. Aug.—Oct. Uncommon. (v.v.)

V. Pellicle of the pileus viscid, more or less separable, possessing numerous cystidia, purplish. Margin straight, acute, somewhat striate. Gills more or less unequal and forked, generally narrow and acutely attenuated in front, often adnate. Flesh \textit{firm}. Taste acrid. Spores white cream, or ochraceous yellow in mass.


\textit{Sanguinea}, bloody.

P. 5–9 cm., blood-red, or becoming pale round the spreading \textit{acute margin}, fleshy, firm, convex, obtuse, then depressed and infundibuliform, disc generally gibbous, polished, moist in damp weather. St. 4–10 × 1–2 cm., reddish, rarely white, at first contracted at the apex, then equal, firm, wrinkled striate, pruinose. Gills white, then cream colour, decurrent, rarely forked, crowded, narrow, connected by veins,
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1529. R. rosacea (Pers.) Fr. Rosacea, rosy.

P. 4-10 cm., rosy flesh colour, varying in intensity, becoming whitish, variegated with darker spots when dry, convex, then plane and umbilicate, or flexuose and incised, often irregular, compactly fleshy, firm; viscid; margin acute. St. 4-5 × 2 cm., white, or reddish, equal, or attenuated at the base, occasionally ventricose, pruinose. Gills white, often coloured reddish on the edge near the margin of the pileus, adnate, fairly broad, forked, edge unequal. Flesh white, reddish under the pellicle, cheesy. Spores white, globose, 8μ, echinulate, 1-guttulate. Taste acrid. Woods. Aug.—Oct. Not uncommon. (v.v.)


P. 5-11 cm., bright purple to dark rose colour, becoming decoloured with age, convex, then expanded and more or less depressed, scarcely viscid when moist, opaque when dry, compact, firm; margin incurved, slightly striate when old. St. 5-10 × 1-3 cm., tinged with purple, equal, firm, sometimes rather mealy. Gills pale sulphur yellow, then deeper yellow, adnected, scarcely crowded, narrow, furcate at the base. Flesh yellowish, then white, reddish under the cuticle of the p. and st. Spores pale ochraceous, subglobose, 8-9 × 8μ, verrucose, or slightly echinulate. Cystidia fusiform, 50-65 × 8-10μ. Taste very acrid. Coniferous woods. Sept.—Dec. Common. (v.v.)

var. Queletii (Fr.) Bataille. Cke. Illus. no. 1019, t. 1028. Lucien Quélet, the eminent French mycologist.

Differs from the type in the white or wax coloured gills which exud drops that on drying leave azure-blue-cinereous, or pallid olivaceous spots. Woods. Aug.—Nov. Not uncommon. (v.v.)


P. 4-10 cm., red, rosy or whitish at the margin, fleshy, convex then plane and depressed, dry, sometimes somewhat pruinose. St. 3-5-7 × 1-3 cm., white, often becoming somewhat cinereous with age, equal, often attenuated or incrassated at the base, rugulose. Gills white, then ochraceous, sinuato-adnected, or rounded behind, crowded or somewhat crowded, forked, connected by veins. Flesh white, rosy under the cuticle. Spores ochraceous, subglobose, 8-9 × 7-8μ, verrucose or slightly echinulate. Cystidia clavate, 60-70 × 6-10μ. Smell pleasant, taste very acrid. Deciduous woods. Aug.—Oct. Not uncommon. (v.v.)

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Fragilis, brittle.

P. 3–5 cm., flesh colour, or red, changing colour, convex, often umbo- nate, then plane and depressed, very thin, fleshy only at the disc, slightly viscid; margin very thin, tuberculoso-striate. St. 4–5 × 1 cm., white, very fragile, pruinose, often slightly striate. Gills shining white, slightly adnexed, very thin, crowded, ventricose, all equal. Flesh white. Spores white, subglobose, 7–9 × 7–8μ, echinulate, 1-guttulate. Cystidia “sparse, with a short lanceolate point, 60–70 × 10–12μ” Rick. Taste very acrid. Woods, and pastures. Aug.—Dec. Common. (v.v.)

var. **nivea** (Pers.) Cke. Cke. Illus. no. 1029, t. 1060, fig. B.

Nivea, snow-white.

Differs from the type in the white pileus. Woods. Aug.—Nov. Not uncommon. (v.v.)

var. **fallax** (Schaeff.) Massee. Cke. Illus. no. 1023, t. 1059, as Russula fallax Fr. var. Fallax, deceptive.

Differs from the type in the olivaceous disc of the pileus. Woods. Aug.—Nov. Not uncommon. (v.v.)

1533. **R. violacea** Quél. (= *Agaricus fragilis violascens* Seer.) Cke. Illus. no. 1029, t. 1060, fig. A, as Russula fragilis Fr. var. violacea Quél.

Violacea, violet.

P. 3–5 cm., bright violet, with a narrow whitish margin, often spotted with yellow, green, or olive, convex, then plane and depressed, thin, viscid, striate. St. 3–4 × 2–5 cm., white, fragile, striate, pruinose. Gills white, adnate, crowded, thin. Flesh white. Spores pale straw in the mass, globose, 8–9μ, verrucose. Smell “of laudanum” Quél. Taste very acrid. Woods. Aug.—Dec. Common. (v.v.)

1534. **R. emetica** (Schaeff.) Fr. Cke. Illus. no. 1021, t. 1030.

emetikí, provoking sickness.

P. 4–10 cm., rosy, then blood colour, tawny when old, sometimes becoming yellow, and at length white, campanulate, then flattened, or depressed, polished, sometimes rugulose; margin at length tubercularly sulcate. St. 3–7 × 1–1.5 cm., white, or reddish, rigid. Gills shining white, free, or adnate, broad, subdistant. Flesh white, reddish under the separable pellicle. Spores white, globose, 8μ, echinulate, 1-guttulate. Cystidia “lanceolate, 60–75 × 12–18μ, not very abundant” Rick. Taste very acrid. Beech woods, and under beeches. July—Dec. Common. (v.v.)
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var. **Clusii** Fr. Vitt. t. 38, fig. 1, as *Agaricus emeticus*.

Clusius, one of the earliest illustrators of fungi.

Differs from the type in the **gills and flesh becoming yellow**. Woods. Sept.—Oct. Uncommon. (v.v.)


*Luteus*, yellow; *tacta*, touched.

P. 4–7 cm., rosy, or **blood-red**, soon becoming **whitish in places and spotted with yellow**, convex, then plane and depressed, fleshy. St. 4–5 × 1–1.5 cm., **white**, or rosy, **spotted with yellow**, equal, rugose. Gills white, exuding watery drops in wet weather, then spotted with yellow, becoming yellowish when cut or bruised, adnate, crowded, somewhat forked. Flesh white, tinged yellowish when cut or bruised, reddish under the cuticle. Spores white, globose, 6–8 μ, echinulate, 1-guttulate. Taste very acrid. Woods, and parks. Aug.—Oct. Not uncommon. (v.v.)


*Atar*, black; *purpurea*, purple.

P. 5–9 cm., deep blood-red, almost black at the disc, and often yellowish at first at the margin, hemispherical, then convexo-plane, and finally depressed or infundibuliform, *fleshy*, firm, viscid, slightly rugosely wrinkled; margin thin, hardly striate in old age, often exceeding the gills. St. 4–7 × 1–3 cm., **white**, unchangeable, or sometimes becoming slightly stained with ochraceous brown, sometimes rosy in the middle, base ochraceous, firm, somewhat equal, slightly rugoso-striate, apex pruinose. Gills white, then yellowish, *sinuato-free*, attenuated behind, broader in front, **equal**, rather crowded. Flesh whitish, either unchangeable, or becoming slightly stained with ochraceous brown, reddish purple under the cuticle. Spores pure white, subglobose, 9 × 8 μ, verrucose, 1-guttulate. Smell slight, pleasant. **Taste either mild, or acrid.** Woods, and under conifers. Aug.—Oct. Common. (v.v.)


*Depallens*, becoming pale.

Differs from the type in the **pileus soon loosing its colour, and in the stem and flesh becoming grey with age**. Woods. Aug.—Oct. Common. (v.v.)

VII. Pellicle of the pileus viscid, separable, possessing cystidia, *variously coloured*. Margin rounded, generally striate. Flesh *fragile*. Gills equal, fragile, rounded in front, free or somewhat free. Spores cream ochraceous, or yellow ochraceous in the mass (rarely whitish yellow in the mass but then the taste is mild, or only slightly acrid when young and the pileus is never red).
*Flesh becoming black, taste mild or slightly acrid when young.


Decolorans, discoloring.

P. 5–10 cm., *orange-red, then light yellow, and becoming pale,* spherical, then expanded and depressed, remarkably regular, fleshy, viscid; margin thin, at length striate. St. 6–10 × 1–2 cm., *white, becoming cinereous,* cylindrical, often rugoso-striate. Gills white, then yellowish, adnexed, often in pairs, thin, crowded, fragile. Flesh white, becoming cinereous when broken, especially in the stem, and more or less variegated with black spots when old. Spores ochraceous, elliptical, "11–13 × 8–9 μ" Maire, verrucose, 1-guttulate. Cystidia "sparse, subulate, 50–60 × 6–8 μ" Rick. Taste mild, then slightly acrid. Edible. Coniferous woods, and peat bogs. Aug.—Sept. Uncommon.

**Russula integra** (Linn.) Bataille.

Integra, entire.

P. 8–12 cm., *bay, brown, or olivaceous, becoming pale,* convex, then plane, fleshy, *firm,* viscid; margin thin, *becoming tuberculately striate.* St. 9–10 × 2–3 cm., *white,* clavate, or ventricose, fragile, wrinkled-striate. Gills white, then mealy and ochraceous cream, free, very broad, connected by veins. Flesh white. Spores ochraceous cream in mass, subglobose, 8–10 × 7–9 μ, echinulate, 1-guttulate. Cystidia "clavate apex obtuse, 50–60 × 10–15 μ" Rick. Smell pleasant, taste mild, then slightly acrid. Edible. Coniferous woods. Uncommon. (v.v.)

1539. **Russula Romellii** Maire. (= *Russula olivascens* Quél. sec. Maire.)

Cke. Illus. no. 1036, t. 1034, no. 1037, t. 1093, as *Russula integra* Linn.; no. 1038, t. 1094, as *Russula integra* Linn. var. *alba* Cke.

Lars Romell, the eminent Swedish mycologist.

P. 8–15 cm., *reddish, purple, violet, becoming olivaceous, isabelline,* whitish, convex, then plane and more or less depressed, soft, fragile, viscid, disc often streaked with innate fibrils; margin rounded, *often striate,* rarely tuberculoso-striate. St. 6–9 × 1·5–2 cm., *white,* prunose, becoming glabrous, somewhat cylindrical, wrinkled-striate, sometimes distinctly corticate. Gills white, at length light yellow, somewhat ochraceous-pulverulent with the spores, free or somewhat adnate, very broad, equal, somewhat distant, rarely forked, or unequal, more or less connected by veins. Flesh white, rarely slightly violaceous under the cuticle. Spores deep yellow ochre in the mass, yellow under the microscope, elliptical, 7–9 × 6–7 μ, marked with anastomosing ridges and spines. Cystidia often with an appendage, 60–90 × 8–10 μ. Smell weak, taste pleasant. Deciduous woods. June—Nov. Common. (v.v.)
1540. **R. erythropus** (Fr.) Pelt. 

*ερυθρός; red; πούς, foot.*

P. 8–16 cm., dark blood-red, disc darker, decolouring very slightly with age, never tinted ochraceous or olivaceous, convex, then depressed, firm, dull, unpolished; margin slightly striate when old. St. 6–10 × 2–3 cm., rose-red, rarely rose-red on one side only, firm, equal. Gills white, then deep ochraceous, very broad, attenuated near the stem, rounded near the margin of the pileus. Spores ochraceous, globose, 8–10 × 8–9 μ, echinulate. Taste pleasant. Edible. Aug.—Oct. Not uncommon. (v.v.)

1541. **R. xerampelina** (Schaeff.) Fr. (= *Russula Barlae* Cke. sec. Maire.) Cke. Illus. no. 1000, t. 1074, upper figs.

*ξηραμπέλινος, of the colour of withered vine leaves.*

P. 6–12 cm., rosy purple, disc becoming pale, yellowish white, sometimes inclining to olivaceous, convex, then flattened, at length depressed, fleshy, compact, without a distinct pellicle, slightly viscid at first, then very slightly rimulose, so that the cuticle under a lens is very thinly granular or punctate; margin spreading. St. 4–8 × 1.5–2.5 cm., white, or reddish, equal, or thickened at the base, firm. Gills whitish, then yellowish, adnexed, broader in front, forked behind, somewhat crowded. Flesh white, becoming brownish with age. Spores pale ochraceous, globose, 7–9 μ, echinulate. Cystidia obtusely conical, 68–78 × 10–12 μ. Smell strong, when old like crab. Taste mild. Edible. Woods. July—Oct. Not uncommon. (v.v.)

1542. **R. cutifracta** Cke. Cke. Illus. no. 992, t. 1024.

*Cutis, skin; fracta, broken.*

P. 7–12 cm., purple, green, or dull red, convex, then a little depressed in the centre, fleshy, firm, dry, pulverulent, dull, viscid in wet weather, opaque, cuticle sometimes cracking from the margin inwards into minute firmly adnate areolae. St. 6–8 × 2.5 cm., white, often slightly tinged with purple or rose on one side, nearly equal, or a little attenuated above, firm. Gills white, then cream, adnexed, or nearly free, narrowed behind, furcate, somewhat crowded, often tinted yellow on the cracks at the edge. Flesh white, tinged with purple under the cuticle. Spores ochraceous, globose, 10 μ, marked with anastomosing ridges and spines. Taste mild. Woods. Sept.—Oct. Uncommon. (v.v.)


*Grisea, grey.*

P. 6–9 cm., greyish lilac, or bluish grey, mixed with rose, yellow, or olive, then becoming greenish, convex, then expanded and depressed, fleshy, fragile, slightly viscid, shining when dry. St. 8–10 × 2–3 cm., white, fragile, rugoso- striate. Gills cream colour, with a tint of apricot flesh colour, adnate, sometimes forked, broadest towards the margin.

1544. R. graminicolor (Seer.) Quél. (= Russula aeruginea (Lindb.) Fr.) Fr. Icon. t. 173, fig. 3, as Russula aeruginea Lindb.

Gramen, grass; color, colour.

P. 5–14 cm., aeruginous-green, disc darker, slightly brownish bistre, convex, then plane and depressed, fleshy, fragile, pellicle separable; margin paler, striate. St. 5–12 × 2–5–4 cm., white, firm, equal, or attenuated at the base, rugose. Gills white, then cream, sometimes spotted with brown when old, slightly adnexed, attenuated behind, broad in front, often connate two by two at the base. Flesh white, fragile. Spores cream colour in the mass, elliptical, 5–8 × 6–7μ, echinulate. Cystidia "abundant, lanceolate, 69–95 × 8–12μ, granular in the upper part" Rick. Taste acrid when young, then only in the gills when old. Under birches, and in pine woods. May—Oct. Not uncommon. (v.v.)

1545. R. chamaeleontina Fr. Cke. Illus. no. 1054, t. 1098.

χαμαελέων, the chameleon.

P. 2.5–4 cm., flesh colour, rosy blood-red, purplish lilac, then soon changing colour, becoming yellow at the disc, and at length wholly yellow, soon plane, thinly fleshy, viscid, pellicle separable; margin slightly striate when old. St. 2–6 cm. × 6–8 mm., white, equal, pruinose, slightly striate, fragile. Gills light yellow, then darker yellow, more or less adnexed, thin, crowded, equal. Flesh white, fragile. Spores ochraceous, globose, 6–7μ, verrucose, 1-guttulate. Cystidia "sparse, subulate, 50–60 × 8–10μ" Rick. Taste mild. Edible. Woods, and downs. Sept.—Nov. Uncommon. (v.v.)


Roseus, rosy; pes, foot.

P. 4–7 cm., rosy flesh colour, rosy orange, or rosy with a tinge of ochre, at first with whitish spots, at length blanched, convex, then plane and depressed, fleshy, viscid, soon dry; margin thin, becoming somewhat tuberculosely striate. St. 3–6 cm. × 8–15 mm., white, either entirely or here and there sprinkled with rosy meal, equal. Gills whitish, then ochraceous egg-yellow, edge often rosy, free, rounded and furcate behind, equal, or a few dimidiate, rather crowded, sometimes with an adnate tooth, ventricose, connected by veins. Flesh whitish, then becoming yellowish. Spores ochraceous, globose, 8–10μ, echinulate. Cystidia fusiform, 60 × 8μ. Smell and taste pleasant. Edible. Beech, and pine woods. Aug.—Oct. Uncommon.
1547. **R. vernetosa** Fr. Bres. Fung. manger. t. 75.

*Vernetosa*, languard.

P. 5–8 cm., rose, or flesh colour, soon becoming pale, commonly whitish or yellowish at the disc, convex, then plane and depressed in the middle, slightly fleshy, viscid, pellicle adnate. St. 5–8 cm. × 12 mm., white, often tinged with rose towards the base, fragile, equal. Gills white, then bright yellow, adnate, narrowed behind, broader in front. Flesh white, soft. Spores ochraceous, subglobose, 7–8 × 6–7 μ, echinulate. Cystidia “lanceolate, 45–70 × 9–15 μ, shorter on the edge of the gill” Rick. Taste acrid. Woods, and heaths. Aug.—Oct. Uncommon. (v.v.)


*Nauseosa*, nauseous.

P. 3–5 cm., variable in colour, typically purplish at the disc, then livid, but becoming pale and often whitish, plano-gibbous, then depressed, viscid, laxly fleshy; margin submembranaceous, tuberculosulcate. St. 2–3 cm. × 8 mm., white, becoming grey with age, fragile, slightly striate. Gills light yellow, then dingy ochraceous, adnexed, ventricose, somewhat distant. Flesh white. Spores yellow, subglobose, 7–10 μ, verrucosely echinulate. Cystidia “fusiform, 50–55 × 10 μ” Bres. Smell often unpleasant, taste mild, then acrid. Coniferous woods. Sept.—Oct. Uncommon.

var. *flavida* Cke. = **Russula lutea** (Huds.) Fr.


P. 2.5–6 cm., livid purplish, becoming yellowish, disc brown, conically convex, then flattened or depressed, membranaceous except at the disc, viscid, **margin tuberculosulcate**. St. 4–5 cm. × 7–10 mm., white, becoming yellowish, and stained brownish when touched, attenuated upwards, rugulose. Gills white, then pallid yellow, adnate, attenuated behind, thin, crowded. Flesh white, ochraceous at the base of the stem. Spores ochraceous, subglobose, 8–10 × 7–8 μ, echinulate, 1-guttulate. Cystidia abundant, conical, 50–65 × 9–11 μ. Taste mild, then slightly acrid. Woods, and damp places. Aug.—Oct. Common. (v.v.)


Differs from the type in the darker, deep purple p., nearly black at the disc.


P. 3–6 cm., bay-brown-purplish, disc darker, convex, then plane or slightly depressed, thin, viscid, shining when dry; **margin striate**,

var. pulchralis (Britz.) Cke. Cke. Illus. no. 1044, t. 1095, fig. A, as Russula pulchralis Britz. Pulchralis, beautiful.

P. 4–8 cm., ochraceous, centre spotted with red or purple, convex, then flattened and depressed, thin, viscid; margin thin, deeply striate and often split. St. 5–6 × 1–2 cm., white, fragile, equal, ventricose, or thickened at the base. Gills whitish, then ochraceous yellow, broad, distant, rather thick. Flesh white. Spores ochraceous, subglobose, 9 × 8 μ, echinulate. Taste mild. Woods. July—Oct. Not uncommon. (v.v.)


P. 5–9 cm., pale reddish flesh colour, then decoloured yellow or ivory white, spotted with purple or brown, convex, then plane, thick, firm, viscid; margin undulate, generally remaining red. St. 3–4 × 1–1.5 cm., white, rarely tinged with rose, at last spotted with red or bistre, firm, polished, reticulately striate. Gills pale sulphur, then yellow apricot or pink, attenuato-adnate, forked. Flesh white, fragile. Spores citron-yellow, subglobose, 10 μ, echinulate. Smell pleasant, like apple, or sweet-briar. Taste mild, then acrid. Edible. Woods. Sept.—Oct. Uncommon. (v.v.)


P. 6–7 cm., ochraceous, with a tinge of yellow, disc usually becoming darker, convex, then plane or depressed, soft, viscid; margin thin, sulcate. St. 3–4 × 1–1.5 cm., ochraceous, rarely white, equal, or thickened at the base, striate. Gills concolorous, slightly adnexed, broad, scarcely crowded. Flesh ochraceous. Spores ochraceous, globose, 9–10 μ, verrucose, 1-guttulate. Cystidia “cylindrical, 50–60 × 7–8 μ, rounded above” Rick. Taste mild, or slightly acrid. Pine, and mixed woods. Aug.—Sept. Uncommon. (v.v.)


Alutacea, like tanned leather.

P. 5–18 cm., purple, or blood-red, tinted with olive, green, or bistre,
sometimes entirely olivaceous, convex, then plane or depressed, fleshy, rigid, slightly viscid, pellicle separable, soon dry; margin thin, at length tuberculously striate. St. 5–12 × 2–5 cm., white, generally reddish at the apex or on one side, sometimes yellowish at the base, firm, equal. Gills pallid light yellow, soon becoming ochraceous egg-yellow, at first free, thick, very broad, equal, somewhat distant. Flesh white, firm, becoming soft with age. Spores deep ochre yellow in the mass, yellow under the microscope, subglobose, 10 × 9 μ, verrucose, 1-guttulate. Cystidia "sparse, cylindrical-fusiform, 60–75 × 8–10 μ" Rick. Taste pleasant, nutty. Edible. Woods, especially beech. July—Oct. Common. (v.v.)


Purpurata, clad in purple.


var. olivaseens (Fr.) Rea. Fr. Icon. t. 172, fig. 2, as Russula olivaseens Pers.

P. 6–10 cm., olivaceous, becoming yellowish at the disc, convex, then expanded and umbilicate, fleshy, rigid. St. 3–7 × 1.5–2 cm., white, firm, equal. Gills cream colour, then yellowish, slightly adnexed, narrowed behind, broader in front, nearly equal, rarely forked. Flesh white. Spores deep ochraceous, globose, 9–10 μ, echinulate. Taste mild, then slightly acrid. Woods. Aug.—Oct. Uncommon. (v.v.)


Aurata, golden.

P. 5–9 cm., varying lemon-yellow, orange or red, disc darker, convex, then plane, or depressed, fleshy, rigid, viscid in wet weather; margin thin, slightly striate when old. St. 5–9 × 1.5 cm., white, tinged with lemon yellow especially towards the base, equal, or attenuated downwards, firm, obsolely striate. Gills whitish, inclining to light yellow, vivid lemon-yellow at the edge, rounded, free, equal, connected by veins, sometimes forked behind. Flesh lemon-yellow under the separable pellicle, yellowish, then white below. Spores ochraceous, globose, 8–9 μ, marked with ridges and spines, 1-guttulate. Cystidia on edge of gill abundant, cylindrical-fusiform, 55–70 × 8–12 μ, apex obtuse, contents yellowish. Smell pleasant. Taste mild, or very slowly acrid. Edible. Woods. June—Oct. Not uncommon. (v.v.)

1555. **R. fusca** Quél. Cke. Illus. no. 1000, t. 1074, bottom fig., as Russula xerampelina Schaeff.

Fusca, dark.

P. 6–8 cm., ochraceous brown, speckled, darker at the disc, convex, then infundibuliform, fleshy, viscid. St. 4–6 × 2 cm., milk-white, rigid, at length slightly wrinkled. Gills milk-white, then ochraceous
cream, or yellow wax colour, sinuate, adnate by a tooth, forked, connected by veins. Flesh white-cream, firm. Spores white-cream colour in the mass, elliptical, 9 μ. Smell and taste pleasant. Edible. Coniferous woods, and under conifers. Sept. Rare.

1556. **R. vesca** Fr. (= Russula rosea (Schaeff.) Quél.) Sverig. ätl. Svamp. t. 63.

P. 2–11 cm., red flesh colour, disc darker, fleshy, firm, convex, then plano-depressed, slightly wrinkled with veins, viscid; margin at length spreading. St. 2–8 × 1–3 cm., shining white, often foxed with age, equal, often attenuated downwards, rugosely striate. Gills white, adnate, rather narrow, thin, crowded, connected by veins. Flesh white, foxing when cut or bruised. Spores white, globose, 8–9 μ, echinulate. Cystidia flask-shaped, apex elongate, obtuse, 2·5–3 μ in diam., 35–60 × 8–10 μ. Smell none, or unpleasant like crab. Taste mild. Edible. Aug.—Nov. Common. (v.e.)

var. **Duportii** (Phill.) Massée. Cke. Illus. no. 1003, t. 1042, fig. A, as *Russula Duportii* Phill.

Rev. Canon J. M. Du Port, an enthusiastic mycologist.

P. 4–6·5 cm., disc rufous or flesh red, obtuse margin bluish, compact, fleshy, firm, convexo-plane, then depressed, dry. St. 2·5–5 cm. × 10–16 mm., white, minutely striate. Gills white, rounded behind, broad, distant. Flesh turning reddish brown when cut. Spores white, globose, 9 μ, echinulate. Smell of crab. Woods. Sept.

1557. **R. Barlae** Quél.¹ Quél. As. Fr. (1883), t. 6, fig. 12.

J. B. Barla, the eminent mycologist of Nice.

P. 6–9 cm., yellow apricot, or bright nankeen yellow, tinged with orange passing into rosy flesh colour, convex, then plane, or infundibuliform, compact, slightly viscid, cuticle separable, often cracked. St. 4–5 × 1–1·5 cm., cream colour, then streaked with bistre, firm, wrinkled striate, silky pruinose. Gills cream colour, then saffron yellow with a tinge of rosy flesh colour, sinuate, free. Flesh white. Spores cream colour, globose, 9 μ, verrucose. Smell pleasant, like melilot ("mousse de Corse" Barla). Mountainous woods. Summer.


Punctata, dotted.

P. 3–8 cm., rose, purple, purple-violaceous, lilac, often more or less mixed with olive green or yellowish green, sometimes entirely greenish olive, yellowish green, or yellow citron colour, fleshy, convex, then plane.

¹ This is recorded as British by M. C. Cooke in *Handbook of British Fungi*, Ed. ii, p. 335, but his diagnosis is referred by René Maire in Bull. Soc. Myc. Fr. xxvii (1910), 172 to *Russula xerampelina* Fr.
sometimes slightly depressed, either viscid, or dry, granularly mealy, often punctate with deeper coloured granules; margin sometimes somewhat sulcate when old. St. 3-5 × 5-1.5 cm., rose, purple, purpl-violaceous, often partially or quite white, equal, or obconic, pruinose mealy, sometimes rugose with mealy, or subulinate. Gills whitish cream, then cream colour, adnate, or subadnate, edge sometimes purple, or purplish-violaceous and floccose, either throughout its length or near the margin of the pileus only, thin, crowded, often forked at the base. Flesh white, sometimes reddish near the cuticle of the pileus. Spores whitish cream in the mass, somewhat hyaline under the microscope, elliptical, 7.5-9 × 7-8 μ, verrucose, subreticulate. Cystidia rather rare, fusiform, or subclavate, sometimes with a short and broad appendage at the apex, 90-130 × 13-15 μ. Smell slight, or very pleasant. Taste mild. Edible. Coniferous woods. July—Oct. Uncommon. (v.v.)

var. violeipes (Quél.) Maire. Quél. Ass. Fr. (1897), 450, pro forma R. citrinae.

Violeus, violet; pes, foot.

Differs from the type in the citron yellow p. sometimes tinted lilac, and the lilac, or white tinged with lilac stem. Coniferous woods. Sept.—Oct. Uncommon. (v.v.)


Caro, flesh; color, colour.

P. 3-7 cm., flesh colour, disc fuscous livid, then concolorous, fleshy, convex, then plane and depressed, viscid; margin at length slightly tuberculately striate. St. 4-5 cm. × 6-12 mm., white, base sometimes rosy, equal, subpruinose, somewhat rugulose. Gills shining white, rounded behind, adnexed, forked, somewhat distant. Flesh white. Spores white, subglobose, 6-8 μ, echinulate. Smell and taste pleasant. Edible. Sept.—Nov. Not uncommon. (v.v.)

1560. R. mustelina Fr. Cke. Illus. no. 976, t. 1018.

Mustelina, pertaining to a weasel.

P. 5-10 cm., bright brown, or dingy yellowish, convex, then plane and depressed, fleshy, firm, dry; margin at first incurved, minutely tomentose, then straight. St. 4-6 × 1.5-2.5 cm., white, equal, somewhat rugose. Gills white, then cream colour, rounded behind, adnexed, broad in front, connected by veins. Flesh white, ochraceous at the margin. Spores ochraceous cream in the mass, hyaline under the microscope, subglobose, 7-8 μ, verrucose, 1-guttulate. Taste pleasant. Edible. Woods. Sept.—Oct. Uncommon. (v.v.)


Caerulea, azure-blue.

P. 5-8 cm., bright purple, or bluish purple, darker or sometimes brownish at the umbonate disc, convex, then expanded, or somewhat
depressed, umbonate, polished; margin thin, at length slightly striate with age. St. 5–11 × 1–2.5 cm., white, equal, firm. Gills yellowish, adnate, equal, rounded at the apex. Flesh white, brownish, or purplish under the cuticle. Spores pale ochraceous, globose, 9–10 μ, echinulate. Taste mild. Coniferous woods, and under conifers. Aug.—Oct. Not uncommon. (v.v.)

1562. **R. lutea** (Huds.) Fr. Cke. Illus. no. 1051, t. 1082.

*Lutea*, golden yellow.


var. **armeniaca** (Cke.) Rea. Cke. Illus. no. 1045, t. 1064, as *Russula armeniaca* Cke.

*Armeniaca*, of Armenia, the native country of the apricot.

Differs from the type only in the rich apricot colour of the pileus. Woods, and lawns. July—Oct. Common. (v.v.)

var. **vitellina** (Pers.) Bataille. Cke. Illus. no. 1052, t. 1102, fig. B, as *Russula vitellina* (Pers.) Fr.

*Vitellina*, egg-yellow.

Differs from the type in the egg-yellow colour, and tuberculately striate margin of the pileus, the distant, saffron yellow gills, and the strong unpleasant smell. Coniferous woods, and under conifers. Aug.—Oct. Uncommon. (v.v.)

**R. Turci** Bres.¹

Latex milk-white, or coloured, rarely like serum.

**Lactarius** Fr.

*(Lac, milk.)*

Pileus fleshy, regular. Stem central, rarely excentric, fleshy. Gills adnate, or decurrent, somewhat rigid, milky, acute at the edge. Spores white, or yellowish, rarely pinkish in the mass; globose, sub-globose, or elliptical, echinulate, punctate, or reticulate; continuous. Cystidia present, or absent. Growing on the ground, more rarely on wood; solitary, or caespitose.

¹ Bres. refers Cke.'s Illus. no. 1199, t. 1147, *Russula nauseosa* Fr. to this species. There is no other British record of its occurrence.
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I. St. central. Gills unchanged, naked, not changing colour and not pruinose. Milk at the first white, (commonly) acrid.

*P. viscid when moist, margin at first involute, tomentose.

1563. L. scrobiculatus (Scop.) Fr. Cke. Illus. no. 922, t. 971.

Scrobiculatus, pitted.

P. 10–30 cm., yellow, becoming pale, zoned, or zoneless, convex, umbilicate, at length infundibuliform, very viscid when moist, covered with agglutinated down; margin bearded when young. St. 4–8 × 2–5–5 cm., light yellow, pitted with darker yellow broad roundish spots, incrassated upwards, somewhat viscid, base pubescent. Gills whitish, or flesh colour, decurrent, crowded, thin. Flesh whitish, becoming yellow when broken. Milk white, soon sulphur-yellow when exposed to the air. Spores light yellow, subglobose, 9 × 7–8 μ, echinulate, 1-guttulate. Taste very acrid. Under birches, and in coniferous woods. Sept.—Oct. Not uncommon. (v.v.)

1564. L. torminosus (Schaeff.) Fr. Cke. Illus. no. 923, t. 972.

Torminosus, griping.

P. 4–12 cm., pallid flesh colour, or strawberry colour, sometimes pale ochraceous, or white, convex, then depressed, at length infundibuliform, viscid when moist, zoned; margin white fibrillosely bearded. St. 6–9 × 1–5–2–5 cm., pale flesh colour, equal or attenuated downwards, sometimes pitted, delicately tomentose, then smooth. Gills paler than the pileus, adnato-decurrent, thin. Flesh pallid. Milk white, acrid. Spores white, subglobose, 8–9 × 7–8 μ, echinulate, 1-guttulate. Cystidia “sparse, subulate, 50–60 × 8 μ” Rick. Mixed woods, and heaths. Aug.—Nov. Common. (v.v.)


Кελίκιον, goat’s-hair cloth; εἶδος, like.


var. intermedius (Krombh.) B. & Br. Krombh. t. 58, figs. 11–13.

Intermedius, intermediate.

P. 10–14 cm., ochraceous yellow, infundibuliform, viscid, margin tomentose. St. 3–5 × 2 cm., yellowish, becoming tinged with rufous, covered with spot-like depressions. Gills lurid whitish, subdecurrent, broad. Flesh white, then yellowish. Milk white, then yellowish, acrid.
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P. 6–9 cm., flesh colour, or brick-red with a rosy tinge, becoming pale, convexo-umbilicate, then depressed and somewhat infundibuliform, wavy, often unequal, disc broken up into minute granule-like squamules, scales larger towards the margin and eventually disappearing. St. 6–8 × 1·5 cm., concolorous, or paler, unequal, incrassated at the base, curved, or flexuose, very slightly flocculose. Gills pinkish, becoming yellowish, decurrent, rather distant, often furcate and connected by veins. Milk white, acrid. Spores white, subglobose, 8–9 × 6–8 μ, echinulate, 1-guttulate. Woods. Sept.—Oct. Uncommon.


Turpis, ugly.

P. 6–30 cm., olivaceous inclining to umber, sometimes tawny towards the margin, at length entirely inclining to umber, convex, then plane, disc-shaped, or umbilicate, at length depressed, sometimes somewhat zoned, tomentose, viscid; margin at first villose, olivaceous light yellow, at length densely rivuloso-sulcate. St. 4–8 × 1·2–2·5 cm., pallid, or dark olivaceous, apex ochraceous whitish, equal, or attenuated downwards, often viscid and pitted. Gills white straw colour, spotted fuscos when broken or bruised, adnato-decurrent, much crowded, forked. Flesh white. Milk white, acrid. Spores white, globose, 6–7 μ, echinulate, 1-guttulate. Cystidia “subulate, 60–75 × 6–8 μ” Rick. Edible. Woods, heaths, and roadsides, especially under birches. Aug.—Dec. Common. (v.v.)


Contra, over against; versus, turned.

P. 6–30 cm., whitish, becoming reddish with blood-coloured spots and zones especially towards the margin, convex, broadly umbilicate, then somewhat infundibuliform, oblique, viscid in wet weather; margin acute, involute, more or less villose. St. 2–6 × 2–4 cm., white becoming concolorous, attenuated downwards, apex pruinose. Gills pallid-white-flesh-colour, decurrent, thin, very crowded. Flesh pallid, reddish under the cuticle. Milk white, acrid. Spores white, or tinged rosy, subglobose, 8 × 6–7 μ, verrucose, 1-guttulate. Smell pleasant, taste acrid. Woods, and pastures, especially under poplars. Aug.—Nov. Not uncommon. (v.v.)

1569. **L. pubescens** Fr. Cke. Illus. no. 927, t. 974.

Pubescens, becoming pubescent.

P. 4–6 cm., whitish, passing into flesh colour, rather plane, depressed in the centre, then broadly infundibuliform, shining; margin fibriloso-
pubescent. St. 2-4 × 1-2 cm., flesh colour, then white, attenuated downwards, often compressed, pruinato-pubescent when young. Gills pallid, slightly flesh-coloured, adnate, or slightly decurrent, crowded, narrower than the flesh of the pileus. Flesh white, pinkish under the cuticle. Milk white, acrid. Spores white, globose, 7-8μ, echinulate, 1-guttulate. Taste very acrid. Woods, heaths, and pastures, especially under birches. Sept.—Nov. Common. (v.v.)

1570. **L. aspideus** Fr. (= *Lactarius uvatus* Fr. sec. Quél.)

*ἀσπίδης*, a round shield; *εὐς*, like.

Entirely straw-colour, sometimes tinged with lilac. P. 5-10 cm., convex, then slightly depressed, viscid; margin incurved, tomentose and white, becoming smooth. St. 5-8 × 1 cm., equal, viscid. Gills adnate. Flesh white, then lilac. Milk white, then lilac, acrid ("sweet" W. G. Sm. and Massee). Spores white, subglobose, 10 × 9μ, verrucose. Taste acrid. Damp meadows, and moist places. Sept. Uncommon.

**P. viscid when moist, pelliculose, margin naked.**

1571. **L. insulsus** Fr. (= *Lactarius zonarius* (Bull.) Quél.) Cke. Illus. no. 929, t. 975.

*Insulsus*, insipid.


1572. **L. zonarius** (Bull.) Fr. (= *Lactarius insulsus* Fr. sec. Quél.)

*Zonarius*, zoned.

P. 5-10 cm., pallid orange, or pale yellowish to deeper yellow, convex, becoming plane then depressed, somewhat umbilicate, pellicle adnate, viscid, beautifully zoned most frequently towards the margin, at length minutely ruguloso-flocculose—at first only at the circumference—margin thin, long involute, naked. St. 5-8 × 1-1-5 cm., equal, or 2-5 × 1 cm. attenuated downwards, white, then yellowish, pale upwards, firm, elastic. Gills whitish, at length dingy yellowish, becoming dingy or even somewhat aeruginous when bruised, rounded- adnate, or adnato-decurrent, arcuate, thin, narrow, somewhat crowded. Flesh white, compact. Milk white, acrid. Spores whitish, globose, 9 × 8μ, echinulate. Cystidia "sparse, subulate" Rick. Smell strong, taste very acrid. Woods, and grassy places. Aug.—Oct. Uncommon. (v.v.)

R. B. B.
1573. L. utilis (Weinm.) Fr. (= Lactarius pallidus (Pers.) Fr. sec. Quél.) Cke. Illus. no. 930, t. 1084. 

P. 12–20 cm., tan colour, pale dull ochre, or livid, convex, then plane, obtuse, at length infundibuliform, humid, often cracked at maturity. St. 5–8 × 2.5 cm., concolorous or darker, fragile, longitudinally striate. Gills pallid, adnate, crowded. Milk white, somewhat acrid. Woods. Sept.—Oct. Rare.

1574. L. blennius Fr. Cke. Illus. no. 931, t. 988. 

βλέννος, mucous matter.

P. 4–11 cm., pallid olivaceous or aeruginous-grey, plano-depressed, glutinous, often concentrically guttate, or somewhat zoned; margin at first incurved and slightly downy, then naked. St. 4–5 × 1–1.5 cm., pallid olive, or pallid grey, viscid, equal, or attenuated downwards. Gills white, becoming cinereous when wounded, subdecurrent. Flesh white, becoming grey. Milk white, then grey, acrid. Spores white, elliptical, 8 × 6–7 μ, verrucose. Cystidia “sparse, fusiform-subulate, 60–75 × 8–10 μ” Rick. Taste slowly acrid. Woods, especially beech. Aug.—Nov. Common. (v.v.)

var. viridis (Schrad.) Quél. 

Viridis, green.


1575. L. lividus Lamb. 

Lividus, livid.

P. pale livid, disc fuscescent, convex, then plane or depressed, not distinctly zoned, viscid (?). St. livid, curved. Gills pale livid, subdecurrent, crowded. Milk white, acrid. Woods. Oct. Rare.


P. 5–10 cm., blackish olive, either somewhat zoned, or zoneless and unicolorous, but always paler ochraceous towards the margin, convex, scarcely flattened with age, rough, granularly punctate on the epidermis, viscid, not glutinous. St. 5–8 × 1–2 cm., greyish ochre, becoming brown when bruised, somewhat viscid, unequal, attenuated at the base. Gills ochraceous, then cinereous ochraceous, adnate, or subdecurrent. Flesh white, brown when bruised. Milk plentiful when wounded like Lactarius volemus, white, then brownish, at first mild, then acrid and bitter. Spores white, round or oval, 7–8 × 6 μ, “10–11 × 7–8 μ” Boud., echinulate, netted. Sometimes caespitose. Amongst grass under beeches. Sept.—Oct. Uncommon. (v.v.)


όσγυνος, a vegetable dye of scarlet colour.

P. 6–10 cm., reddish flesh colour, or reddish brown, umbilicate, becoming plane, viscid, often zoned and spotted; margin thin, inflexed.
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St. 3–10 × 1·5–2·5 cm., ochraceous cream, or flesh colour, here and there pitted or somewhat spotted with rose, apex constricted, attenuated at the base, pruinose. Gills white, then light yellow-ochraceous, adnato-decurrent, thin, crowded, branched. Flesh white, then yellowish, reddish under the cuticle of the p. and st. Milk white, slowly acrid. Spores pale ochre, globose, 7 µ, echinulate, 1-guttulate. Cystidia “subulate, 60–75 × 8–9 µ” Rick. Taste very acrid. Woods. Aug.—Nov. Uncommon. (v.v.)


P. 5–10 cm., rufous inclining to fuscos in wet weather, becoming pale, variegated with darker zones, umbilicato-convex, then becoming plane, depressed in the centre, often repand when older, very viscid in wet weather. St. 4–5 × 1–1·5 cm., pale, equal, or attenuated at the base, tough. Gills whitish then becoming yellow, subdecurrent with a tooth, horizontal, very thin and crowded, narrow, often forked. Flesh white, cheesy. Milk white, acrid. Spores ochraceous, globose, 7–8 µ, echinulate. Taste very acrid. Woods. Sept.—Oct. Uncommon. (v.v.)


P. 3–10 cm., hoary whitish, grey flesh-colour-livid, becoming fuscos, somewhat thin, convex, plane, then depressed, viscid; margin at first involute, very soon almost straight. St. 4–9 cm. × 12–18 mm., whitish, becoming light yellow, sometimes with yellow ferruginous spots, equal, viscid, sometimes pitted. Gills shining white to dead white, spotted with lilac when wounded, sometimes yellowish, or ochraceous ferruginous or tinged with pallid brick colour, adnate and subdecurrent, arcuate, thin, crowded, very unequal, here and there branched and anastomosing by veins. Flesh white, lilac when broken. Milk white, then lilac, acrid. Spores pale ochraceous, broadly elliptical, 10–12 × 8–9 µ, echinulate. Cystidia “subulate, pointed, 50–75 × 6–10 µ” Rick. Smell nauseous, or aromatic, taste slowly acrid. Woods, and heaths. Aug.—Nov. Not uncommon. (v.v.)

Flavidus, yellowish.

P. 5–10 cm., pale citron, or sulphur yellow, becoming stained with violet on injury or rubbing, convex, then expanded and slightly depressed at the centre, which often remains umbonate. St. 3–8 × 1–2 cm., white, or yellowish, soon stained with violet on handling or other injury, more or less attenuated at the base. Gills yellowish, bruising violet on injury, adnato-decurrent, narrow, crowded. Flesh white, becoming quickly violet on exposure to the air. Milk white, then violet, acrid. Spores white, ovoid, 9–10 × 8–9 μ, verrucose, reticulate, 1-guttulate. Taste mild, then acrid. Woods. Sept.—Oct. Uncommon. (v.v.)

***P. without a pellicle, hence absolutely dry, most frequently unpolished.

1582. L. flexuosus Fr.  

Flexuosus, full of turns.

P. 5–10 cm., lead-grey, or violet-grey, becoming pale, zoned, or zoneless, convex, becoming plane, depressed, somewhat repand, dry, somewhat shining, then rivuloso-scaly, or floccose; margin incurved, velvety, and whitish. St. 5–9 × 1.5–2.5 cm., pallid grey, apex whitish, base somewhat yellowish, obovoid, or equally attenuated downwards, often lacunose or pitted, delicately pubescent. Gills light yellowish, at length becoming whitish-flesh-colour, adnate, thick, distant, branched. Flesh white, cheesy, hard. Milk white, very acrid. Spores pale ochraceous, globose, 6–7 μ, verrucose. Cystidia "thin, clavate, 50–80 × 7–8.5 μ" Rick. Taste very acrid. Pine, and beech woods. July—Oct. Uncommon. (v.v.)

var. roseozonatus Fr. Fr. Icon. t. 169, fig. 3.

Roseus, rose-colour; zonatus, zoned.

Differs from the type in the rose colour, or rosy violet pileus marked with darker zones. Pine woods. Sept. Rare.

1583. L. pyrogalus (Bull.) Fr. Cke. Illus. no. 937, t. 993.

πῦρ, fire; γάλα, milk.

P. 5–10 cm., cinereous-grey, at length becoming dingy yellow, firm, convex, becoming plane, depressed, somewhat zoned, delicately granose under a lens, moist in wet weather; margin soon spreading. St. 4–6 cm. × 6–12 mm., pallid white, sometimes dingy, often attenuated downwards, grumoso-tubercular under a lens. Gills light yellow-wax-colour, the colour rich inclining to ochraceous or flesh colour, adnato-decurrent, thin, somewhat distant. Flesh white, greyish near the pileus. Milk white, very acrid. Spores pale ochraceous, subglobose, 7–8 μ, echinulate. Cystidia "only on the edge of the gill, 45–70 × 7–8 μ, obtuse" Rick. Taste very acrid. Woods, and pastures. Aug.—Dec. Common. (v.v.)
1584. *L. squalidus* (Krombh.) Fr. Krombh. t. 40, figs. 23–25.

Squalidus, dirty.


Capsicum, red pepper.

P. 5–10 cm., chestnut colour, darker at the closely involute margin, compact, pulvinate, dry. St. 3–9 × 2.5 cm., whitish, rufous striate, apex fulvous, subequal, or incrassated upwards. Gills fulvous, somewhat orange colour, adnato-decurrent, crowded, Anastomosing at the base, 3–4 mm. wide. Flesh yellow, becoming fuscous on exposure to the air. Milk white, very acrid. Spores globose, 6µ, rough. Under birches. Sept. Rare.

1586. *L. chrysorheus* Fr. (= *Lactarius theiogalus* (Bull.) Quél.) Cke. Illus. no. 940, t. 984. χρυσός, gold; βέω, I flow.

P. 5–8 cm., pale yellowish flesh colour, with darker zones or spots, convex, umbilicate, then infundibuliform. St. 5–7–5 × 1–2.5 cm., white, equal, delicately pruinose under a lens. Gills pallid yellowish, decurrent, very thin and crowded. Flesh white, bright sulphur-yellow when broken. Milk white, then bright sulphur-yellow (golden), very acrid. Spores white, subglobose, 6–7 × 6µ, echinulate, 1-guttulate. Cystidia "lanceolate, 50–60 × 8–12µ" Rick. Taste acrid. Woods, especially oak. Aug.—Nov. Common. (v.v.)

*L. glaucescens* Crossland = *Lactarius piperatus* (Scop.) Fr.


P. 5–9 cm., cinereous fuliginous, sometimes darker, sometimes paler, convex, then plane, at length obliquely infundibuliform, irregular, often excentric, or emarginate on one side, firm, rigid, moist, here and there spotted. St. 4–5 × 1–1.5 cm., pallid, apex white, attenuated downwards, often oblique, ascending, or curved. Gills pallid, then yellow flesh colour, subdecurrent, thin, somewhat crowded, forked. Flesh white becoming reddish on exposure to air. Milk white, soon reddish, acrid. Spores ochraceous, subglobose, 8–11µ, echinulate. Smell strong, stinking, taste acrid. Woods. Aug.—Nov. Rare.


P. 6–8 cm., grey, or pale brown, with darker zones, convex, then expanded, or more or less depressed at the disc, dry. St. 5–6 cm. ×


**Umbrinus**, umber brown.

P. 5–7·5 cm., more or less olivaceous umber, paler and yellowish when old, convex, then plane, disc slightly depressed, often wavy and excentric, dry, flocculoso-rivulose. St. 2·5–3·5 × 1–2 cm., concolorous, or paler, apex white, attenuated upwards. Gills pallid, dingy yellowish, slightly decurrent, thin, crowded, forked behind, 2 mm. wide. Flesh white, becoming tinged with brown on exposure to the air, firm. Milk white, forming grey spots when it has escaped, acrid. Spores white, globose, 8μ, rough. Cystidia none. Taste acrid. Pine woods. Sept.—Oct. Rare.

**L. plumbeus** (Bull.) Fr. = **Lactarius turpis** (Weinm.) Fr.

1590. **L. piperatus** (Scop.) Fr. (= Lactarius glaucescens Crossland.)

Cke. Illus. no. 944, t. 979.

**Piperatus**, peppery.

Entirely white. P. 5–22·5 cm., becoming yellowish with age, umbilicate, then reflexed and infundibuliform, rigid; margin involute at first. St. 3–7 × 2–5 cm., equal, or obconical, obsoletely pruinose. Gills becoming pale ochraceous, decurrent, crowded, narrow, dichotomous, edge obtuse. Flesh white, then yellowish, becoming sometimes greenish grey. Milk white, often becoming greenish when dry, very acrid. Spores white, globose elliptical, 6–9 × 6–8μ, minutely punctate, with a large central gutta. Cystidia “clavate, or fusiform-filiform, 60–70 × 8–9μ, obtuse, very sparse” Rick. Taste very acrid. Said to be edible. Woods. Aug.—Oct. Common some years. (v.v.)

var. **pergamenus** (Swartz) Quél. Cke. Illus. no. 943, t. 978.

**Pergamena**, parchment.

_differs from the type in the rugose wrinkled pileus, the longer thinner stem, and the adnate, horizontal gills._ Woods. Aug.—Oct. Uncommon. (v.v.)

1591. **L. vellereus** Fr. Cke. Illus. no. 945, t. 980.

**Vellus**, a fleece.

Entirely white. P. 10–30 cm., becoming stained or spotted with yellow, convexo-saucer-shaped, innato-pubescent, compact; margin strongly incurved. St. 5–8 × 2·5–6 cm., becoming yellowish, equal, hard, finely pubescent. Gills watery white, then pale ochraceous, adnate-decurrent, arcuate, rather thick, somewhat distant, rather broad, branched, edge acute. Flesh white, yellowish on exposure to the air. Milk white, scanty, turning litmus paper red, very acrid. Spores white,

var. velutinus Bertillon.

Diffsers from the type in the more crowded gills, in the flesh turning reddish tawny on exposure to the air, and in the sweet milk only slowly becoming somewhat acrid, and not turning litmus paper red. Woods. Uncommon. (v.v.)

L. esuccus (Otto) Fr. = Russula chloroides (Krombh.) Bres.

1592. L. scoticus B. & Br. Cke. Illus. no. 938, t. 1004, fig. B.

Scoticus, Scotch.

P. 2½-5 cm., whitish, convex, then depressed, tomentose, then smooth; margin involute, tomentose. St. 2½-3 cm. × 6 mm., somewhat flesh colour, somewhat unequal, curved. Gills whitish, very slightly decurrent, thin, scarcely branched, about 2 mm. broad. Flesh whitish. Milk white, acrid. Spores white, subglobose, 7–8μ, apiculate, minutely echinulate. Smell pungent, taste very acrid. Amongst moss. Sept. Rare.


Involutus, incurved.

Entirely white, or with a pale ochraceous tinge. P. 2½-5 cm., convex, then plane, or slightly depressed; margin strongly and persistently involute, minutely silky. St. 2–3 cm. × 4–6 mm., equal, or slightly thickened at the base, very firm. Gills very slightly decurrent, very crowded, 1 mm. broad, sometimes forked. Milk white, very acrid. Spores white, pip-shaped, 5 × 3μ, smooth. Taste acrid. Woods. Sept. Rare.

II. St. central. Gills naked. Milk always deeply coloured.

1594. L. deliciosus (Linn.) Fr. Cke. Illus. no. 947, t. 982.

Deliciosus, delicious.

P. 5–15 cm., orange-brick-colour, becoming pale and stained with verdigris, concentrically zoned with darker markings, convex, then plano-depressed, or broadly infundibuliform, slightly viscid. St. 2–8 × 2–2½ cm., concolorous, or paler, often stained with verdigris, equal, or attenuated at the base, fragile, often spotted in a pitted manner. Gills saffron yellow, becoming stained with verdigris, subdecurrent, crowded, narrow, arcuate, often branched. Flesh white, then reddish and becoming verdigris. Milk red-brick-saffron, aromatic, mild, then slightly acrid. Spores white, pinkish in the mass, subglobose, 8–9 × 7–8μ, echinulate, 1-guttulate. Cystidia "sparse, fusiform-subulate, 30–40 × 4–6μ" Rick. Smell pleasant, taste slightly acrid. Edible. Coniferous woods, and elsewhere under conifers. July—Dec. Common. (v.v.)
1595. **L. sanguifluus** (Paul.) Fr. Boud. Icon. t. 50.  
_Sanguis, blood; fluus, flowing._

P. 3–8 cm., reddish tawny, spotted with darker markings, rarely zoned, becoming stained with verdigris, plane, then depressed, firm, slightly viscid; margin at first involute and white pruinose. St. 3–6 × 1–2.5 cm., rosy flesh, or blood colour, at length concolorous and stained verdigris, at first equal, then dilated at the apex, and attenuated at the base, pruinose, often pitted. Gills pale ochraceous, then concolorous, and finally stained verdigris, adnate, then decurrent, very crowded, rather narrow, often branched. Flesh white, tinged with blood-red especially near the cuticle of the stem, firm, chewy. Milk blood-red, slightly acrid. Spores pale ochraceous, globose, 8–9 × 8 μ, echinulate, 1-guttulate. Cystidia “sparse, subulate, 45 × 5–8 μ” Rick. Smell pleasant, often like _Mentha piperita_, taste slightly acrid. Edible. Pine woods. Sept.—Oct. Uncommon. (v.v.)

III. St. central. Gills pallid, then changing colour, afterwards darker, glancing when turned to the light, at length white pruinose. Milk at the first white, mild, or mild becoming acrid.

*P. at the first viscid.*

1596. **L. pallidus** (Pers.) Fr. Cke. Illus. no. 948, t. 1007.  
Pallidus, pale.


1597. **L. quietus** Fr. Boud. Icon. t. 51.  
Quietus, calm.

P. 3–9 cm., somewhat cinnamon, flesh colour, disc darker, somewhat zoned, convex, then depressed, obtuse; margin deflexed, at first very slightly viscid, then somewhat silky, opaque, becoming pale. St. 4–9 × 1–1.5 cm., rufescent, at length beautifully rubiginous, spongy, equal, sometimes attenuated at the base which is covered with concolorous hairs. Gills white, then soon brick-rufescent, adnato-decurrent, somewhat forked at the base. Flesh white, then rufescent. Milk white, sweet. Spores white, globose, 8–10 μ, verrucose. Cystidia “lanceolate-subulate, 50–60 × 6–7 μ” Rick. Smell oily, taste pleasant. Woods. Aug.—Dec. Common. (v.v.)

1598. **L. aurantiacus** (Fl. Dan.) Fr.  
Aurantiacus, orange.

P. 3–6 cm., bright golden orange colour, convex, then plane, or de-

1599. L. theiogalus (Fr.) Plowr. (= Lactarius chrysorheus Fr. sec. Quél.; Lactarius hepaticus (Plowr.) Boud.) Trans. Brit. Myc. Soc. 1, t. v. (Fr.)

P. 2.5–7 cm., liver coloured when moist, drying to rufous tawny and lighter at the margin, convex, then expanded, and finally depressed, umbo-nate, umbo sometimes wanting, viscid at first; margin crenulate, thin. St. 3–4 × 5–1 cm., slightly pinker than the colour of the pileus, equal, attenuated at the base. Gills pale, then rufescent, adnato-decurrent, each terminating at the crenulations of the margin of the pileus, 3–6 mm. broad, thin, rather distant. Flesh of the pileus pallid, then ochraceous, of the stem becoming rufous especially downwards. Milk white, very slowly changing to sulphur yellow, mild, then slightly acrid. Spores white, globose, 6–7 µ, echinulate, 1-guttulate. Cystidia "sparsely, subulate, 45–75 × 6–8 µ." Rick. Fir woods. Aug.—Nov. Not uncommon. (v.v.)

1600. L. cremor Fr.

Cremor, thick juice.

P. 3–6 cm., tawny orange, convex, then plane and obtuse, sometimes umbo-nate when young, often unequal and excentric, viscid, minutely punctate; margin striate. St. 3–5 cm. × 6–8 mm., congestus, equal, fragile, silky upward under a lens. Gills white, then flesh colour, adnate, somewhat distant, fragile, pruinose. Flesh congestus, or paler, thin. Milk whitish, often watery, somewhat mild. Spores white, globose, 9–10 µ, echinulate. Cystidia "subulate, 45–60 × 7–8 µ." Rick. Taste mild, or slowly acrid. Beech woods. Sept. Rare.


Differs from the type in being entirely yellowish flesh colour, ochraceous when dry, the margin of the pileus at length sulcate, and the juice-less, white flesh. Under larches. Sept. Rare.


P. 3–6 cm., flesh colour, or livid grey, becoming pale, subpapillate, becoming plane, then umbilicate, at length somewhat infundibuliform, viscid, opaque, slightly silky when dry; margin somewhat deflexed. St. 5–7 cm. × 4–10 mm., congestus, attenuated upwards, or somewhat equal. Gills whitish, then yellowish, adnato-decurrent, thin, somewhat crowded, somewhat flaccid. Flesh whitish, then grey. Milk
LACTARIUS


1602. L. cyathula Fr. (= Lactarius cupularis (Bull.) Quél.) Cke. Illus. no. 952, t. 1009, fig. B, and no. 953, t. 1085.

κύαθος, a cup.

P. 1–6 cm., rufescent brick, or flesh colour, somewhat zoned, when dry becoming pale, livid or flesh colour, hoary tan, rimoso-rivulose, convexo-plane, umbonate, at length plano-depressed, umbo often vanishing, slightly viscid, sometimes striate. St. 5 cm. × 2–10 mm., pale, at length whitish, equal, pruinose. Gills white flesh colour, then yellowish, decurrent, very crowded, thin, linear. Flesh white flesh colour. Milk white, acrid. Spores pale ochraceous, globose, 6–10 µ, echinulate. Cystidia “very sparse, subulate” Rick. Smell strong of bugs when drying. Woods. Aug.—Nov. Rare.

**Pileus unpolished, squamulose, villose, or pruinose.

1603. L. rufus (Scop.) Fr. Cke. Illus. no. 954, t. 985. Rufus, red.

P. 5–10 cm., bay-brown-rufous, umbonate when young, soon depressed with an umbo, and at length infundibuliform, dry, at first flocculoso-silky, but soon polished; margin involute when young, somewhat whitish-tomentose. St. 5–8 × 1 cm., rufescent, paler than the pileus, white pubescent at base, obsolescently pruinose. Gills ochraceous, or pallid, then rufescent, adnato-decurrent, crowded, scarcely branched. Flesh pallid, not compact. Milk white, very acrid. Spores white, broadly elliptical, 9–10 × 7–8 µ, verrucose. Cystidia abundant, “lanceolate-fusiform, 60–70 × 7–10 µ” Rick. Taste very acrid. Coniferous woods. June—Dec. Common. (v.v.)

var. exumbonatus Boud. Boud. Icon. t. 52.

Exumbonatus, without an umbo.


P. 5–10 cm., pale yellowish-brick-colour, becoming pale, fragile, convex, then flattened, somewhat umbonate, the surface wholly broken up into granuloso-squamulose flocci. St. 5–8 × 1–1.5 cm., brick colour inclining to pale, equal, pruinose, base white, tomentose. Gills whitish, then somewhat flesh colour, at length yellowish, decurrent, thin, crowded. Flesh concolorous but paler. Milk white, mild, then slightly acrid, somewhat watery. Spores pale ochraceous, globose, 7–8 µ, echinulate. Cystidia “cylindrical-rounded, 50–70 × 9–12 µ” Rick. Smell strong,


Tomentosus, woolly.

P. 7–9 cm., dingy flesh colour, rufescent, or brownish, umbonate, then depressed, or infundibuliform, finely tomentose. St. 5 × 1–1.5 cm., pallid, equal. Gills yellow flesh colour, rather decurrent. Flesh white, then tinged brown. Milk whitish, mild. Spores white, globose, 8–9 μ, verrucose. Smell pleasant, taste mild, then slightly acrid. Damp places. Sept. Rare.

1606. **L. mammosus** Fr. Fr. Icon. t. 170, fig. 2.

Mammosus, having large breasts.

P. 3–6 cm., greyish fuscous, convex, acutely umbonate, umbo at length vanishing, then depressed, clothed with appressed down; margin involute, white-pubescent. St. 5–8 × 1–1.5 cm., white, inclining to pale, pubescent, firm. Gills whitish, then pallid ferruginous, adnate, crowded. Flesh reddish white. Milk white, mild, then acrid. Spores white, “sub-globose, 6–7 × 5–6 μ,” echinulate. Cystidia subulate, 60 × 8–9 μ” Rick. Birch, and pine woods. Oct. Rare.

var. **monstrosus** Cke. Cke. Illus. no. 957, t. 995.

Monstrosus, strange.

Differs from the type in its larger size. Woods. Oct. Rare.

var. **minor** Boud. Boud. Icon. t. 58.

Minor, smaller.

Differs from the type in its smaller size, and the pileus clothed with shorter hairs. Under birches. Nov. Rare. (v.v.)

1607. **L. glycosmus** Fr. Fr. Icon. t. 170, fig. 3.

γλυκίς, sweet; ὀσμή, scent.

P. 2–7 cm., grey, brick colour, fuscous, most frequently passing into violet, convex, becoming somewhat plane, acutely papillate, then depressed, the papilla vanishing, delicately innato-squamulose, or unpolished, opaque. St. 2.5–5 cm. × 4–8 mm., light yellowish, becoming tawny when bruised, sometimes silvery-whitish, especially at the apex, somewhat equal, pubescent. Gills straw colour, then tawny-flesh-colour, or somewhat ochraceous, adnato-decurrent, arcuate becoming plane, thin, often branched, crowded. Flesh white, then slightly tinged with the external colour. Milk white, rarely greenish, mild, then slightly acrid. Spores pale ochraceous, globose, 7–9 μ, echinulate, 1-guttulate. Cystidia “subulate, 69–70 × 7–9 μ” Rick. Smell very pleasant, aromatic, taste mild. Edible. Woods. Aug.—Nov. Common. (v.v.)
var. flexuosus Massee. Cke. Illus. no. 958, t. 1011, as type.

_Flexuosus_, full of turns.

Differs from the type in the silky, umbilicate, flexuose, more or less zoned pileus. Woods. Sept.—Oct. Not uncommon. (v.v.)

1608. **L. ignyotus** Fr. Fr. Icon. t. 171, fig. 1. 

P. 4–8 cm., fuliginous umber, elastic-fragile, convexo-plane, somewhat depressed; margin at first incurved, then depressed, acutely-umbonate, plicately-rugulose, or wrinkled sulcate, pruinose velvety. St. 7–12 × 1.5–2 cm., concolorous, base paler, becoming whitish, fragile, corticate, constricted and plicate at the apex, pruinose velvety. Gills snow-white, then whitish ochre, reddish when wounded, rounded behind and adnate, then subdecurrent, thin, rather crowded. Flesh white, then slowly becoming reddish, ochraceous, or ferruginous. Milk watery white, becoming reddish, or saffron colour, sparse, sweet. Spores ochraceous, globose, 9μ, strongly echinulate, 1-guttulate. Taste pleasant. Under fir, and beeches. Sept.—Oct. Uncommon. (v.v.)

1609. **L. fuliginosus** Fr. (= Lactarius azonites (Bull.) Quél.) Cke. Illus. no. 959, t. 996.

_Fuliginosus_, sooty.

P. 3–10 cm., tan whitish, sprinkled with innate, fuliginous pruina, coffee and milk colour, finely velvety, then somewhat rugulose, soapy vivid, fawn brick colour, the disc sometimes at last brown, convex, then somewhat repand and depressed; margin at first inflexed, then soon spreading. St. 4–8 cm. × 6–10 mm., dead white to shining white, then dingy, tan, somewhat rufescent-brick-colour, fuliginous, somewhat equal, sometimes rugulose. Gills white, at length light yellow ochraceous, rounded adnexed, then decurrent, somewhat thin, somewhat distant, branched, connected by veins, the intermediate ones at length crisped. **Flesh and milk white, then rose colour, and at length saffron yellow.** Spores ochraceous, globose, 9–10μ, echinulate. Cystidia “sparse, subulate” Rick. Taste mild, then slightly acrid. Woods, and pastures. Aug.—Nov. Common. (v.v.)


P. 4–8 cm., umber, or blackish umber, convex becoming plane, umbonate, orbicular, at first everywhere villose, somewhat velvety, then becoming smooth. St. 5–8 × 1–1.5 cm., paler than the pileus, equal, pruinose. Gills ochraceous, adnate, thin, very crowded, straight. **Flesh pallid, becoming reddish on exposure to the air. Milk white, acrid.** Spores ochraceous, globose, 7–10μ, echinulate and ribbed. Taste acrid. Coniferous woods. Sept.—Oct. Uncommon. (v.v.)

1611. **L. retisporus** Massee. _Rete_, a net; _σπόρα_, seed.

P. 5–9 cm., dark smoky-brown, convex, then plane, disc depressed, minutely velvety, radially rugose from disc to margin. St. 3–5 ×
1·5 cm., paler than the pileus, equal. Gills pale ochraceous with darker spots, deeply sinuate and slightly adnexed, subdistant. Flesh dingy yellow, becoming reddish brown when cut. Milk white, then brown, sweet, becoming very thick and tenacious. Spores colourless, globose, 10μ, with raised bands forming a network. Under beeches. Oct. Rare.

1612. L. lilacinus (Lasch) Fr. Boud. Icon. t. 53.

Lilacinus, lilac-coloured.

P. 3–8 cm., rosy lilac, covered with a concolorous tomentum, often spinulose when young, plane, then depressed, papillate, sometimes very obsolesly zoned. St. 3–8 cm. × 5–12 mm., paler and more ochraceous than the pileus, equal, somewhat rugulose, apex white-mealy. Gills ochraceous, rarely tinted rosy lilac, adnato-decurrent, narrow. Flesh rosy white, acrid. Milk white, acrid, plentiful. Spores white, globose, or oval, 7–10μ, verrucose, reticulated. Cystidia “fusiform, 60–75 × 7–9μ” Rick. Taste acrid. Woods, and damp places. Aug.—Oct. Not uncommon. (v.v.)


Spinulosus, full of little spines.

P. 2–4 cm., brick red, or rosy lilac, convex, acutely umbonate, then depressed, covered with minute erect spines, especially towards the margin, zoned and spotted. St. 3–4 cm. × 4–8 mm., concolorous, rugulose, granular. Gills yellowish flesh colour, then yellowish, decurrent, narrow. Flesh paler. Milk white, slowly acrid. Spores pale ochraceous, globose, 7–8μ, echinulate. Taste slightly acrid. Woods. Sept.—Oct. Not uncommon. (v.v.)

var. violaceus Cke. Cke. Illus. no. 961, t. 998, fig. B. Violaceus, violet.

Differs from the type in the rosy-violet p., the incurved margin, and the pale st. On the ground. Sept.

***P. polished, smooth.

1614. L. volemus Fr. (= Lactarius lactifluus (Schaef.) Quél.) Cke. Illus. no. 962, t. 999. Volema pira, a species of large pear.

P. 5–12 cm., rufous tawny, golden, becoming pale, compact, rigid, obtuse, paler at the margin, plano-convex, at length depressed and rimoso-rivulose; margin at first incurved. St. 6–10 × 1·5–3 cm., concolorous, somewhat equal, or attenuated upwards, obese, hard, pruinose. Gills white to yellowish, adnato-decurrent, thin, crowded, becoming dingy when wounded. Flesh white, becoming brownish on exposure to the air. Milk white, sweet, plentiful, rarely becoming yellow. Spores very pale ochraceous, globose, 5–6μ, verrucose. Cystidia “very abundant, subulate-fusiform, 60–100 × 8–9μ, very undulating and thick walled” Rick. Smell and taste very pleasant. Edible. Woods. Aug.—Oct. Not uncommon. (v.v.)
1615. **L. ichoratus** (Batsch) Fr. Cke. Illus. no. 963, t. 1000.

P. 5–10 cm., tawny-brick-colour, disc often brown, brick colour and zoned, plano-depressed, often unequal, excentric, occasionally repand, opaque, thin, obtuse. St. 4–7.5 cm. × 6–10 mm., tawny, then ochraceous, equal, or fusiform below. Gills white, then ochraceous, adnate, decurrent with a tooth, scarcely crowded. Flesh pallid, becoming brownish on exposure to the air. Milk white, sweet. Spores ochraceous, elliptical, 8–10 × 6–7 μ, echinulate. Cystidia “sparse, subulate, 50 × 5–6 μ” Rick. Smell strong, taste pleasant. Woods. Oct.

1616. **L. serifluus** (DC.) Fr. Cke. Illus. no. 964, t. 1012.


Mitissimus, very mild.


1618. **L. subdulcis** (Pers.) Fr.

Sub, somewhat; dulcis, sweet.


var. **concavus** Fr.

Concavus, hollowed out.

Differs from the type in the rufous bay colour of all its parts recalling Lactarius rufus, the inflexed margin of the pileus, the smooth stem, the

var. sphagneti Fr.  
Sphagnetum, a Sphagnum swamp.

Differs from the type in the obtuse, red bay pileus shining as if varnished, and the crenate, inflexed margin.

1619. L. camphoratus (Bull.) Fr. Cke. Illus. no. 967, t. 1013, fig A. Camphoratus, strong scented.


var. Terrei (B. & Br.) Cke.

Michael Terrey.
Differs from the type in the corrugated pileus, and the swollen base of the stem clad with orange down.

1620. L. subumbonatus Lindgr. (= Lactarius cimicarius (Batsch) Quél.; Lactarius rubescens (Bres.) Bataille.) Cke. Illus. no. 968, t. 986, fig. A. Sub, rather; umbonatus, umbonate.


1621. L. cimicarius (Batsch) Cke. (= Lactarius subumbonatus (Lindgr.) Quél.) Cke. Illus. no. 967, t. 1013, fig. B. Cimex, a bug.

P. 2–6 cm., dark bay brown, convex, then depressed, or infundibuliform; margin often waved and lobed. St. 4–6 cm. × 4–14 mm., paler than the pileus, equal. Gills dingy ochraceous with a red tinge, slightly decurrent. Flesh tinged brownish. Milk white, acrid. Spores white, globose, 9 × 7–8μ, verrucose, 1-guttulate. Smell strong, like bugs. Taste acrid. Woods. Sept.—Nov. Not uncommon. (v.v.)

1622. L. obnubilus (Lasch) Fr. Boud. Icon. t. 55. Obnubilus, overclouded, dark.

P. 2–6 cm., brown fuliginous, darker at the disc, paler at the striate margin, convex, at first papillate, then umbilicate, slightly viscid. St. 3–7 cm. × 6–9 mm., paler than the pileus, equal, slightly rugulose, covered with concolorous hairs at the base. Gills yellowish, adnato-decurrent, crowded. Flesh reddish. Milk white, rather acrid. Spores pale ochraceous, subglobose, 7–9 × 7–8μ, verrucose, 1-guttulate.
Taste somewhat bitter. Pine woods, and under alders. Sept.—Nov.
Uncommon. (v.v.)

var. crenatus Massee.

Crenatus, notched.

Differs from the type in the coarsely sulcate margin of the pileus.

1623. L. tabidus Fr. Boud. Icon. t. 57.

Tabidus, wasting away.

P. 1–5 cm., pale brick colour, then tan, becoming paler, submembranaceous, somewhat plane, acutely papillately umbonate, at length expanded and somewhat depressed, somewhat rugulose; margin pellucidly striate.

St. 2–4 cm. × 4 mm., concolorous, equal, or attenuated upwards, white tomentose at base. Gills concolorous but paler, adnato-decurrent, flaccid, narrow, somewhat distant. Flesh concolorous.

Milk white, sweet, then slightly acrid, scanty. Spores white, globose, 10–12 × 7–10 μ, verrucose, 1-guttulate. Taste pleasant, then slightly acrid. Woods, and under willows and alders. Sept. Uncommon.

1624. L. minimus W. G. Sm. Cke. Illus. no. 968, t. 986, fig. B.

Minimus, smallest.


IV. St. excentric, or lateral. Growing on trunks.

1625. L. obliquus Fr.

Obliquus, slanting.


III. Receptacle membranaceous, or fleshy membranaceous, fragile, rapidly putrescent, or shrivelling up.

Spores ochraceous, or ferruginous.

Bolbitius Fr.

(βόλβιτιόν, dung, especially cow dung.)

Pileus membranaceous, regular. Stem central, not confluent with the pileus. Gills free, or slightly adnate, acute at the edge. Spores ochraceous, ferruginous, fuscos, or salmon colour; elliptical, elliptic-oblong, or almond-shaped; smooth; with an apical germ-pore. Cystidia present, or absent. Growing on dung, and on rich soil.
B. hydrophilus (Bull.) Fr. = Hypholoma hydrophilum (Bull.) Fr.

1626. B. vitellinus (Pers.) Fr. Kalchbr. Icon. t. 19, fig. 2.

*Vitellus*, the yolk of an egg.

P. 2–4 cm., egg yellow, submembranaceous, deeply campanulate, then expanding and convex, viscid, smooth, then furrowed and splitting at the margin. St. 6–11 cm. × 2–4 mm., cream colour, attenuated upwards from the subbulbous base, covered with white, fugacious, mealy flocci. Gills ochraceous, then somewhat ferruginous, free, attenuated at both ends, thin, crowded. Flesh yellowish, thick at the disc. Spores ferruginous, yellow under the microscope, broadly elliptical, 12–14 × 7–8 μ, often truncate at the one end. On horse dung, dung heaps, and amongst grass. May—Oct. Not uncommon. (v.v.)

var. *olivaceus* Gillet.

*Olivaceus*, olivaceous.

Differs from the type in its *olivaceous* colour. Horse dung. Sept.

Uncommon. (v.v.)

1627. B. Boltonii (Pers.) Fr.

James Bolton of Halifax, the author of "An History of Fungusses."

P. 2–4 cm., yellow, becoming pale, disc darker, fleshy, conical, or convex, then plane and depressed at the disc, viscid, smooth, becoming sulcate and splitting at the membranaceous margin, finally withering and becoming like paper. St. 5–8 cm. × 4–6 mm., yellowish, equal, attenuated at the base, often twisted, flocculose with the fugacious cortina, which sometimes forms a ring-like zone. Gills light yellow, then livid fuscous, slightly adnate. Flesh yellowish, especially in the st., very thin. Spores fuscous ferruginous, broadly elliptical, or pip-shaped, 12–13 × 7–8 μ. On dung, and manured soil. May—Oct. Uncommon. (v.v.)

1628. B. flavidus (Bolt.) Massee. Cke. Illus. no. 677, t. 689, as Bolbitius Boltonii Fr.

*Flavidus*, yellowish.

P. 2·5–5 cm., pale yellow, glutinous, conical, then expanded, disc usually slightly elevated; margin striate, and usually splitting. St. 5–6 cm. × 4–6 mm., yellow, slightly thinner upwards. Veil very fugacious, white, leaving no mark on the st. Gills white, then yellow, at length dusky brown, almost or quite free, 4 mm. broad. Flesh yellow in the st. Spores brown, elliptical, 10 × 6 μ. The whole plant deliquesce-sup. Dung-hills, and rotten cloth in woods. June—Aug. Uncommon. (v.v.)


*Grandiusculus*, pretty well grown up.

P. 3–5 cm., pale yellow, disc rufous, submembranaceous, campanulate, then expanded, smooth; margin slightly striate. St. 7·5–10 cm. × 6 mm., white, gradually attenuated upwards, straight, smooth.
Gills pale, then rusty ochraceous, quite free, attenuated behind, 2 mm. broad, linear, crowded. Flesh white, very thin. Spores rusty, elliptic-oblong, 15 × 5–6μ. Amongst grass. Sept. Rare.

1630. **B. fragilis** (Linn.) Fr. Cke. Illus. no. 679, t. 720, fig. A.

*Fragilis*, fragile.

P. 1.5–2.5 cm., light yellow, then becoming pale, submembranaceous, pellucid, conical, then expanded, subumbonate, smooth, viscid; margin striate, often crenulated. St. 5–7.5 cm. × 2–4 mm., yellow, very fragile, attenuated upwards, naked, smooth. Gills yellow, then pale cinnamon, attenuato-adnexed, almost free, ventricose, 2–4 mm. broad. Flesh yellowish, thin at the disc. Spores ferruginous, almond-shaped, 10–11 × 6–7μ. Cystidia “vesiculose, 30–36 × 12–20μ.” Rick. The whole plant rapidly withering. Roadside, road-scrapings, horse dung, and pastures. April—Nov. Common. (v.v.)

1631. **B. affinis** Massee.

*Affinis*, related.

P. 1–2 cm., yellowish tawny, whitish when dry, campanulate, then expanded, umbonate, glabrous, dry; margin striate. St. 4–7 cm., white, attenuated upwards from a marginate bulb, shining. Gills yellowish tawny, adnexed, narrow. Spores 8 × 6μ. Rare.

1632. **B. titubans** (Bull.) Fr. Cke. Illus. no. 680, t. 690.

*Titubans*, tottering.

P. 2–4 cm., light yellow at the disc, paler and becoming greyish at the margin, membranaceous, very tender, ovato-campanulate, then flattened and split, diaphanous, slightly viscid, striate; margin plicate. St. 5–7.5 cm. × 1–2 mm., white, equal, very fragile, shining, sometimes mealy. Gills ochraceous, or purplish, then fuscous flesh colour, or ferruginous, adnexed, or free, 2–3 mm. broad. Flesh whitish, scarcely any except at the disc. Spores deep ochraceous, broadly elliptical, 11–15 × 8–9μ, with a hyaline apical germ-pore. Rich pastures, gardens, and roadsides. May—Oct. Common. (v.v.)

1633. **B. apicalis** W. G. Sm. Cke. Illus. no. 679, t. 720, fig. B.

*Apex*, the top of a thing.

P. 8–15 cm., brown, disc ochraceous bounded by a darker line, membranaceous, conical, 18 mm. high, obsoletely umbonate, striate, then plicate to the apical disc, splitting at the margin. St. 5–6 cm. × 2 mm., white, attenuated upwards from the thickened base, striate, minutely pruinose under a lens. Gills brown, free, at first pressed to the stem, ventricose, 3 mm. broad. Flesh white, thick at the disc. Spores brown, elliptical, 9 × 6–7μ. Pastures. June. Rare.

1634. **B. rivulosus** B. & Br. Cke. Illus. no. 678, t. 928, fig. B.

*Rivulosus*, rivulose.

P. 2–3 cm., tan colour, campanulate, striate, rivulose. St. 7 cm. × 4–6 mm., white, attenuated upwards, smooth. Gills cinnamon,


P. 2–3 cm., pure white, fleshy, campanulate, obtusely umbonate, smooth, slightly viscid; margin striate. St. 7–9 cm. × 3–4 mm., pure white, gradually attenuated upwards from the clavato-bulbous base, rather tough, shining. Gills pallid, then salmon colour, free, narrowed behind, 2 mm. broad, broadest in front, subdistant. Flesh white, thick at the disc. Spores salmon colour, elliptical, 18 × 9–10μ. Earth in palm house. Rare.


P. 7–15 mm., white, yellowish white, or flesh colour, then whitish, very delicate, conical, elongated, 8–25 mm. high, moist, smooth. St. 4–7 cm. × 2 mm., white, base bulbous or slightly thickened. Gills salmon colour, nearly free, attenuated behind, narrow, not crowded. Flesh white, very thin. Spores “salmon colour, elliptical, 15–16 × 8–10μ” Massee. Lawns, and rich pastures. May—Sept. Uncommon.

(v.v.)

Spores black, or blackish fuscous. Gills auto-digested from below upwards.

**Coprinus** (Pers.) Fr.

*(κόπρος, dung.)*

Pileus fleshy, or membranaceous, regular. Stem central, confluent, or distinct from the pileus, with or without a ring or volva. Gills free, adnate, or attached to a collar, very thin, parallel-sided, or subparallel-sided, and auto-digested from below upwards. Spores black, violet black, chocolate, or fuscous; oval, elliptical, subglobose, angularly subglobose, pip-shaped, almond-shaped, or cordiform, smooth, very rarely echinulate; with an apical germ-pore. Cystidia usually large, rarely absent. Growing on the ground, on dung, and on wood. Solitary, or caespitose.

I. Gills covered above with a fleshy or membranaceous cuticle, hence the p. does not open into furrows along the gills but becomes torn and revolute.

*Furnished with a ring arising from the volva; the cuticle torn into scales.


P. 4–6 cm., white, becoming pinkish at the margin and finally black; 32—2
fleshy, cylindrical, 5–15 cm. high, then campanulate, the continuous cuticle soon separating into adpressed, shaggy scales, the scales becoming ochraceous at their apices, disc deep ochraceous, remaining persistently entire, at length striate; margin often torn and unequal. St. 12–25 × 1–2 cm., white, then dingy or lilac white, attenuated upwards from the bulbous, rooting base, fibrillose, silky, shining. Ring white, membraneous, thin, torn, movable, fugacious. Gills white, then pink, at length black and deliquescent, free, separate from the st., linear, 6–10 mm. broad. Flesh white, thick at the disc. Spores black, elliptical, often with a lateral apiculus, 11–13 × 6–7 μ. Cystidia vesiculose, 50–65 × 20–30 μ. Taste mild. Edible. Woods, pastures, roadsides, especially ground made up with night soil. April—Dec. Common. (v.v.)

var. ovatus (Schaeff.) Quél. Schaeff. Icon. t. 7. Ovatus, egg-shaped.

Differs from the type only in its smaller size and the ovate p.

var. clavatus (Batt.) Quél. Schaeff. Icon. t. 8. Clavatus, club-shaped.

Differs from the type in the elongate elliptical p., the rootless st., the shaggy volva-like ring, and the gills never becoming pink.

1638. C. umbrinus Cke. & Masssee. Umbrinus, umber.

P. 2.5–4.5 cm., dark umber, fleshy, conico-hemispherical, then almost plane, finally splitting at the margin and revolute, coarsely sulcate up to the disc, universal veil generally remaining as a large white patch at the apex, elsewhere covered with scattered, snow white, floccose scales. St. 10–15 cm. × 6–8 mm., dark umber, slightly and gradually attenuated upwards from the bulbous, slightly rooting base, polished, shining. Volva persistently white, sheathing the base of the st., and free and reflexed about 2 cm. from the base. Gills becoming black, edge persistently white, free, distant from the st., 3 mm. broad, thin, crowded. Flesh umber, exceedingly thin. Spores sooty-black, elliptic-oblong, obliquely apiculate, 17–18 × 9 μ. Cystidia absent. Manured ground. Aug. Rare.

1639. C. sterquilinus Fr. Cke. Illus. no. 646, t. 660.

Sterquilinum, a dung-pit.

P. 2–5 cm., white, then silvery grey, disc tinged fuscous, submembraneous, ovato-conical, then campanulate, scarcely expanded, obtuse, fragile, deeply sulcate, the furrows forked, silky-villosose, disc squarrose with divergent, imbricated scales; margin at length split. St. 8–15 cm. × 6–8 mm., white, attenuated upwards, fragile, fibrillose, base bulbous, becoming blackish when touched. Ring white, membraneous, narrow, near the base and volva-like. Gills white, then pink, and at length purplish umber, free, slightly ventricose, 5–6 mm. broad. Flesh greyish, then whitish, very thin. Spores black, broadly elliptical,

Oblectus, delightful.

P. 3-5 cm., whitish, then bright flesh colour, at length black, membranaceous, cylindrical, then conico-campanulate, covered with white silky scales, sulcate nearly up to the disc. St. 8-12 cm. × 5-6 mm., white, slightly attenuated upwards, soft, silky. Volva brownish on the outside, white on the inside, large, free, spreading, up to 6 mm. broad. Gills becoming blackish, with a tinge of flesh colour, free, linear. Flesh white, thin. Spores black, elliptic-oblong, with an oblique basal point, 16 × 8-9 μ. Newly made dung-hills. Aug.—Nov. Rare. (v.v.)

Squamosus, scaly.

P. 2-8 cm., cinereous, covered with reddish brown scales, submembranaceous, ovoid, 2-3 cm. high, then expanded, at length splitting and revolute. St. 6-15 cm. × 6-12 mm., white, equal, often attenuated at the base, covered with reddish brown scales below the ring, smooth above. Ring distant, narrow, fugacious. Gills white, then reddish brown, and finally black, free, ventricose. Flesh brownish under the cuticle, white elsewhere, thin. Spores black, boat-shaped, 9-10 × 5 μ. Caespitose. Base of trunks, elms, and old palings. Sept.—Oct. Uncommon. (v.v.)

**Somewhat ringed, but not with a volva. P. dotted, or spotted with minute, innate squamules.

1642. **C. atramentarius** (Bull.) Fr. (= **Coprinus fuscescens** (Schaeff.) Quél.) Cke. Illus. no. 648, t. 662.  
Atramentarius, inky.

P. 5-8 cm., lurid fuliginous, becoming hoary with adpressed, silky lustre, fleshy, ovate, obtuse, wholly longitudinally and deeply sulcate and ribbed, soft to the touch, minutely mealy, repand-unequal at the margin, disc often squamulose, slightly adpressedly silky at the sides. St. 7-20 cm. × 8-18 mm., white, at first ventricose, fusiform, attenuated shortly downwards, and for a greater distance upwards, furrowed, then elongato-attenuated upwards, firm, longitudinally fibrillose, apex smooth, base often with a few tawny squamules. Ring white, basal, very fugacious. Gills whitish, then brown-black, quite free, ventricose, 10-15 mm. broad, edge flocculose. Flesh fuliginous, scissile. Spores black, elliptical, 9-10 × 5 μ, 1-multi-guttulate. Cystidia cylindric-saccate, 50-120 × 25-37 μ. Taste mild. Edible. Caespitose rarely solitary. Woods, pastures, and gardens, almost always connected with buried wood. May—Dec. Common. (v.v.)

Soboles, offshoot; fero, I bear.

Differs from the type in the truncate, more squamulose p., and in the stems arising from a common tuberos base. Base of stumps, rotten palings, and in hot-houses. May—Sept. Uncommon. (v.v.)

1643. *C. fuscescens* (Schaeff.) Fr. (= *Coprinus atramentarius* (Bull.) Fr. sec. Quél.)

*Fuscescens*, becoming fuscous.

P. 5–7.5 cm., whitish, or greyish, disc becoming fuscous, or rufescent, submembranaceous, globose, then ovate and expanded, at length revolute when deliquescent, at first covered with a somewhat mealy pruina, then smooth, or rimosely squamulose on the disc, obtuse. St. 4–7.5 cm. \( \times \) 4–6 mm., white, equal, fragile, slightly silvery under a lens, at first obsoletely ringed towards the base. Gills white, then umber, free, very broad, semi-ovate. Flesh fuscous in the p. and base of st., thick at the disc. Spores fuscous black, “elliptical, apiculate, \( 10 \times 6 \mu \)” Masseé. Caespitose. Elm stumps, rotten wood, wood in cellars. May—Dec. Uncommon. (v.v.)


*Rimosus*, cracked; *squamosus*, scaly.


***Universal veil floccose, at first continuous, then broken up into superficial scales which form patches on the p.***


*Picaceus*, appertaining to a magpie.

P. 5–10 cm., fuliginous black, variegated with broad, unequal, superficial, separating, white scales, from the breaking up of the universal woven veil, striate. St. 10–25 cm. \( \times \) 6–12 mm., white, attenuated upwards from the bulbous base, fragile, smooth. Gills white, then pinkish, at length black, free, ventricose, 8–12 mm. broad. Flesh brownish under the cuticle of the p., pallid elsewhere, thick only at the disc. Spores black, broadly elliptical, with a basal apiculus, 14–18 \( \times \) 8–12 \( \mu \); “basidia pyriform, 30–45 \( \times \) 15–17 \( \mu \).” Cystidia conical-cylindrical, 100–150 \( \times \) 30–50 \( \mu \)” Rick. Said to be poisonous. Smell none, or foetid. Frondose woods, especially beech, and roadsides. Sept.—Dec. Rather uncommon. (v.v.)

1645. *C. apthosus* Fr.

*Apthos*, the thrush.

P. 2–3 cm., livid, submembranaceous, ovate, 2–5 cm. high, then campanulate, expanded, deliquescent slowly, covered with the universal veil soon separating into floccose, white, fugacious scales. St. 5 cm. \( \times \) 4 mm.


Differs from the type in the repand, olivaceous p. Decaying pieces of moist wood in cellars, cold kitchens, etc. Common.


Flocculosus, flocculose.

P. 4–10 cm., dingy white, membranaceous, ovate, then expanded and splitting in the direction of the gills, striate, covered over with floccose scales. St. 6–10 × 1 cm., white, attenuated upwards from the swollen base, finely silky under a lens. Gills violaceous, then fuscous black, free, ventricose. Spores fuscous black, elliptical, 10 × 7–8 μ. Cystidia cylindrical, 30 × 12 μ. Solitary, rarely caespitose. Pastures, and gardens. June—Sept. Rare, (v.v.)

1647. C. similis B. & Br.

Similis, like.

P. 2.5–4 cm., pallid, disc darker, hygrophanous, ovato-campanulate, lineato-striate, clothed with acute separating warts which are fuscous at the apex. St. 6–7 cm. × 4–5 mm., white, broader at the base. Gills brownish near the margin, adnate, attenuated behind, somewhat linear. Spores "brown, elliptic-oval with a germ-pore, 8–9 × 5–6 μ. Cystidia vesiculose, 30–36 × 15–25 μ" Rick. Trunks of dead trees. Sept. Rare.

****P. at first clothed with distinct flocci, or lax villous down, which fall off and disappear. Ring none.


Extinctorius, like an extinguisher.

P. 2–7.5 cm., pale, disc darker, sublivid, submembranaceous, clavate, then campanulate, at length rimosely split, expanded, scarcely revolute, firm, floccoso-scaly with the universal veil, becoming bare from the margin upwards; margin striate. St. 8–12 cm. × 5–6 mm., white, attenuated upwards from the rooting base, smooth, base cottony. Gills white, then fuscous blackish, reaching the st., narrow, lanceolate. Spores fuscous purple, almond-shaped, 8–11 × 6–7 μ, "mitriform" Rick. Generally solitary. On the ground, at the base of ash trees, or in woods. May—Sept. Rare.


μακρός, long; ῥίζα, root.

P. 2–5 cm., cinereous, or livid, then tinged fuscous, submembrana-
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caceous, oval, then campanulate, 1.5–5 cm. high, at length revolute, ribbed and furrowed from the apex to the margin, at first floccosely mealy with the fugacious veil, becoming naked from the apex downwards; margin thin, deliquescent. St. 2–6 cm. × 4–15 mm., white, equal, or slightly attenuated upwards, continued into a long, thin, tapering root from the base, 1.5–10 cm. long, somewhat silky. Gills white, then black, edge white, free, ventricose. Flesh greyish, becoming white, very thin. Spores black, almond-shaped, 11–15 × 8–9 μ. Cystidia vesiculose. Smell often strong. Solitary, or caespitose. On decaying vegetable matter, more rarely where dung-heaps have been. Woods, and homesteads. July—Oct. Not uncommon. (v.v.)

1650. C. cinereus (Schaeff.) Cke. Cke. Illus. no. 658, t. 671.

Cinereus, ash colour.

P. 1–4 cm., ashy grey, disc often fuscous, membranaceous, cylindrical, 1.5–4 cm. high, then campanulate, and at length revolute, densely covered with white, fugacious flocci, then naked and striate. St. 4–11 cm. × 3–6 mm., white, equal, or slightly attenuated upwards from the thickened base, densely covered with white, fugacious, downward pointing flocci. Gills white, then black, free, lancelolate. Flesh of p. fuscous, white in the st., very thin at the margin. Spores black, pip-shaped, 9–11 × 6–7 μ. Cystidia vesiculose, 60–70 × 30–40 μ. Woods, heaths, pastures, and manure beds. Feb.—Nov. Common. (v.v.)

1651. C. echinosporus Buller.  ἐχῖνος, hedgehog; σπόρα, seed.

P. 3 cm. broad, 18 mm. high, white, then grey, and finally dirty yellowish brown, oval, then conico-campanulate, becoming flattened, and finally revolute and radially splitting along the lines of the longest gills, at first clothed with short, dense down, then breaking up into small, delicate, thin, fugacious tufts or scales; hairs sometimes branched, consisting of slender cells, 80–150 × 5–10 μ. St. 9 cm. × 3 mm. at base, white, slightly attenuated upwards, straight, or flexuose, firm, adpressedly hairy. Gills blackish at maturity, adnexed, very thin, very slightly wedge-shaped, auto-digesting on the edge. Flesh brownish yellow, brownish at the apex of the p., becoming finally dirty ochraceous. Spores black in the mass, very dark and opaque under the microscope, finely warded, or echinate, oval, more or less pip-shaped, apex truncate, 9–11 × 5–7 μ, with an apical germ-pore through which a transparent membrane often protrudes; basidia of three lengths, surrounded by 3–4 paraphyses. Cystidia abundant, conical, rounded at both ends, generally parallel-sided, rarely globose, 70–95 × 23–30 μ, varying up to 105 μ in length and 45–57 μ in diam. Sticks dredged from a pool. Oct. Rare.

C. fimetarius (Linn.) Fr. = Coprinus macrorhizus (Pers.) Rea, and Coprinus cinereus (Schaeff.) Cke.

*Tomentosus,* downy.

P. 1-5-4 cm., grey white, submembranaceous, cylindrical, 3-4 cm. high, then conical, or narrowly pyramidal, not expanded, striate, at length longitudinally cracked, entirely covered with a greyish felty veil, which becomes torn into scales during expansion. St. 5-7-5 cm. × 4-6 mm., greyish, subequal, velvety, base thickened, rooting. Gills whitish, then fuscous blackish, free, linear, edge at first white-micaceous. Flesh white, very thin at the margin. Spores “reddish brown, transparent, 25 × 7-8 μ.” Rick. On dung. Rich pastures, roadsides, and woods. Sept. Uncommon.

1653. **C. niveus** (Pers.) Fr. Cke. Illus. no. 659, t. 672, fig. B.

*Niveus,* snow white.

Entirely snow white. P. 1-5-5 cm., submembranaceous, ovate, soon campanulato-expanded, at length revolute, split and torn, mealy floccose, often squamulose. St. 2-5-7-5 cm. × 3-6 mm., attenuated upwards, very fragile, densely covered with fugacious, upward pointing flocci, becoming smooth. Gills white, then flesh colour, and finally blackish, adnexed, narrow. Flesh white, very thin at the margin. Spores black, broadly elliptical, 15 × 10-12 μ, often apiculate at one end. Cystidia vesiculose. On dung, especially horse. Woods, and pastures. May—Dec. Common. (v.v.)

var. **astroides** Fr. ἀστήρ, star; εἶδος, shape.

Differs from the type in the squamose, grey p. becoming inverted and smooth, and in the elongate, thin, smooth st., stellate at the base. Woody places.

1654. **C. roseotinctus** Rea.

*Roseus,* rose; *tinctus,* coloured.

P. 5-8 mm., fuscous, densely powdered with rose coloured meal, membranaceous, cylindrical, 7-11 mm. high, then campanulate, at length revolute, umbonate, silky, striate, becoming sulcate along the back of the gills; margin torn. St. 2-5 cm. × 2-3 mm., white, at first densely powdered with deep rose coloured meal, then only sparingly powdered near the apex at maturity, equal, becoming elongate and flexuose; base bulbous, white floccose. Gills white, then black, adnexed, 1-1.5 mm. broad, deliquescent. Flesh greyish, thin. Spores black, pipe-shaped, slightly apiculate, 9-11 × 5-6 μ. Ash plantations, and under trees. Aug.—Oct. Uncommon. (v.v.)


*kóθορνος,* a high hunting boot.

P. 2-3 cm., membranaceous, dingy white, reddish, flesh coloured (or yellowish sec. Massee), conico-campanulate, then expanded, umbonate,
and irregularly split, densely furfuraceous. St. 3–4 cm. × 2–4 mm.,
white, attenuated upwards, squamulose, base sheathed with white,
fibrillose squamules. Gills white, then flesh coloured, at length blackish,
free, sublanceolate, crowded. Flesh very thin. Spores black, ellipti-

*****P. covered with small micaceous scales, or granules which
fall off and disappear. Ring none.

1656. C. micaceus (Bull.) Fr. Cke. Illus. no. 660, t. 673.

Micaceus, glintering.

P. 3–6 cm., yellow ferruginous, yellowish livid, disc darker, at length
date-brown-fuscous, ferruginous ochraceous when dry, submembrana-
ceous, oval, then campanulate, undulato-lobed, rosmosely split, striate,
at first covered with glistening micaceous particles, soon naked and
becoming sulcate, disc even; margin plicate and irregular. St. 5–20 cm. ×
4–8 mm., white, or whitish, equal, silky, often curved, fibrillose, be-
coming smooth. Gills white, or isabelline, then brown, or livid at the
ege, and finally fuscous blackish, adnexed, lanceolate. Flesh pallid,
thin at the disc. Spores fuscous black, pip-shaped, or elliptical with
a long apiculus, 9–10 × 5 μ. Cystidia cylindric-oblong, apex rounded,
85–140 × 48–75 μ. Edible. Densely caespitose. Stumps, old posts,
Common. (v.v.)

1657. C. truncorum (Schaeff.) Fr. Schaeff. Icon. t. 6.

Truncorum, of tree trunks.

P. 2–4 cm., globose, then campanulate, ferruginous ochraceous,
densely covered with micaceous meal, soon naked, striate, not becoming
sulcate. St. 7–10 × 3–4 mm., white, very fragile, somewhat striate,
smooth. Gills white, then rosy, at length black, free. Spores fuscous,

1658. C. frustulosum Sacc. Sacc. Myc. Ven. Spec. t. 6, figs. 10–14,
from Atti della Soc. Ven.—Trent. II.

Frustulosum, consisting of small fragments.

P. 3–6 cm., covered up to the yellow umbo with rosy red micaceous meal,
oveate, 1 cm. high, then campanulate, umbonate, even. St. 1.5–
12.5 cm. × 4–6 mm., white, glistening, very brittle, conical, then
cylindrical, smooth, apex mealy. Gills reddish white, then black, free.
Spores 8 × 6 μ. Caespitose. Amongst long grass near a post, and
under Rhododendra. Sept. Rare.


P. 5–7.5 cm., umber, submembranaceous, campanulate, then ex-
anded, deeply sulcate up to the darker, usually wrinkled disc, sprinkled
with large micaceous particles, revolute in decay. St. 10–15 cm. ×
4–6 mm., snow white, attenuated upwards from the slightly bulbous
base, silky. Gills deep rich brown, then black, attached, then seceding and becoming free, narrow, attenuated at both ends. Flesh brownish, thin. Spores 15 × 10–11 µ. Solitary, or clustered. Hollow trees, rich ground, and manure heaps. May—Aug. Uncommon.

1660. C. radians (Desm.) Fr. Radians, radiant.

P. 2–3 cm., yellow tawny, becoming pale, membranaceous, ovate, then campanulate and expanded, micaceous, disc granular, sulcate; margin striate. St. 2–4 cm. × 4–8 mm., white, slightly attenuated upwards from the swollen base, and arising from a dense mass of tawny mycelium, the Ozonium of old authors. Gills white, then violaceous black, adnate, linear, 3–4 mm. broad. Flesh white, tawny under the cuticle of the p. and in the st., thin at the margin. Spores black, elliptic fusiform, 9–10 × 4–5 µ, 1–2-guttulate, with a hyaline germ-pore at each end. Caespitose. On stumps, especially elm, old stacked logs, and plaster walls. April—Dec. Not uncommon. (v.v.)

1661. C. papillatus (Batsch) Fr. Cke. Illus. no. 663, t. 676, fig. B. Papillatus, having a nipple.

P. 4–15 mm., fuscous, disc darker, membranaceous, ovate, then campanulate, at length flattened and revolute, torn, striate, scurfy, beset with minute warts, which are more crowded on the disc. St. 2–3 cm. × 2 mm., hyaline-pellucid, equal, smooth except at the base. Gills blackish, then black, free, few. Spores “brownish black, angularly oval, 7–8 × 6–7 µ. Cystidia vesiculose” Rick. On the ground, and on dung. Pastures, and gardens. June—Oct. Uncommon. (v.v.)

var. oxygenus Fr. ὀξύς, sharp; γένος, race.

Differs from the type in the whitish p., inclining to grey, slightly flocculose as well as the st.


N. Patouillard, the eminent French mycologist.

P. 5–20 mm., ashy-grey, disc yellowish, rough with minute reddish granules, membranaceous, conico-campanulate, then expanded, plicato-sulcate up to the disc at maturity. St. 1–4 cm. × 2 mm., white, fragile, slightly attenuated upwards, smooth. Gills cream colour, then black, free, attached to a collar, 2 mm. broad, distant. Flesh white, reddish at the disc and base of the st., very thin. Spores black, with a hyaline apiculus, angularly globose, 6–7 µ. Spent tea leaves. July. Uncommon. (v.v.)

*****P. smooth, without floccose, or micaceous squamules. Veil none.

1663. C. alternatus (Schum.) Fr. Alternatus, alternate.

P. 3–4 cm., chalky-pallid, disc paleumber, fleshy, hemispherical, discoid, smooth, striped with alternately broad and narrow striae. St.
7–10 × 4–6 mm., whitish, attenuated upwards from the thickened base, smooth. Gills cinereous, then black, adnate, linear. Flesh thin. Spores "black, broadly pip-shaped, 10 × 6–7 μ" Massee. Subcaespitose. On the ground. Rare.

1664. C. erythrocephalus (Lév.) Fr. (= Coprinus oblectus (Bolt.) Fr. sec. Quél.) Lév. Ann. se. nat. (1841), t. 14, fig. 3.

♂ερυθρόκεφαλος, red; κεφαλή, head.

P. 1 cm., reddish vermilion, at length grey, membranaceous, conico-campanulate, 1 cm. high, smooth, striate. St. 2–3 cm., paler than the p., naked. Gills fusceous, then black, slightly adnerved, crowded. Gregarious. On limed soil. Spring. Rare.

1665. C. deliquescent (Bull.) Fr. Deliquescent, melting away.

P. 5–10 cm., livid fuliginous, membranaceous, ovato-campanulate, then expanded, smooth, disc papillate with minute points, never split, but revolute and striate, the striae broad but not deep. St. 7–10 cm. × 4–8 mm., shining white, equally attenuated upwards, corticate, smooth. Gills clay colour, then lurid blackish, free, at length remote from the st., flexuose, very narrow, only 1 mm. broad, very crowded. Flesh thin. Spores black, "elliptical, 8 × 5 μ, obliquely apiculate" Massee. Subcaespitose. On trunks, stumps, and heaps of leaves. Aug.—Oct. Not uncommon. (v.v.)

1666. C. digitalis (Batsch) Fr. Digitalis, belonging to the finger.

P. 2–3 cm., whitish, or straw coloured, disc often darker, becoming olivaceous livid or yellowish cinereous, submembranaceous, fragile, ovate, then campanulate, 2–3 cm. high, quite smooth and naked, moist, striate, except at the even disc. St. 2·5–12·5 cm. × 2–3 mm., shining white, equal, somewhat flexuose, smooth, corticate, fragile, base villose. Gills whitish brown, then black, somewhat free, reaching the st., ventricose; edge white, micaceous. Spores "brown, elliptical, 8–9 × 5 μ," Rick. Caespitose. Damp places in woods, and pastures. Sept.—Oct. Uncommon.


Congregatus, collected into a flock.

P. 1–2 cm., pale ochraceous, membranaceous, cylindrical, then campanulate, 1·5–2 cm. high, viscid, smooth; margin striate, split when expanded. St. 2–3 cm. × 2 mm., white, equal, smooth. Gills white, then black, reaching the st., linear. Flesh white, yellowish at the disc, very thin. Densely caespitose. Woods, roadsides, and gardens. Sept.—Nov. Uncommon. (v.v.)


P. 2·5–5 cm., bright brown, becoming pale ochraceous tan, fleshy, fragile, ovate, then campanulate, 2·5–5 cm. high, sulcate, or deeply
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Dilrectus, smooth, rather dry. St. 10–15 cm. × 4 mm., whitish, equal, somewhat flexuose, slightly downy, apex minutely striate. Gills whitish, then tinged with brown, at length black. Flesh whitish, thin at the margin. Spores blackish brown, elliptical, or sometimes subangular, 12–15 × 7–9 μ. Cystidia “vesiculose, very large, conically flask-shaped, up to 24 μ broad” Lange. Caespitose. Naked soil. Oct. Rare.

C. hydrophorus (Bull.) Quél. = Psathyrella hydrophora (Bull.) Fr.

II. P. very thin, without a pellicle, at length opening into furrows along the back of the gills, and becoming plicato-sulcate. St. thin, fistulose. Gills melting away into very thin lines.

*St. annulate, or volvate.

1669. C. dilrectus Fr. (= Coprinus oblectus (Bolt.) Fr. sec. Quél.) Fr. Icon. t. 140, fig. 2.

Dilrectus, beloved.

P. 1–2.5 cm., whitish, then rosy, at length reddish, submembranaceous, campanulate, obtuse, floccosely mealy, at length split, revolute, and naked. St. 2.5–5 cm. × 2–4 mm., whitish, attenuated downwards, sprinkled with red fibrils. Volva reduced to whitish, spreading, fuggyous squamules at the base. Gills white, then reddish fuscous, at length black, free, somewhat lanceolate, crowded. Flesh white, reddish at the disc, very thin at the margin. Spores black, elliptical, 10 × 6 μ. Cystidia “ovate, vesiculose, average breadth 23 μ” Lange. On the ground. Burnt ground in beech woods, and bare soil. Nov. Rare. (v.v.)


ĕφῆμερος, lasting but a day; eἰδος, like.

P. 4–6 mm., whitish, or livid, membranaceous, pellucid, cylindrical, 5–20 mm. high, then campanulate, sprinkled with superficial flocci, plicato-sulcate, at length split and revolute. St. 2–3 cm. × 1–2 mm., white, smooth, base bulbous and hairy. Ring white, very tender, movable, narrow. Gills white, then black, free, distant from the st., very tender. Spores black, subglobose, often somewhat angular, 7 × 5–6 μ. “Cystidia globose, 23–30 μ” Lange. On horse and cow dung. July—Oct. Not uncommon. (v.v.)


Bulbillosus, with a little bulb.

P. 5–10 cm., grey, disc yellow, convex, then expanded, at first covered with white meal; margin striate, incurved. St. 10–20 × 1 mm., white, smooth, base bulbous. Ring white, movable, median. Gills grey, then black, narrow, 1 mm. broad. Flesh white, yellowish at the disc, very thin. Spores black, subglobose, angular, 8–9 × 8 μ. Horse dung. Aug.—Oct. Uncommon. (v.v.)
1672. **C. Hendersonii** Berk. Cke. Illus. no. 668, t. 680, fig. A.

J. L. Henderson.

P. 2–12 mm., cinereous, disc brownish, membranaceous, cylindrical, then ovali-campanulate, at length plane, minutely granular under a lens, striate half way up; margin folded. St. 2.5–4 cm. × 1–2 mm., white, attenuated upwards, nearly or quite smooth. Ring white, cup-shaped, more or less distant, permanent, fixed. Gills white, then black, free, narrow, rather distant, edge white. Flesh white, very thin. Spores black, “spherical, apiculate, 8–9μ” Quél. Hotbeds, and horse dung. Feb.—Sept. Uncommon. (v.v.)

1673. **C. Bresadolae** Schulz.

L’Abbé J. Bresadola, the eminent mycologist of Trieste.

P. 8 mm., greyish white, disc tinged brown, membranaceous, sub-cylindrical, 17 mm. high, at first covered with a very thin universal veil, which does not break up into squamules, but splits from apex to base, and becomes obliterated. St. 12 cm. × 4 mm., white, tapering upwards, smooth. Ring loose, deciduous. Gills black, edge white. Spores black, cylindrical, ends rounded, 12–17 × 6μ. Gregarious. Worked wood, and on the ground amongst rotten branches. Sept. Rare.

1674. **C. volvaceo-minimus** Crossland.

Volvaceus, having a volva; minimus, least.

P. 4–6 mm., grey, inclining to cinereous, disc darker, membranaceous, ovate, then campanulate, sprinkled with white squamules, striate; margin at length split and reflexed. St. 2–2.5 cm. × 1 mm., white, hyaline, apex slightly swollen, smooth; bulbous base furnished with a distinct, sheathing, persistent ring, or collar, half the width of the p., and finally reflexed. Gills becoming blackish purple, almost free, narrow, attenuated at each end. Spores blackish purple, subglobose, 6–7μ, minutely apiculate. Manure heaps. Rare.

**P. clothed with superficial, separating floccules.

Gills free. Ringless.

1675. **C. lagopus** Fr. Saund. & Sm. Myc. Ill. t. 19.

λαγώς, a hare; πους, foot.

P. 2–5 cm., whitish, or greyish, disc livid, very tender, pellucid, cylindrical, then campanulate, covered with white, fugacious fibrils, then naked, flattened and split, radiato-sulcate. St. 5–12.5 cm. × 2–6 mm., white, attenuated upwards rarely at the base, very fragile, everywhere white woolly. Gills white, then black, free, at length remote, linear. Flesh white, very thin. Spores black, elliptical, 10–12 × 6–7μ. Cystidia “large, vesiculose, ovate, or oblong, about 12–25μ broad” Lange. Rich soil, rotten wood, sawdust, and on dung. Woods, and pastures. July—Oct. Uncommon. (v.v.)

P. 4–7 cm., whitish, disc cinereous, membranaceous, campanulate, sultate, then splitting, disc naked, clothed elsewhere with free, white, pointed, feathery squamules; margin subrevolute. St. 17 cm. × 3–5 mm., slightly attenuated above, hollow, densely floccose. Gills black, free, crowded, linear. Spores black, ovoid, 6–8×5–6 μ, basidia 4-spored. On the ground. Dec. Rare.

1677. C. narcoticus (Batsch) Fr. Cke. Illus. no. 668, t. 680, fig. B. *ναρκωτικός*, making numb.

P. 2–3 cm., white, or greyish, very tender, pellucid, conico-cylindrical, villose with white floccose, fugacious, recurved scales, then flattened, naked, striate. St. 4–5 cm. × 2 mm., white, pellucid, equal, or attenuated upwards, villously fibrillose, becoming smooth. Gills white, then blackish, free, reaching the st., narrow. Flesh white, very thin at the margin. Spores blackish brown, elliptical, 11 × 5 μ, “with a hyaline epispore. Cystidium subglobose, 20–40 μ” Lange. Smell very strong, foetid, narcotic-alkaline. Manure heaps. Oct.


P. 12–15 mm., ashy grey, or slate colour, disc brown, submembranaceous, cylindrical, 18 mm. high, then cylindrico-campanulate, sprinkled with adpressed, or patent, pointed scales; margin slightly striate. St. 2–5–5 cm. × 4 mm., dirty white, attenuated upwards, clothed with short cottony down, and with longer, sometimes deflexed, loose fibres, base strigose. Gills at length black, quite free, linear, 1–2 mm. broad. Flesh whitish, thin at the margin. Spores black, “broadly elliptical, or obliquely pip-shaped, 11–15 × 7–9 μ” Massee. Subcaespitose. Putrid dung. March—Sept. Rare.


P. 8–15 mm., grey, disc fuscous, or tawny, very tender, cylindroconical, 12–15 mm. high, soon opening into furrows and flattened, furfuraceo-flocculose, at length naked and forked-striate. St. 4 cm. × 1–2 mm., whitish cream colour, becoming pale white, equal, flaccid, smooth, base slightly bulbous. Gills ochraceous cream colour, then brownish black, free, at length remote, narrow, linear. Spores “brownish black, priform ovoid, 10 μ” Quél. Subcaespitose. On dung. Pastures, and gardens. July—Oct. Uncommon.

1680. C. cordisporus Gibbs. Lange, Dansk. Bot. Ark. bind 2, no. 3, t. 1, fig. g. *Cor*, the heart; *σπορά*, seed.

P. 3–9 mm., whitish, or pallid ochraceous, disc sprinkled with tawny, furfuraceous papillae, membranaceous, cylindric-ovate, 3–8 mm. high,
then expanded, at length upturned, plicato-sulcate, splitting along the backs of the gills; margin crenate. St. 2–3 cm. × 1–2 mm., whitish-hyaline, glabrous, equal, base slightly thickened and densely strigose-squamulose. Gills pale, then blackish, free, ending close to the st., rather narrow, 25–30 in number in the larger pilei; intermediate shorter ones few or none. Flesh whitish, very thin. Spores dark brown-purple, laterally compressed, front view obtusely cordate, 9–10 μ diameter, side view elliptical, 9–11 × 5–6 μ. Cystidia cylindric-fusiform, 50 × 10 μ. On cow, horse, sheep, and rabbit dung. April—Oct. Not uncommon. (v.v.)

1681. **C. radiatus** (Bolt.) Fr. Cke. Illus. no. 671, t. 683, fig. A.

*Radiatus*, beaming.

P. 2–6 mm., dingy yellowish, or greyish, disc darker, often rufescent, very tender, membranaceous, clavate, then campanulate, soon opening into furrows, flattened, radiato-plicate, pellucid, covered with cinereous down, soon naked. St. 5–25 × 1 mm., hyaline, equal, often pruinose when young, becoming smooth, base silky and villose. Gills whitish, then pallid blackish, free, few, distant. Flesh white, very thin. Spores black, elliptical, 7–8 × 4–5 μ. In troops. Cow, and horse dung. Woods, and pastures. May—Nov. Common. (v.v.)

1682. **C. Spraguei** Berk. & Curt. Cke. Illus. no. 671, t. 683, fig. B.

Charles J. Sprague.

P. 1–2 cm., greyish, disc tawny, very tender, membranaceous, conical, then campanulate, at length expanded and revolute, tomentose, plicate; margin coarsely striate. St. 3–4 cm. × 1–2 mm., pale cinnamon, equal, smooth. Gills white, then blackish, free, few, distant, narrow. Flesh whitish, tawny at the disc, very thin. Spores black, "elliptical, slightly curved, 10 × 5 μ" Massee. Gardens. July. Rare.


*Urtica*, nettle; colo, I inhabit.

P. 4–6 mm., chalky white, spherical, then hemispherical, becoming revolute and radially split, beset with numerous, small, white scales, composed of matted hyphae. St. 1–5–2 cm. × 2 mm., white, attenuated upwards, smooth, hollow, base floccose. Gills white, then chocolate, ventricose, 1–5 mm. wide, very thin. Spores chocolate, oval, 7 × 4 μ; basidia dimorphic. Cystidia cylindrical-ovall, firmly fixed by both ends. Nettle roots, sticks, dead leaves and grass haulms. June—Aug. Uncommon.

1684. **C. platypus** Berk. Cke. Illus. no. 675, t. 687, fig. B.

πλατύς, broad; ποὺς, foot.

P. 4–6 mm., white, then ochraceous flocculose, campanulate, convex,
then expanded. St. 6–8 × 1 mm., whitish, flattened and discoid at the base, smooth. Gills becoming black, free, narrow, distant. Flesh white, thin. Spores “blackish, 8 × 6 µ” Massee. On dead stems of Phalaris arundinacea, and on Palm stems in conservatories. Oct. Rare. (v.v.)

1685. **C. Spegazzinii** Karst.

C. Spegazzini, the South American mycologist.

P. 3 cm., greyish, cylindrical, or oval, 2 cm. high, then expanding and splitting up to the disc, at first with a cobweb-like covering, and even, soon naked and grooved. St. 6–7 cm., white, thickened below and rooting, adpressedly silky. Gills free. Flesh very thin. Spores elliptical, 9–14 × 5–6 µ. On soil in a plant pot. Rare.

***P. micaceous or furfuraceous. Gills commonly adnate to the apex of the st., which (in some species) is dilated into a ring or collar. Ringless.

1686. **C. domesticus** (Pers.) Fr. Fr. Icon. t. 140, fig. 3.

Domesticus, pertaining to the house.

P. 3–6 cm., fuliginous, disc date brown, submembranaceous, ovate, then campanulate, furfuraceo-squamulose, then opening into furrows, and flattened, undulato-sulcate, disc obtuse, even. St. 5–7.5 cm. × 2–6 mm., white, slightly firm, attenuated upwards, adpressedly silky, then polished. Gills white, then flesh colour, at length fuscous blackish, adnerved, linear, 2 mm. broad. Flesh white, fuliginous in the p., thin. Spores black, elliptical, 9–10 × 5–6 µ. Cystidia “only on edge of gill, globular, about 5 µ broad, with or without a 5–16 µ long, 5–6 µ broad, appendix” Lange. Often caespitose. On damp carpets, in cellars, on old walls, and in gardens. April—Dec. Not uncommon. (v.v.)

1687. **C. stercorarius** Fr.

Stercorarius, belonging to dung.

P. 2–3 cm., whitish, very tender, membranaceous, ovate, then campanulate, at length expanded, pellucid, covered with dense, micaceous, somewhat persistent, shining white meal; margin striate. St. 4–5 cm. × 2 mm., shining white, fragile, attenuated upwards from the thickened base, pruinose, becoming smooth, often springing from a darkish sclerotium. Gills white, soon black, adnexed, attenuated behind, ventricose, 1–2 mm. broad. Flesh white, greyish at the disc, very thin. Spores black, broadly elliptical, or subglobose, 7–10 × 7–8 µ. Cystidia vesiculose-clavate, 50–75 × 30–40 µ.” Rick. Rich soil, dung, road-sides. May—Oct. Not uncommon. (v.v.)

1688. **C. tuberosus** Quél. (= Coprinus stercorarius Fr. sec. Lange.)

Quél. Soc. bot. xxv, t. 3, fig. 2. Tuberous, having a swelling.

P. 3–5 mm., white, then greyish, membranaceous, elliptical, then ampanulate, finely striate, covered with hyaline, warted, granular esicles, the remains of the universal veil. St. 2–4 cm. × 1 mm., white,
COPRINUS


1689. C. stellaris Quél. Quél. Soc. bot. xxiv, t. 5, fig. 6.

Stellaris, starry.

P. 1–2 mm., snow white, then greyish, ovate, then campanulate, striate, at length split in a star-like manner, crowned with minute, pellucid vesicles, the remains of the universal veil. St. 1–2 cm. × 1 mm., hyaline, velvety with long, silky white hairs. Gills greyish, then brown, adnate, narrow. Spores for a long time hyaline, then brownish bistre, elliptical, 8μ. Fox, cow, and human dung. Caves, and pastures. April—July. Rare.

1690. C. Friesii Quél. Quél. Jur. et Vosg. i, t. 23, fig. 5.

Elias Fries, the eminent Swedish mycologist.

P. 1–1.5 cm., snow white, then striate and violaceous at the margin, at length grey, ovate elliptical, then revolute, floccosely mealy. St. 5–20 × 1 mm., white, equal, pulverulent, base surrounded by a floccose collar. Gills white, then violaceous, at length brownish black, free, narrow, crowded. Flesh white, very thin. Spores brownish black, angularly globose, 8–10.5 × 6–7.5μ. Dead grass stems. Aug.—Oct. Uncommon. (v.v.)

1691. C. tigrinellus Boud. Boud. Icon. t. 139.

Tigrinellus, spotted like a tiger.

P. 1 cm., snow white, covered with small, scattered, blackish flocci, especially at the disc, becoming rosy towards the striate margin and at length greyish, oblong, then slightly campanulate, at length revolute at the margin, pulverulent. St. 2–3 cm. × 1–2 mm., white, equal, smooth; base somewhat marginately bulbous, velvety, and often with blackish flocci like the p. Gills white, then brownish, free, narrow. Flesh white, thin. Spores brownish black, fuliginous under the microscope, broadly elliptical, 11 × 7μ. Dead leaves of Carex riparia, Carex paludosa, more rarely of Iris Pseudacorus. July—Aug. Uncommon.

1692. C. Gibbsii Massee & Crossland.

Thomas Gibbs, a Yorkshire mycologist.

P. .5 mm., pale ochraceous, disc darker, hemispherical, then expanded, striate, smooth, minutely atomate. St. 4–7 mm., white, pellucid, smooth, attached by a few white strands of mycelium. Gills adnate, 5–7 in number. Spores purplish brown, subcircular, compressed, 8–9μ in diameter, 5μ thick. Cystidia pyriform. Horse, and sheep dung. Nov. Uncommon.
1693. **C. ephemerus** (Bull.) Fr. Cke. Illus. no. 673, t. 685, fig. B.

 breve ; lasting but a day.

P. 6–18 mm., greyish, disc rufescent; very tender, membranaceous, ovali-clavate, then soon campanulate, and on opening into furrows flattened, radiato-sulcate, disc elevated, often umbonate, even, at first slightly scurfy, then naked (but minutely mealy under a lens). St. 2.5–5 cm. × 1–2 mm., whitish, pellucid, equal, smooth. Gills whitish, then fusceous, at length black, reaching the st., remote, linear. Flesh white, very thin. Spores black, ovate, or cylindrical-elliptical, 8–10 μ. Cystidia vesiculose, globular or subconical, sometimes with a bottle-neck apex, 20–50 × 16–30 μ. On horse, and rabbit dung. Dung-hills, and pastures. May—Oct. Common. (v.v.)

1694. **C. bisporus** Lange. (= Coprinus bisporiger Buller.)

Bis, twice; σπορά, seed.

P. 5–12 mm. high and broad, pallid, or ochraceous, then greyish-hyaline, ovate-conical, then revolute and radially sulcate up to the prominent disc, covered with erect, minute hairs, 45–120 × 12–24 μ. St. 3–8 cm. × 1–3 mm., white, equal, base strigose. Gills white, then blackish, adnexed, narrow, 2 mm. wide. Flesh white, ochraceous under the pellicle of the pileus, thin except at the disc. Spores purplish-brown in the mass, dark brown under the microscope, oval, or oblong ellipsoidal, 12–14 × 6–7 μ.; basidia broadly ovate, 8–10 μ. in diam., with 2-sterigmata. Cystidia inflated, ovate, 80–90 × 45–55 μ. Wood and dung. Aug.—Oct. Uncommon. (v.v.)

1695. **C. velox** Godey. Gillet, Champ. Fr. Hym. t. 175

Veloxy, fleeting.

P. 3–4 mm., greyish, membranaceous, cylindrical then obovate, soon expanded, striate, furrowed, disc and ribs scurfy. St. 1.5–3 cm. × 1 mm., white, somewhat pellucid, covered with short, whitish flocci, especially towards the radiating fibrillose base. Gills grey, then black, reaching the stem, thin. Flesh very thin. Spores “dark brown, elliptical, 7.5–9 × 4.5 μ.” Lange. Cystidia “none” Massee and Salmon. Cow, and horse dung. Oct.—Jan. Uncommon.


Aquatilis, found in or near water.

P. 1.5–2 cm., yellowish brown, campanulate, sulcate-plicate almost to the apex, scurfy. St. 5–7 cm. × 2 mm., whitish, equal, scurfy. Gills brownish, then black, reaching the st. Flesh of p. pale orange, thin. On decaying sticks, or twigs partly submerged, or lying in wet mossy places, also on Luzula sylvatica. June. Rare.

33—2
1697. **C. sociatus** Fr. (= Psathyrella crenata (Lasch) Fr. see. Rick.)

Sociatus, gregarious.

P. 3–6 cm., fuscous, then becoming pale, disc date brown, even, and umbilicate, very tender, ovali-cylindrical, then expanded, densely split into furrows, the raised ribs slightly scurfy. St. 4–6 cm. × 1–2 mm., white, delicately attenuated from the base, smooth. Gills grey, then cinereous black, adnexed in the form of a ring, attenuated behind, slightly ventricose. Flesh very thin. Spores “brownish black, ovate-oval, 12 × 7 μ. Cystidia somewhat bottle-shaped with a broad neck, 20–25 μ broad” Lange. Damp ground in gardens, old walls, and woods. July—Oct. Uncommon.

1698. **C. plicatilis** (Curt.) Fr. Cke. Illus. no. 674, t. 686, fig. A.

Plicatilis, folded.

P. 1–3 cm., fuscous, then bluish-grey-cinereous, disc darker, fuscous or rufescent, ovali-cylindrical, then campanulate, soon expanded, opening into furrows, sulcato-plicate, for the most part smooth, disc broad, even, at length depressed. St. 2.5–7.5 cm. × 1–2 mm., pallid, somewhat pellucid, equal, smooth. Gills cream colour, then grey, at length grey-blackish, remote from the st., and adnate to a collar formed by the dilated apex of the st., distant. Flesh whitish, very thin. Spores black, broadly elliptical, 10–12 × 8–9 μ. Cystidia vesiculose, 60–85 × 25–35 μ. Woods, pastures, roadsides, and gardens. April—Dec. Common. (v.v.)


P. 5–1.5 cm. broad, 3–8 mm. high, foxy-red, or rufescent to tan colour at first, becoming grey to dark grey, disc tan coloured, oval, to cylindrical, or elliptical, then expanded and flattened with a strongly depressed disc, splitting along the lines of the gills and becoming plicate, bearing a certain number of minute, scattered, flaky, separable, rufescent or whitish scales, consisting of globose, angular, or elliptical cells, often in chains, 12–30 μ in diam., some brown and some colourless, not ornamented with crystals of calcium oxalate, the pileus also villose or downy with many colourless hairs, 70–100 × 5 μ, enlarged at the apex where minute drops of a clear fluid are exuded under moist conditions. St. 2–8 cm. × 1–2 mm., white, becoming stained with dull yellow, equal, smooth, hollow. Gills grey, then black, at first attached to the stem by the margin for its entire length, then adnexed, and finally free, linear, narrow; margin, before autodigestion begins, slightly divided, fimbriate. Flesh white, thin. Spores black in the mass, dark brownish to black under the microscope, elliptical, 9–15 × 6–9 μ. Cystidia on gill surface none. Horse dung. Sept.—Oct. Uncommon. (v.v.)
COPRINUS

1700. **C. filiformis** B. & Br. Cke. Illus. no. 674, t. 686, fig. B.

*Filum*, a thread; *forma*, shape.

P. 1–2 mm., grey, shining with white mealy particles, very tender, cylindrical, 1–2 mm. high, striate. St. 10–15 × 5 mm., white, hyaline, sprinkled with a few, short, delicate hairs. Gills "blackish, adnate, linear" W. G. Sm. Spores "subglobose, 5 × 4 μ" Massee.

On the ground. Woods, and pastures. April—Sept. Uncommon (v.v.)

****P. always smooth. Ringless.

1701. **C. hemerobius** Fr. Cke. Illus. no. 675, t. 687, fig. A.

*ήμερα*, a day; *βίος*, life.

P. 1.5–3 cm., greyish, disc and surface of ribs date brown, ovate, then campanulate, radiately sulcate up to the even, not depressed disc, smooth. St. 5–9 cm. × 3–4 mm., pallid, fragile, attenuated upwards, smooth. Gills pallid, then blackish, adnate to the dilated apex of the st., attenuated at the margin, linear, 2–4 mm. broad. Flesh white, very thin at the margin. Spores black, elliptical, with a hyaline apical or oblique germ-pore, 10–11 × 5 μ. Cystidia "bottle-shaped, or cylindrical-conical, 60–70 × 15–20 μ" Rick. Pastures, and woods, especially beech. Sept.—Nov. Not uncommon. (v.v.)

*C. hiascens* (Fr.) Quél. = *Psathyrella hiascens* Fr.


1702. **C. eburneus** Quél. Quél. As. fr. (1883), t. 6, fig. 9.

*Eburneus*, white as ivory.

Entirely white and shining. P. 3–4 cm., elliptic campanulate, firm, striate, polished, besprinkled with small, recurved, fugacious flocci. St. 5 cm. × 6–8 mm., firm, smooth. Gills white, then deep bay, free, lanceolate, tardily deliquescing. Spores violet, almond-shaped, 14 μ. Mountainous pastures. July—Sept. Rare.

1703. **C. Schroeteri** Karst.

J. Schröter, the Silesian mycologist.

P. 1 cm., dingy ochraceous, becoming pale, at length sooty grey, elliptical, then expanded, sulcate, smooth. St. 1–2 cm., minutely pulverulent at first, slightly striate upwards. Gills brown, free. Spores black, angularly subglobose, 13–15 × 8–12 μ. On cow dung. Rare.

var. **proximellus** (Karst.) Massee.

*Proximellus*, somewhat nearly related.

Differs from the type in the elliptical spores, 10–13 × 5–7 μ. Manured ground. Rare.
IV. Receptacle membranaceous, tough, reviving with moisture, not putrescent. Spores white.

*Pileus with a thin, unspecialized cellular pellicle.

**Marasmius** Fr.

(μαπαίνω, I die away.)

Pileus membranaceous, or coriaceous, regular, or resupinate. Stem central, or wanting, cartilaginous, or horny. Gills adnate, adnexed, decurrent, or free, pliant, rather tough. Spores white; elliptical, pip-shaped, oblong elliptical, almond-shaped, tear-drop-shaped, globose, or subglobose; smooth, punctate, or echinulate; continuous. Cystidia present, or absent. Growing on the ground, or on wood; solitary, gregarious, caespitose, or fasciculate.

A. Margin of p. incurved at first. St. cartilaginous.

Mycelium floccose.

a. St. externally villose, or pruinose. Gills separating, free.

*St. woolly, or strigose, at the base.

1704. **M. urens** (Bull.) Fr. (= Marasmius peronatus Bolt. sec. Quél.)

Gonnerm. & Rabenh. Heft. 8–9, t. 8, fig. 1. **Urens**, burning.

P. 3–7.5 cm., deep yellow, or pinkish buff, becoming paler, disc darker and often slightly depressed, slightly fleshy, convex, then plane, here and there squamulose, or rimoso-squamulose when dry; margin thin, involute. St. 4–5 cm. × 2–6 mm., concolorous, equal, or slightly bulbous at the base, covered with white farinose down. Gills pale wood colour, then brown, free, united behind, at length remote, distant, tough. Fleshy yellowish. Spores white, elliptical, or pip-shaped, 8 × 4 μ, 1–2-guttulate. Taste very acrid. Woods. May—Oct. Uncommon. (v.v.)

1705. **M. peronatus** (Bolt.) Fr. (= Marasmius urens Bull. sec. Quél.)

Cke. Illus. no. 1070, t. 1117. **Peronatus**, wearing boots of untanned leather.

P. 3–6 cm., light yellowish, or pallid brick rufescent, then becoming pale wood colour, or tan, at first fleshy-pliant, then coriaceo-membranaceous, convex, then plane, obtuse, flaccid, slightly wrinkled, at length lacunose; margin striate. St. 5–9 cm. × 2–6 mm., white, clothed with dense white, or yellowish villose, strigose hairs in the basal third, attenuated upwards, incurved at the base. Gills cream colour, then pallid wood colour and rufescent, adnexed, then separating, free, moderately thin, crowded. Fleshy yellowish. Spores white, pip-shaped, or tear-drop-shaped 7–10 × 4–5 μ. Taste acrid. Woods. July—Dec. Common. (v.v.)


**St. naked at base.**

1707. **M. oreades** (Bolt.) Fr. Cke. Illus. no. 1072, t. 1118.

‘*Opeïas*, belonging to mountains.

P. 2–6 cm., rufescent, then becoming *pale*, *hygrophanous*, *whitish when dry*, fleshy, pliant, convex, then plane, subumbonate; margin *striate* when moist. St. 4–10 cm. × 2–4 mm., *pallid*, very tough, equal, everywhere clothed with a villose-woven cuticle. Gills *pallid-white*, free, broad, distant, the alternate ones shorter, at *first soft*, then firmer. Flesh *pale-ochraceous*. Spores white, elliptical, with an oblique basal apiculus, 7–8 × 5 μ. Smell and taste pleasant. Edible. In rings in pastures, on lawns, and roadsides. May—Oct. Common. (v.v.)


P. 1.5–3 cm., *milk white*, then shining, *often tinted with rose or greyish violet*, and finally *fuscous violaceous*, globose, then *campanulate*, hygrophanous, pellucidly striate. St. 2–5 cm. × 3–4 mm., *white*, then *brownish at the base*, flexuose, *pulverulent*. Gills *white*, then *dingy*, free, distant, ventricose. Spores white, ovoid *pruiniform*, 9 × 7 μ, 1-guttulate. Smell pleasant like that of *Marasmius oreades*. Taste *mild*. Edible. Beech woods, and under beeches. Aug.—Dec. Not uncommon. (v.v.)


Differs from the type in the stem becoming blackish at the base. On stumps and amongst dead leaves. Oct. Uncommon. (v.v.)

1709. **M. plancus** Fr. Cke. Illus. no. 1073, t. 1119, fig. A. *Plancus*, flat footed.

P. 2–3 cm., rufescent, then becoming *pale*, thin, flexuose, plane, or depressed, somewhat *repand*, obtuse. St. 3–5 cm. × 4–6 mm., *pale yellow*, soon *compressed*, unequally *twisted*, covered with a white villose cortex; base *naked*, somewhat *attenuated*. Gills *yellow*, then *bright bay*, or *rust colour*, *narrow*, distant, becoming free. Taste *mild*. Deciduous woods. Sept.—Oct. Uncommon.
1710. **M. scorteu** Fr. Cke. Illus. no. 1073, t. 1119, fig. B.  

*Scorteu*, made of leather.  


*St. woolly downwards*, smooth upwards.  

1711. **M. prasiosmus** Fr. (= *Marasmius archyropus* Pers. sec. Quél.)  

πρασίς ου, *a leek*; ὀσμή, *smell*.  


1712. **M. varicosus** Fr. (= *Marasmius fuscopurpureus* Pers. sec. Quél.) Boud. Icon. t. 72.  

**Varicosus**, full of dilated veins.  

P. 1–3 cm., *fuscous purple*, becoming *darker when dry*, submembranaceous, *pliant*, campanulate, then convex and plane, *umbonate*, *even*. St. 3–6 cm. × 2–4 mm., *rubiginous*, blackish when dry, filled with *dark blood-coloured juice*, which forms drops when it is broken, *very minutely tomentose*, often longitudinally grooved; base reddish, *strigose*. Gills *white*, *then becoming concolorous with the pileus*, adnate, or almost *free*, *very crowded*, *linear*, *very narrow*. Flesh *concolorous*. Spores white, elliptical, 4–5 × 2·5–3μ. Damp *mossy places*. Sept.—Oct. Uncommon. (v.v.)  

1713. **M. fuscopurpureus** (Pers.) Fr. (= *Marasmius varicosus* Fr. sec. Quél.) Cke. Illus. no. 1075, t. 1121, fig. B.  

*Fuscus*, *dark*; *purpureus*, *purple*.  

P. 1–3 cm., *dark purple*, becoming *pale when dry*, slightly fleshy, at first *hemispherical*, then *plane*, *obsoletely umbilicate*, slightly wrinkled. St. 2·5–8 cm. × 2–4 mm., *pallid*, then *rufous*, or *dark purple*, *sheathed towards the base with strigose*, *rubiginous down*. Gills *rufescent*, adnexed in the form of a ring, then free, *distant*, *narrow*. Flesh *dark coloured*. Spores white, elliptical, 4 × 3μ, 1-guttulate. Cystidia none. Oak, and beech woods. Aug.—Oct. Uncommon. (v.v.)
1714. **M. terginus** Fr. (= *Marasmius Stephensii* Berk. sec. Fr.) Fr. Icon. t. 174, fig. 4. **Tergum**, hide.

P. 1–3 cm., flesh colour when moist, whitish when dry, shining, tough, slightly fleshy, convex, then plane, obtuse, at length somewhat depressed; margin striate when moist. St. 5–8 cm. × 2–4 mm., pallid upwards, reddish downwards, slightly attenuated upwards, longitudinally fissile, white villose at the rooting base. Gills pallid, separating free, somewhat crowded, narrow. Flesh white. Spores white, elliptical, 6–7 × 4 μ, punctate. Taste mild. Edible. Amongst leaves, and on twigs in deciduous woods. Oct.—Nov. Uncommon.


**Esculentus**, edible.

P. 1–2.5 cm., lurid ochraceous, or pale yellowish, somewhat fleshy, convex, then plane, moist, sometimes subumbonate; margin at first pellucidly striate. St. 2–7 cm. × 2–4 mm., white, then concolorous, equal, apex pruinose; base long, rooting, tomentosely fibrillosé. Gills white, often becoming yellowish at the edge, rounded behind, adnexed, crowded. Spores white, oblong, 5–6 × 2–3 μ. Cystidia capitate at the apex, ventricosely fusiform, 40–66 × 10–18 μ, very thick walled. Taste slightly bitter. Edible. On buried cones of conifers in woods, and plantations. Sept.—May. Common. (v.v.)


κόνος, a cone; γίγνομαι, to be born.

P. 1–3 cm., fuscous, then paler, very rarely white, somewhat fleshy, convex, or conico-campanulate, then expanded and subumbonate or plane, moist. St. 2–6 cm. × 2–3 mm., white, soon ochraceous, equal, apex white mealy; base long, rooting, tomentosely fibrillosé. Gills cinereous, then white, often becoming yellowish, sinuato-adnexed, crowded. Spores white, oblong, depressed on one side, 4–5 × 2.5–3 μ. Cystidia ventricosely fusiform, 48–72 × 10–14 μ, thick walled. Taste slightly bitter. Edible. On buried cones of conifers in woods, and plantations. Sept.—May. Common. (v.v.)

**St. (at least when dry) everywhere pruinously velvety.**


1717. **M. erythropus** (Pers.) Fr. (= *Collybia erythropus* (Pers.) Quél.) Cke. Illus. no. 1077, t. 1123, fig. B. ἐρυθρός, red; πούς, foot.

P. 2–3 cm., pallid, becoming whitish when dry, hygrophanous, slightly fleshy, convex, then plane, obtuse, slightly wrinkled when
dry, striate. St. 5-7.5 cm. x 4 mm., dark red, apex paler, firm, tough, often compressed, shining, pruinose when dry, base white strigose. Gills whitish, becoming flesh colour, separating free, broad, lax, connected by veins, subdistant. Flesh concolorous. Spores white, pip-shaped, 6 x 3.µ. Taste mild. Edible. Deciduous woods, and heaths. Sept.—Nov. Common. (v.v.)

1718. M. undatus (Berk.) Quél. (= Collybia undata Berk.; Collybia vertirugis Cke.) Cke. Illus. no. 193, t. 149, upper figs., as Collybia vertirugis Cke. 

P. 1-2 cm., dull brown, or cinereous, campanulate, then convexo-plane, tough, submembranaceous, minutely pulverulent, radiatowrinkled. St. 5-6 cm. x 2-3 mm., rufous, apex whitish, sometimes compressed, minutely velvety, base strigose. Gills white with a yellowish tinge, adnate, connected by veins, subdistant, broad. Spores white, subglobose, 6-7 x 4-5.µ, apiculate at the one end. On dead, and cut off bracken stems. Sept.—Oct. Common. (v.v.)

1719. M. hariolorum (DC.) Quél. (= Collybia hariolorum (DC.) Fr.; Collybia confluentis (Pers.) Fr. sec. Quél.) Cke. Illus. no. 194, t. 150, lower figs., as Collybia confluentis Pers. 

Hariolus, a soothsayer.

P. 2-3 cm., rufescent, then flesh coloured, and finally whitish when dry, submembranaceous, tough, pliant, campanulato-convex, then flattened, obtuse, rather depressed. St. 7-12 cm. x 2-4 mm., flesh colour, or purplish, cartilaginous, equal, often compressed, pulverulent with white villose down, confluent at the base; apex pallid, naked. Gills flesh colour, then whitish, linear, narrow, slightly adnexed, then free, somewhat crowded. Spores white, elliptical, 5-7 x 3-4.µ, 1-guttulate. Cystidia “on edge of gill moniliform, 50-65 x 10-12.µ” Rick. Fasciculate. Amongst dead leaves in deciduous woods. June—Dec. Common. (v.v.)

1720. M. ingratus (Schum.) Quél. (= Collybia ingrata (Schum.) Fr.) Fr. Icon. t. 64, fig. 1, as Collybia ingrata (Schum.) Fr. 

Ingratus, unpleasant.

P. 2-6 cm., dingy fuscous-tan, or reddish, becoming whitish flesh colour, slightly fleshy, plant, globose-campanulate, then expanded, umbonate. St. 4-10 cm. x 2-8 mm., fuscous, or purplish, cartilaginous, twisted, covered with a white pruinà, often compressed, villose internally, apex white mealy. Gills reddish brick colour, becoming pallid, free, very crowded, narrow. Flesh reddish, or the same colour as the pileus. Spores white, “lanceolate-fusiform, 7-8 x 3-4.µ. Cystidia none” Rick. Smell mouldy, taste bitter. Caespitose. On dead twigs in woods, and in damp places. Aug.—Oct. Uncommon.

P. 5–10 mm., white, becoming tinged with yellow, fleshy-horny, convex, obtuse, or obsolesly papillate, pruinose; margin thin, incurved. St. 1.5–3 cm. × 1–2 mm., white, equal, rigid, pruinose, base white villose. Gills shining white, decurrent, very narrow, 1 mm. wide, subdistant. Flesh greyish, very tough, elastic. Spores white, pip-shaped, elongated into a long acute point at one end, blunt and rounded at the other, 9–12 × 4 μ, with a large central gutta. Oak woods. Sept.—Oct. Uncommon. (v.v.)

1722. **M. archyropus** (Pers.) Fr. (= *Marasmius prasiosmus* Fr. sec. Quél.) Gonn. & Rabenh. t. 8, fig. 6.

P. 2.5 cm., tan colour, becoming pale, slightly fleshy, convex, then plane, or depressed. St. 6–10 cm. × 2 mm., pallid rufescent under the white tomentose pruina, which forms an outer covering, similar at the base, rigid, tense, straight. Gills pallid, adnexed, separating, crowded, linear. Flesh yellowish, deeper coloured in the stem. Spores white, pip-shaped, 8–10 × 3–4 μ, 1–3-guttulate. Deciduous woods. Sept.—Oct. Uncommon. (v.v.)


Suaveolens, sweet smelling.

P. 4.5–6 cm., flesh colour, becoming pale, convex, then plane, or depressed, tough; margin striate. St. 6–7 cm. × 2–3 mm., reddish, apex paler, everywhere covered with a white tomentose pruina, becoming twisted when dried. Gills pallid, then fuscous, adnexed, separating, crowded, 6–8 mm. wide, ventricose. Flesh whitish in the pileus, reddish in the stem. Spores white, globose, 3–4 μ. Smell very pleasant, like *Marasmius oreades*. Beech woods, and under beeches. Sept.—Nov. Not uncommon. (v.v.)


Torquescens, becoming twisted.

P. 1–2 cm., pallid, disc tawny, membranaceous, thin, convex, then plane, striate, then sulcate. St. 4–6 cm. × 1–2 mm., brown, apex smooth and whitish, delicately velvety, twisted and sulcate when dry, white floccose at the base. Gills white, then reddish, free, thin, ventricose, distant, minutely serrulate. Flesh whitish, reddish in the stem. Spores white, almond-shaped, 9–10 × 6–7 μ. On twigs in woods, and hedgerows. Sept.—Nov. Uncommon. (v.v.)

Obtus, blunt; folius, leaf, gill.

P. 1 cm., whitish, disc tawny, membranaceous, convexo-plane, with a prominent umbo, smooth, sulcate; margin at first incurved. St. 3–4 cm. × 1 mm., tawny, apex white, equal, minutely velvety. Gills pallid, adnate to a collar behind, 2 mm. wide, distant, simple; edge very obtuse, blunt, ciliate with the prominent cystidia. Flesh white, tough, thin. Spores white, broadly oval, or subglobose, 14–15 × 10–12 μ, with a large central gutta, thick walled; basidia clavate, 40–60 × 18–23 μ, with 2–4-sterigmata. Cystidia abundant, fusiform, ventricose, 95–145 × 17–25 μ, apex capitate, 14–18 μ, thin walled. Sept.—Oct. Uncommon. (v.v.)

1726. M. impudicus Fr. Cke. Illus. no. 1078, t. 1124, fig. B.

Impudicus, disgusting.

P. 1–3 cm., bay-brown-rufous, tinted with purple or lilac, becoming pale when dry, slightly fleshy at the disc, convex, then plane, often depressed in the centre, membranaceous, striato-plicate. St. 5 cm. × 2 mm., rufous, or rufous-fusaceous when moist, sometimes violaceous-purple, wholly covered over with white villose down when dry, equal, often compressed, tough, flexible, rooting at the attenuated base. Gills flesh colour, or greyish, then whitish, at first reaching the stem, then free, truncate behind, connected by veins, ventricose, at first crowded, then distant. Spores white, elliptical, 8 × 4–5 μ, "minutely echinulate" Quél. Smell strong, disgusting, resinous. On pine trunks, and needles in coniferous woods. Sept.—Oct. Uncommon.

***St. smooth.

1727. M. dryophila (Bull.) Karst. (= Collybia dryophila (Bull.) Fr.)

Cke. Illus. no. 206, t. 204, as Collybia dryophila Fr.

δρυς, oak; φιλος, loving.

P. 2–4 cm., bay-brown-rufous, yellow, ochraceous, or white, becoming pale, slightly fleshy, tough, convexo-plane, obtuse, disc generally depressed. St. 4–7 cm. × 2–4 mm., whitish, becoming yellow, or rufescent, cartilaginous, somewhat rooting. Gills white, or becoming pale, somewhat free, crowded, narrow. Flesh white, thin. Spores white, elliptical, 5–6 × 3–4 μ. Woods, pastures, and hedgerows. May—Nov. Common. (v.v.)

var. funicularis (Fr.) Rea. (= Collybia dryophila (Bull.) Fr. var. funicularis Fr.)

Funiculus, a slender rope.


var. auratus (Quél.) Rea. (= Collybia dryophila (Bull.) Fr. var. aurata Quél.)

Auratus, golden.

var. oedipus (Quél.) Rea. (= Collybia dryophila (Bull.) Fr. var. oedipus Quél.) Fr. Icon. t. 80, fig. 1, as Mycena galerospis Fr. oëdipus, swollen footed.


P. 7-5 cm., dome-shaped, resembling the old straw bee-hive. St. 1 cm. at the base, rufescent. Amongst dead leaves. Sept.—Nov. Not uncommon. (v.v.)

var. aquosus (Bull.) Rea. (= Collybia aquosa (Bull.) Fr.) Fr. Icon. t. 66, fig. 2, as Collybia aquosa (Bull.) Fr. Aquosus, watery. Pale tan, becoming white. P. hygrophanous; margin striate. Spores elliptical, 5-6 × 3-4μ, 1-guttulate. Amongst moss in woods, and on heaths. May—Oct. Common. (v.v.)

1728. M. exsulptus (Fr.) Rea. (= Collybia exsulpta Fr.; Collybia dryophila (Bull.) Fr. sec. Quél.) Fr. Icon. t. 66, fig. 3, as Collybia exsulpta Fr. Exsulptus, cut out.

P. 2-5–5 cm., tawny brown, or sulphur yellow, slightly fleshy, tough, convex, then expanded and umbilicate, unchangeable. St. 2-3 cm. × 3-4 mm., bright sulphur yellow, cartilaginous, incurved, base sometimes enlarged. Gills bright sulphur yellow, somewhat free (decurrent with a small tooth), arcuate, linear, very crowded, narrow. Flesh rufous. Spores white, 6-5-7 × 3-3-75μ. Taste strong, mushroom-like. Edible. Gregarious. On old pine stumps, and in coniferous woods. May—Oct. Uncommon.

c. St. abrupt, often furnished with a floccose tubercle at the base. Gills adnate, or subdecurrent.

*Stem very smooth, and shining upwards, base simple.


P. 10-15 mm., whitish, somewhat membranaceous, pliant, convex, soon flattened and depressed at the disc, plicato-rugose. St. 2–3 cm. × 1-2 mm., date-brown, bright, shining, thickened and paler upwards, here and there obsequitely pruinose; base inserted, naked, blackish. Gills white, adnate, somewhat decurrent on account of their triangular form, broad, distant, distinct, simple. Spores white, oblong, 10–13 × 3–4μ. On twigs, leaves, and grass stems in woods. Sept.—Oct. Uncommon. (v.v.)


Angulatus, angled.

P. 1–1.5 cm., *fuscos whitish*, somewhat membranaceous, hemispherical, then flattened, at length *plicato-angular*. St. 2–3 cm. × 1 mm., *rufescent grey*, thickened at both ends, base hairy. Gills whitish, distant. Spores white, elliptical, 7 × 4 μ. On grass, submerged rushes, roots, on sandhills. Aug. Uncommon.

1731. **M. languidus** (Lasch) Fr.

*Languidus*, weak.

P. 10–12 mm., *white*, inclining to flesh colour, or light yellow, slightly fleshy, convex, then expanded and *umbilicate*, *flocculose*, *rugos sulcate*; margin involute. St. 2–3 cm. × 1–2 mm., *pallid*, becoming *fuscos*, thickened upwards, base generally white villose. Gills *white*, adnate, then decurrent, distant, connected by veins, narrow. Spores white, elliptical, 8 μ, minutely punctate. On dead leaves of grass, twigs, and dead herbaceous stems in woods. Aug.—Oct. Uncommon.


P. 6–10 mm., *whitish*, then tinged with red or buff, convex, then plane. St. 6–12 × 1 mm., *tan* colour, incurred, and sprinkled with delicate mealy granules at the base and about half way up. Gills white, *then brownish*, adnexed, narrowed in front. Spores "colourless, pyriform, 6 × 3 μ" Massee. Dead twigs, and brambles. Sept.—Oct. Rare.

**St. velvety, or pruinate, base subtuberculose.

1733. **M. foetidus** (Sow.) Fr. Boud. Icon. t. 73. *Foetidus*, stinking.

P. 1.5–4 cm., *bay-brown-tawny*, membranaceous, somewhat pellucid, pliant, convex, then expanded, at length *umbilicate*, *striato-plicate*. St. 2–4 cm. × 1–2 mm., *date brown*, becoming *blackish*, everywhere velvety, horny, attenuated downwards, abrupt, or sometimes inserted with a very small floccose tubercle at the base. Gills *yellowish rufescent*, adnate, or subdecurrent, distant, connected by veins. Flesh *yellowish, becoming blackish in the stem*. Spores white, elliptical-oblong, or tear-drop-shaped, 9–12 × 4–6 μ, 1-guttulate. Smell strong, *very foetid*. Dead twigs, and rotten branches in woods, and hedgerows. Aug.—Jan. Uncommon. (v.v.)

1734. **M. inodorus** Pat. *Inodorus*, without smell.

P. 1–2 cm., *reddish brown*, membranaceous, convex, then expanded, covered with adpressed silky down. St. 1–2 cm. × 1–2 mm., *blackish red*, apex pale, rigid, entirely covered with a white pruinosity consisting of hyaline, short, flexuose hairs. Gills *white*, adnate, unequal, some-

1735. M. xerotoides von Post. Fr. Icon. t. 174, fig. 3.

Xer tus, the genus Xer tus, εἰδός, like.

P. 4–8 mm., fuscous-umber and striate when moist, becoming pale fuscous grey and somewhat undulate when dry, submembranaceous, convex, obtuse, soon expanded and umbilicate; margin involute. St. 10–14 × 1 mm., grey or cinereous-fuscous, velvety; base swollen, and strigose. Gills whitish, becoming cinereous, broadly adnate, subdecurrent, distant, intermixed with shorter ones. Spores white, “elliptical, 5 × 3μ” Massee. On sandy soil in woods. Rare.

1736. M. lagopinus von Post. λαγός, a hare.

P. 2 cm., pallid, slightly fleshy, convex, then plane. St. 2.5 cm. × 1–2 mm., pallid, squamulose with white flocci for the lower half. Gills pallid, adnate, somewhat ventricose. Spores “pale straw colour, sub-globose, 3 × 2μ” Massee & Crossl. Dead branches, and on fir trunks. Oct. Rare.

1737. M. amadelphus (Bull.) Fr. Bres. Fung. Trid. t. 130, fig. 2.

a, with; ἀδέλφος, brother.

P. 6–12 mm., pale yellowish, becoming pale, margin whitish, fleshy-membranaceous, convex, hemispherical, then expanded and depressed, or umbilicate, sulcately striate, pruinose under a lens. St. 1–1.5 cm. × 1.5–1 mm., concolorous, somewhat darker at the base, somewhat mealy but becoming smooth, equal, undulate. Gills white, adnate, or subdecurrent, broad, distant, margin fimbriate. Spores white, oblong, 10–13 × 2.5μ. On trunks, and branches in coniferous woods. Sept.—Dec. Uncommon. (v.v.)

var. insignis Fr. Insignis, striking.

Differs from the type in the whitish, thinner pileus, and the more distant, separating, pallid umber gills with tumid veins. On fir twigs.

1738. M. ramealis (Bull.) Fr. Cke. Illus. no. 1082, t. 1127, fig. B.

Ramus, a branch.

P. 6–15 mm., white, disc rufescent, somewhat fleshy, convex, then plane, obtuse, or depressed, slightly wrinkled, minutely silky under a lens. St. 6–10 × 1–2 mm., whitish, base rufescent, tubercular when young, often incurred, mealy, squamulously hairy under a lens. Gills white, adnate, connected behind, slightly distant, narrow. Spores white, elliptical, 8–10 × 3–4μ, minutely punctate. On dead twigs, branches, and bramble stems in woods, hedgerows, and wood stacks. Jan.—Dec. Common. (v.v.)
1739. **M. candidus** (Bolt.) Fr. Boud. Icon. t. 75.  
*Candidus*, shining white.  
P. 3–15 mm., white, hemispherical, then plane, or slightly depressed, pellucid, submembranaceous, at length wrinkled, sulcate. St. 5–15 × 1–2 mm., white, incurved, delicately pruinose; base floccose, at length becoming fuscous. Gills white, adnexed, ventricose, distant. Flesh white. Spores white, pip-shaped, 9 × 3 μ, multi-guttulate. On pine branches, and twigs. Sept.—Nov. Uncommon. (v.v.)

1740. **M. sclerotipes** Bres. (= *Collybia cirrhata* recent. auct. non Fr. sec. Bres.) Bres. Fung. Trid. t. 11, fig. 1.  
*σκληρότης*, hardness; *pēs*, foot.  
P. 6–8 mm., shining white, umbilicate disc yellow, membranaceous, convex, then plane, rugosely striate, somewhat floccose. St. 12–18 × 5–1 mm., pallid rufous, apex whitish, equal, springing from a rufescent sclerotium, pruinose under a lens. Gills white, adnate, distant, edge fimbriate. Spores white. On the ground in swampy places. Aug.—Oct. Uncommon.

B. Margin of p. straight, and adpressed to the stem at first.  
St. cartilaginous. Mycelium rhizomorphoid, corticate.

1741. **M. alliaceus** (Jacq.) Fr. Cke. Illus. no. 1083, t. 1128, fig. A.  
*Allium*, garlic.  
P. 1–4 cm., whitish inclining to fuscous, often milk-white when young, submembranaceous, campanulate, then expanded, subumbonate, at length striate and sulcate. St. 4–20 cm. × 2–4 mm., blackish, horny, rigid, attenuated upwards, pruinato-velvety; base rooting, incurved, naked. Gills white, adnexed in the form of a ring, then free, subventricose, slightly distant, crisped when dry. Flesh white, blackish in the stem. Spores white, pip-shaped, 8–9 × 3 μ, 2–3-guttulate, “globose-elliptical, 7–9 × 6–7 μ” Rick. Cystidia “bluntly fusiform, 45–60 × 12–15 μ” Rick. Smell very unpleasant, of garlic, persistent. Amongst leaves, and on stumps in woods. Aug.—Nov. Common. (v.v.)

1742. **M. molyoides** Fr.  
*μῶλον*, wild garlic; *εἴδος*, like.  
P. 2–3 cm., brownish, then pale, submembranaceous, convex, then plane and depressed, sometimes slightly striate. St. 5–6 cm. × 2–3 mm., blackish fuscous, paler when young, white at the apex, equal, base clavate, becoming twisted when old. Gills white, or yellowish, free, crowded, ventricose; margin ciliate and darker coloured. Flesh pale ochraceous. Spores white. Smell faint, of garlic when young, then inodorous. Amongst leaves in woods. Aug.—Oct. Uncommon.
1743. **M. cohaerens** (A. & S.) Cke. (*= Marasmius ceratopus Pers. sec. Quéél.) Fr. Icon. t. 79, fig. 1, as *Mycena cohaerens* Fr.

*Cohaerens*, sticking together.

P. 2–3 cm., *cinnamon*, or *umber-tawny*, becoming pale, slightly fleshy, campanulate, obtuse, pruinose, *velvety under a lens*. St. 10–12 cm. × 4 mm., *bay brown*, *horny*, *very rigid*, *shining*, apex *whitish*, pruinose, *caespitoso-fasciculate*, base date-brown, glued together with *white villose down*. Gills *white*, becoming pale, sprinkled with *fulvous bristles* under a lens, *rounded behind*, *somewhat free*, *distant*, *generally connected by veins*, *very broad*. Spores *white*, "*lanceolate, 8–9 × 4 μ.*


1744. **M. cauticinalis** (With.) Fr. Bres. Fung. Trid. t. 41, fig. 2.

*Cautes*, a rough pointed rock.

P. 1–2 cm., *dingy yellow*, becoming *ferruginous*, then ochraceous, membranaceous, thin, pliant, campanulate, then convex, obtuse, at length plane, umbilicate, and striato-sulcate. St. 3–5 cm. × 2–3 mm., *bay brown*, *paler and mealy upwards*, rigid, tough, *floccoso-villose at the tubercular base*, and arising from a *filiform, dark bay mycelium*. Gills *pallid light yellow*, *adnato-decurrent*, *subdistant*, connected by a *network of veins*. Flesh *yellow*, or *rufescent*. Spores *white*, pip-shaped, 6–7 × 3–4 μ, 1-guttulate. Amongst needles in coniferous woods. Sept.—Nov. Uncommon. (v.v.)

1745. **M. torquatus** Fr.

*Torquatus*, adorned with a collar.

P. 1–2 cm., *whitish*, or *greyish white*, *truly campanulate*, 1–2 cm. high, membranaceous, tough, obtuse; margin *plicato-sulcate*. St. 3–4 cm. × 2 mm., *whitish*, equal, shining, base *generally fuscosus*, arising from a *minute, round tubercle*. Gills *white*, *adnate to a free collar*, connected by veins, distant, ascending, unequal. Flesh of pileus *pale yellow*. Spores *white*. On stems, and leaves. Sept.—Oct. Uncommon.

1746. **M. scorodonius** Fr. (*= Marasmius alliatus* Schaeff. sec. Quéél.) Cke. Illus. no. 1079, t. 1125, fig. A.

*σκόροδον*, garlic.

C. P. sessile, resupinate.

1747. **M. spodoleucus** B. & Br. (= Marasmius Broomei Berk. sec. Cke.) Cke. Illus. no. 1088, t. 1137, fig. C.

*σπόδος*, ashes; *λευκός*, white.

P. 4–5 mm., cinereous, conchate, resupinate, pulverulent, or slightly furfuraceous; margin free, arched. Gills white, few, narrow, entire, so short as to leave a naked space at the base. Flesh umber. Spores white, globose, 3–4 μ. Dead twigs and stumps of elm. Nov.—March. Uncommon. (v.v.)

**Pileus with a thick, cellular pellicle.**

*Cells of the pellicle upright, echinulate or verrucose.*

**Androsaceus** (Pers.) Pat. (= Marasmius Fr. p.p.)

(*ανδροσάκες*, an unidentified sea plant.)

Pileus membranaceous, thin, regular, cells of pellicle echinulate, or tuberculose. Stem central, horny. Gills adnate, emarginate, decurrent, or attached to a collar. Spores white, elliptical, pip-shaped, oblong elliptical, subglobose, or club-shaped; smooth; continuous. Cystidia present, or absent. Growing on wood, fallen leaves, etc.

*Fleshy-membranaceous.


*καλός*, beautiful; *πόνη*, foot.

P. 1–1.5 cm., whitish, slightly fleshy, tough, convex, then flattened, obtuse, rarely depressed, slightly wrinkled when dry. St. 2–3 cm. × 2 mm., bay-brown-rufous, tough, shining, attenuated upwards. Gills white, slightly emarginate, thin, subdistant. Spores white, elliptical, 7 × 4 μ. On twigs, grass roots, etc. Sept.—Nov. Common. (v.v.)

**Tender, pellucid.**


*πολυάδελφος*, with many brothers.


1750. **A. flosculinus** (Bataille) Rea. (= Marasmius flosculus Quél.)

Quél. Soc. bot. 1878, t. 3, fig. 4. *Flosculus*, a little flower.

P. 4–5 mm., white, shining, very thin, diaphanous, campanulate,

1 By an oversight this species was described under Omphalia (no. 1412), but its correct position is here.

***Membranaceous.

1751. A. rotula (Scop.) Pat. (= Marasmius rotula (Scop.) Fr.) Cke. Illus. no. 1084, t. 1129, fig. A, as Marasmius rotula Scop.

Rotula, a little wheel.

P. 5–15 mm., whitish, unicolorous, or with the umbilicus becoming fuscous, membranaceous, convex, umbilicate, plicate; margin undulato-crenulate. St. 2–5 cm. × 1 mm., blackish, horny, equal, shining, striate when dry. Gills white, adnate to a collar free from the stem, broad, few (often equal), very distant. Spores white, pip-shaped, acutely attenuated at the one end, 7–9 × 3.5–4.5 µ. Cystidia vesiculose, apex echinulate, 14–16 × 7–8 µ. On dead twigs and roots in woods and hedgerows. May—Jan. Common. (v.v.)

1752. A. graminum (Lib.) Pat. (= Marasmius graminum (Lib.) Berk.) Cke. Illus. no. 1084, t. 1129, fig. B, as Marasmius graminum Lib.

Graminum, of grasses.

P. 5–8 mm., rufous, or very pale rufous, the furrows paler, umbo brown, nearly plane, umbonate, sulcate. St. 2.5–4 cm. × 1 mm., bay or brownish tawny, white above, shining. Gills cream-coloured, adnate to a collar free from the stem, few, subventricose, interstices veined. Spores white, pip-shaped, 8–10 × 4 µ. On leaves, and stems of grasses. July—Feb. Not uncommon. (v.v.)

1753. A. androsaceus (Linn.) Pat. (= Marasmius androsaceus (Linn.) Fr.) Cke. Illus. no. 1084, t. 1129, fig. C, as Marasmius androsaceus Bull.

Androsaceus, an unidentified sea plant.

P. 4–10 mm., whitish, or somewhat fuscous, membranaceous, subumbilicate, wrinkled striate. St. 3–6 cm. × 1 mm., black, horny, very tough, equal, contorted and striate when dry. Gills whitish or greyish flesh colour, adnate, crowded, narrow. Spores white, pip-shaped, 7 × 3–4 µ. On leaves, and twigs, etc. April—Dec. Common. (v.v.)

1754. A. splachnoides (Hornem.) Rea. (= Marasmius splachnoides (Hornem.) Fr.) Cke. Illus. no. 1085, t. 1130, fig. A, as Marasmius splachnoides Fr.

Splachnoides, intestines; ςπλάχνη, like.

P. 5–10 cm., white, disc yellowish flesh colour, submembranaceous, convex, then expanded and slightly umbilicate, sulcate. St. 2–4 cm. × 1 mm., red (becoming fuscous), apex whitish flesh colour, shining. Gills white, subdecurrent, narrow, crowded, simple and anastomosing. Spores white, elliptical, “8 × 5µ” Cke. On pine, oak, and beech leaves in woods. Oct. Uncommon.

34—2
1755. A. Curreyi (B. & Br.) Rea. (= Marasmius Curreyi B. & Br.)
Cke. Illus. no. 1085, t. 1130, fig. B, as Marasmius Curreyi B. & Br.
Frederick Currey, the eminent mycologist.


1756. A. perforans (Fr.) Pat. (= Marasmius perforans Fr.; Marasmius abietis Batsch sec. Quél.) Cke. Illus. no. 1085, t. 1130, fig. C, as Marasmius perforans Fr. Perforans, boring through.

P. 8–12 mm., whitish, becoming pale rufescent, submembranaceous, convexo-plane, minutely umbonate, then flattened, at length slightly wrinkled. St. 2–3 cm. × 1 mm., bay brown, then black, apex flesh colour, tough, equal, velvety. Gills whitish, adnate, narrow, numerous, simple, unequal (the alternate ones shorter), not very distant. Spores white, "lanceolate, 6 × 3 μ" Rick. Smell very foetid. On fir leaves. Aug.—Oct. Rare.

1757. A. insititius (Fr.) Rea. (= Marasmius insititius Fr.) Cke. Illus. no. 1086, t. 1135, fig. A, as Marasmius insititius Fr. Insititius, ingrafted.

P. 10–20 mm., white, membranaceous, plant, convexo-plane, somewhat umbilicate, then plicato-sulcate. St. 2–3 cm. × 1 mm., rufous, inclining to fuscous, horny, attenuated downwards into an inserted base, floccoso-furfuraceous. Gills pale, to cream, broadly adnate, attenuated at the margin, distant, simple, unequal. Spores white, pip-shaped, 6–8 × 3.5–4 μ. Cystidia hyaline, cylindrical, clavate or lanceolate, 40–50 × 5–6 μ. On leaves, decayed grass, etc. Aug.—Oct. Uncommon. (v.v.)

var. albipes (Fr.) Rea. (= Marasmius insititius Fr. var. albipes Fr.) Berk. Outl. t. 14, fig. 6, as Marasmius insititius Fr.

Albus, white; pes, foot.


William Hudson, author of "Flora Anglica."

P. 2–6 mm., pale fuscous-rufescent, membranaceous, hemispherical, wrinkled, beset with scattered, long, purplish, or brownish hairs. St.
1-2·5 cm. × .5 mm., dark purple, or reddish, horny, beset with the same scattered hairs as the pileus, apex pale. Gills white, adnexed, narrow, single, the alternate ones dimidiate, distant. Spores white, oblong elliptical, 9-12 × 4-6 μ, 1-2-guttulate. On fallen, dead holly-leaves in woods, and under hollies elsewhere. March—Dec. Not uncommon. (v.v.)


\[\text{επίχλοι, upon; χλόη, grass.}\]

P. 4-5 mm., whitish, disc bay-brown-fuscous, thin, plano-convex, subpapillate. St. 2-3 cm. × .5 mm., bay brown, paler at the base, coarsely striate, striata setulose. Gills whitish, rounded, broader behind, somewhat crowded. Spores white, “elliptical, 3 × 2 μ” Cke. On dead grass stems, and spines of *Robinia*. Aug.—Oct. Rare.


\[\text{ἀκτής, a ray; φέρω, I bear.}\]

P. 2-4 mm., pale bay brown, with distant darker radiating lines, very thin, convex, then plane, umbilicate, wrinkled when dry. St. 1-2 cm. × .5 mm., paler than the pileus, equal. Gills whitish, adnexed, narrow, alternate ones shorter. Spores white, “subglobose, 3 μ” Massae. On fallen twigs. Aug. Rare.

1761. **A. saccharinus** (Batsch) Rea. (= *Marasmius saccharinus* (Batsch) Fr.) Cke. Illus. no. 1087, t. 1136, fig. C, as *Marasmius saccharinus* Batsch.

\[\text{Saccharum, sugar.}\]

P. 2-5 mm., snow white, membranaceous, convex, subpapillate, sulcate, and plicate. St. 1·5-2·5 cm. × .5 mm., white, reddish at the bulbose base, pruinose, villose under a lens. Gills whitish, broadly adnate, narrow, thick, very distant, reticulato-united. Spores white, “ovoid lanceolate, 12 μ, guttulate” Quél., “elliptical, 5 × 3 μ” Massae. On dead twigs, and leaves. Aug. Rare.

1762. **A. epiphyllus** (Fr.) Pat. (= *Marasmius epiphyllus* Fr.)

\[\text{ἐπίφυλλον, a leaf.}\]

P. 4-10 mm., milk white, membranaceous, very thin, convex, then plane, at length umbilicate, smooth, at length plicato-rugose. St. 1-2·5 cm. × 1 mm., date brown, apex whitish, somewhat horny, equal, velvety under a lens. Gills white, adnate, few, very distant, entire, veined, branched. Spores white, “oval-oblong, 5-6 μ, minutely aculeolate” Quél., “3 × 2 μ” Cke. On dead leaves, twigs, etc. Sept.—Nov. Common. (v.v.)
1763. **A. epiphylloides** Rea. (= *Marasmius epiphyllus* Fr. sec. Lange.)


*Epiphyllus*, the species *A. epiphyllus*; εἰδός, like.

P. 2–5 mm., white, membranaceous, subspherical, then convex and expanded. St. 3–8 × 5 mm., chestnut brown, apex white, equal. Gills white, adnate, 5–1 mm. wide, sometimes connected by veins, few, distant. Spores hyaline, club-shaped, 13–15 × 3.5–4 μ, multi-guttulate. Cystidia 43–45 × 9–10 μ, attenuated at the apex, ventricose at the base. On dead leaves, and twigs. Sept.—Dec. Common. (v.v.)

††Cells of the pellicle decumbent, very long, fibrillose.

**Crinipellis** Pat.

(*Crinis*, hair; *pellis*, skin.)

Pileus membranaceous, regular, cells of pellicle long, thick, tough. Stem central, firm. Gills adnate, or free. Spores white, pip-shaped, smooth, or punctate; continuous. Cystidia present. Growing on wood, twigs, etc.

1764. **C. stipitarius** (Fr.) Pat. (= *Marasmius scabellus* (A. & S.) Quél.; *Collybia stipitaria* Fr.) Cke. Illus. no. 193, t. 149, lower figs., as *Collybia stipitaria* Fr. *Stipitarius*, possessing a stem.

P. 8–10 mm., ochraceous, disc becoming fuscous, membranaceous, convexo-plane, umbonate, then umbilicate, zoned, velvety squamulose, or fuscous fibrillose; margin white, scalloped. St. 2.5–5 cm. × 2–3 mm., dark brown, shaggy-fibrillose, tough, channelled. Gills white, or with a yellowish tinge, separating free, ventricose, somewhat distant. Flesh brownish. Spores white, pip-shaped, 10–12 × 6–7 μ, multi-guttulate. Cystidia "subulate, 30–40 × 6–8 μ" Rick. On dead grass stems, thatch, and twigs. July—Nov. Common. (v.v.)

1765. **C. caulicinalis** (Bull.) Rea. (= *Marasmius caulicinalis* (Bull.) Quél.)

P. 10–15 mm., tan, or fawn colour, campanulate, then convex, thin, delicately tomentose and pubescent. St. 2–3 cm. × 2–3 mm., concolorous, brown at the attenuated base, fibrous, pubescent. Gills whitish yellow, then tan, free, ventricose, thick. Flesh tan. Spores white, pip-shaped, 7–8 × 5 μ, punctate, 1-guttulate. On dead grass stems. Aug.—Oct. Not uncommon. (v.v.)

V. Receptacle coriaceous, fleshy-coriaceous, or woody. Spores white.

Pileus fleshy-coriaceous, gills somewhat soft.

**Panus** Fr.

(*πᾶν*, all; ὀὖς, ear.)

Pileus fleshy-coriaceous, excentric, dimidiate, or resupinate, sessile or stipitate. Stem when present lateral, confluent with the pileus.
Gills soft, then coriaceous, decurrent, or arising from a central point. Spores white, cylindrical, or elliptical; smooth, continuous. Cystidia present, or absent. Growing on wood, often caespitose.

*P. irregular. St. excentric.

1766. **P. conchatus** (Bull.) Fr. (= *Panus flabelliformis* (Schaeff.) Quél.) Krombh. t. 42, figs. 1, 2. Conchatus, shell-shaped.

P. 5–10 cm., cinnamon, then becoming pale, fleshy-pliant, thin, unequal, excentric, or dimidiate, flaccid, squamulose when old. St. 12 × 8 mm., pale, unequal, often compressed, base pubescent. Gills whitish, or pale flesh colour, at length ochraceous wood-colour, deeply decurrent in parallel lines, here and there branched, crisped when dry. Flesh white. Spores white, cylindrical, 6 × 3 μ, 1–2-guttulate. On beech, and poplar stumps and willows. June—Oct. Rare. (v.v.)

1767. **P. torulosus** (Pers.) Fr. (= *Panus flabelliformis* (Schaeff.) Quél.) Cke. Illus. no. 1096, t. 1149, fig. B. Torulus, a tuft of hair.

P. 5–8 cm., somewhat flesh colour, varying rufescent-livid, and becoming-violet, entire, but very excentric, fleshy-pliant, then coriaceous, plano-infundibuliform. St. 2–5 × 2–2.5 cm., pale, covered with grey often violaceous down, oblique, tough, firm. Gills reddish, then tan colour, decurrent, subdistant, simple, separate behind. Flesh pallid. Spores white, cylindrical, 6 × 3 μ, 1–2-guttulate. On old stumps of birch and pollard willows. May—Oct. Common. (v.v.)

1768. **P. rudis** Fr. (= *Panus hirtus* (Secr.) Quél.) Quél. Jur. et Vosg. t. 1, t. 14, fig. 1. Rudis, rough.

P. 1–4 cm., ochraceous fawn, or reddish, fleshy, coriaceous, then corky, thin, unequal, excentric, or dimidiate; margin incurved, lilac, and bristling with hairs. St. 1–2 × 2–3 cm., ochraceous fawn, unequal, shaggy with a rough, hairy, lilac velvet. Gills whitish pink, then pale ochraceous fawn, very decurrent, narrow. Flesh white. Spores white, cylindrical, 5–6 × 3 μ, 1–3-guttulate. Cystidia “on edge of gill cylindrical-clavate, 45–50 × 12 μ, very thick walled” Rick. Beech stumps. May. Uncommon. (v.v.)

**St. definitely lateral.

1769. **P. stipticus** (Bull.) Fr. (= *Panus farinaceus* Schum. sec. Quél.) στύπτικός, astringent.

P. 1–4 cm., cinnamon, becoming pale, thin, elastic, reniform, sometimes infundibuliform and lobed, pruinose, the cuticle breaking up into furfuraceous scales. St. 5–20 × 2–3 mm., pale, coriaceous, dilated at the apex, ascending, pruinose. Gills ochraceous, or cinnamon, ending determinately, thin, very narrow, crowded, connected by veins. Flesh concolorous. Spores white, elliptical, 4–5 × 2–2.5 μ. Cystidia “on
edge of gill lanceolate, clavate at first, $30 \times 15\mu$, then $40-70 \times 7-8\mu$" Rick. Taste very astringent. Poisonous. On dead stumps, and fallen branches. Jan.—Dec. Common. (v.v.)

var. farinaceus (Schum.) Rea.
Farinaceus, mealy.

Differs from the type in the cuticle of the pileus breaking up into whitish-bluish-grey scurf. Trunks, and fir branches. Oct.—Dec. Uncommon. (v.v.)

var. albido-tomentosus (Cke. & Massee) Rea. Cke. Illus. no. 1097, t. 1144, fig. B, as Panus farinaceus Fr.

Albidus, whitish; tomentosus, hairy.

Differs from the type in the pileus being densely clothed with a short, whitish, velvety tomentum. Trunks. Uncommon.

***P. resupinate, sessile, or extended behind.

1770. P. patellaris Fr. Fr. Icon. t. 176, fig. 3.

Patellaris, like a little dish.


1771. P. Stevensonii B. & Br.
Rev. John Stevenson, the eminent Scotch mycologist.


Pileus membranaceous-coriaceous, gills coriaceous, branched, obtuse.

Xerotus Fr.

(ξηρός, dry; ὁς, an ear.)

Pileus membranaceous-coriaceous, regular. Stem central, confluent with the pileus. Gills coriaceous, broadly plicaeform, dichotomous, edge entire, obtuse. Spores white, elliptical, irregular. Growing on the ground.

1772. X. degener Fr. (= Cantharellus carbonarius (A. & S.) Fr. sec. Quél.)
Degener, degenerate.

P. 1.5–4 cm., date-brown-grey when moist, grey when dry, somewhat zoned, coriaceo-membranaceous, very thin, but very tough, plano-infundibuliform, striate when moist, flocculose when dry. St. 4–20 × 2 mm., fuscous, somewhat white-velvety, very tough, equal. Gills

Pileus coriaceous, or woody, pliant; gills firm, often toothed.

**Lentinus Fr.**

*(Lentus, pliant, or tough.)*

Pileus coriaceous, pliant, more or less irregular, stipitate, or sessile. Stem when present, central, excentric, or lateral, confluent with the pileus. Gills tough, adnate, or decurrent, often toothed at the edge. Spores white, elliptical, pip-shaped, oblong cylindrical, or globose; smooth, or echinulate, continuous. Cystidia present, or absent. Growing on wood, rarely on the ground; solitary, or caespitose.

I. P. nearly entire. St. distinct.

*P. scaly, more or less manifestly veiled.


P. 3–8 cm., white, or cream colour, variegated with somewhat adpressed, brownish, or blackish, fibrillose squamules, fleshy-coriaceous, thin, commonly orbicular and central, convex, then infundibuliform; margin often split when dry. St. 3–5 × 5–1.5 cm., whitish, becoming fuscos at the base, very hard, often attenuated downwards and rooting, minutely squamulose, furnished at the apex with an entire, reflexed, fugacious ring. Gills white, then yellowish, decurrent, narrow, crowded, serrate. Flesh white, fuscos at base of stem. Spores white, pip-shaped, 7–9 × 3 µ, 1–3-guttulate. Smell strong, acid. On oak, ash, willow, and poplar stumps, and on railway sleepers. April—Oct. Not uncommon. *(v.v.)*

var. **Dunalii** (DC.) Fr. Berk. Outl. t. 15, fig. 2. **Dunal.**

Differs from the type in the evanescent, adpressed spot-like scales of the pileus, the subsilky stem, and the scarcely manifest veil. On willows, and poplars. Rare.

1774. **L. lepideus** Fr. (= *Lentinus squamosus* (Schaeff.) Quél.)

λεπίδος, a scale.

P. 5–10 cm., pallid ochraceous, variegated with darker, adpressed, spot-like scales sometimes becoming rufescent, fleshy, very compact, firm, irregular, commonly excentric, convex, then plane, or depressed, sometimes broken up into cracks. St. 2–8 × 1–3 cm., whitish, covered with tomentose scales that become rufescent, apex smooth, base woody, sometimes rooting, at the first furnished with a cortina towards the apex.

**P. villose, or pulverulent.**

**λέων, a lion; πούς, foot.**

P. 7–20 cm., *tan-clay-colour,* rather darker towards the margin, fleshy, compact, tough, irregular, very excentric, or almost lateral, broadly umbilicate; margin arched and bent downwards, more or less lobed, distinctly tomentose. St. 7–10 × 2.5–3 cm., pale chestnut, blackish downwards, curved and ascending, hard, tough, subequal, pulverulently furfuraceous, or tomentose. Gills *pale reddish ochraceous,* deeply decurrent, especially on the lower side of the stem, 6–8 mm. wide, connected by veins, wrinkled at the sides; edge serrated, *darker.* Flesh *white.* Spores white, "cylindrical, obliquely apiculate, 12–15μ long" Massee. Smell very pleasant. Taste sweet, pleasant. On decayed willow. Sept.—Oct. Rare.

1776. *L. pulverulentus* (Scop.) Fr.  
**Pulverulentus,* dusty.**


**Adhaerens,* sticking to.**

P. 8–13 cm., *lurid whitish,* then hazel, becoming fuscous, fleshy pliant, somewhat irregular, convexo-subcampanulate, then depressed and infundibuliform, *pulverulently villose,* covered with a resinous, amber coloured gluten. St. 2–5 cm. × 5–12 mm., concolorous, covered with a resinous gluten, rooting, subequal, pulverulently tomentose. Gills *white,* *then yellowish,* sinuate-decurrent, somewhat crowded; edge serrate, glutinous. Flesh *white.* Spores white, "oblong cylindrical, 7–10 × 2.5–3μ" Bres. Smell pleasant, fragrant. Taste somewhat bitter and astringent. Coniferous woods. Autumn—Spring. Rare.

1 Berkeley and Broome describe P. 5 cm., *fuliginous,* at first infundibuliform then lateral, flabelliform, floccoso-pulverulent with little umber particles. St. 7–5 cm. at length smooth. Gills pallid, deeply decurrent, thick, edge crenulate but not torn.

Suffrutescens, arborescent.

P. 4–8 cm., whitish cream colour, fleshy, compact, conical, convex, umbonate, disc covered with reddish brown squamules, then depressed and infundibuliform; margin often revolute. St. 7–11 cm. × 7–9 mm., concolorous, covered with reddish brown scales (which sometimes project) in the lower half or up to the sulcate apex, equal, or more or less bulbous at the base, slightly incurved, strongly flexuose, or twisted in abnormal specimens. Gills white, then yellowish, deeply decurrent, crowded, serrate. Flesh white. Spores white, elliptic cylindrical, 7.5 × 2.5 μ. Squared wood in cellars. Nov.—Feb. Rare. (v.v.)

**P. smooth.**

1779. **L. umbellatus** Fr. *Umbellatus*, like a sunshade.

Very much branched, fleshy coriaceous, tough. Pileoli very numerous, 1.5–2.5 cm., becoming yellowish cinereous, entire, umbilicate. St. 5–9 cm. × 3–8 mm., white, caespitously connate at the base, branched, each branch giving rise to a separate p., sulcate. Gills white, deeply decurrent, very narrow, 1 mm., minutely serrated, crowded. Flesh white. Spores white, globose, 4–5 μ, with a large central gutta. Smell and taste pleasant. Old stumps. Aug.—Oct. Uncommon. (v.v.)

1780. **L. cochleatus** (Pers.) Fr. Cke. Illus. no. 1093, t. 1142, fig. A. 

C. *κοχλια*, a snail with a spiral shell.


II. Dimidiate, sessile, or furnished with a sublateral stem.


Scoticus, Scottish.

P. 1–4 cm., pallid, then brownish, hygrophanous, umbilicate, sometimes infundibuliform, at length flattened; extremely variable in form, either quite stemless and reniform, or variously stipitate, lobed at the margin and sinuate, or plicate. St. 5–5.5 cm. × 2–3 mm., darker, cylindrical, pulverulent, springing from a brown, fibrillose mycelium. Gills pallid, decurrent when the stem is developed, rather distant, strongly toothed, and irregularly torn. Spores white, elliptical, 5–6 × 4 μ. On decayed Ulex, birch, and spruce. Nov.—Jan. Rare. (v.v.)

P. 1–2·5 cm., fawn colour, covered with darker floccose scales, somewhat dimidiate, subcoriaceous, thin, depressed, sometimes very much so and almost cyathiform; margin slightly involute, almost strigose. St. 4–6 × 2–3 mm., concolorous with the gills, or paler, lateral, rough with somewhat reflexed scales; apex with a delicate, white, fimbriate collar or fringe when young. Gills *pale brown*, descending, irregarually serrated and torn at the margin. On a stump standing in a pond. Sept. Rare.

1783. **L. vulpinus** (Sow.) Fr. (*= Lentinus castoreus* Fr. sec. Quél.) Fr. Icon. t. 176, fig. 1. *Vulpinus*, foxy.

Sessile, many times imbricated. Pilei tan, fleshy, very pliant, reniform-conchate, very convex; margin deflexed and almost perpendicular, hence concave beneath; surface wholly peculiar, with raised longitudinal ribs, which are broken up into scales or fibrous teeth towards the thin, incurved, fuscous margin, hence entirely rough and corrugated, velvety tomentose, and white-warty behind. Gills whitish, then reddish, extended to the base, broad, crowded, torn into teeth. Flesh white. Spores white, "somewhat needle-shaped, 9–10 × 1·5μ" Rick. Smell none or strong of field mint. Trunks, and stumps. March—Oct. Rare.

1784. **L. auricula** Fr. Fr. Icon. t. 175, fig. 2. *Auricula*, the ear.


1785. **L. flabelliformis** (Bolt.) Fr. Cke. Illus. no. 1095, t. 1148, fig. B. *Flabelliformis*, fan-shaped.

Subsessile. P. 2–3 cm., pallid fawn colour, membranaceous, plant, reniform, plane, even; margin fimbriato-toothed. St. commonly rudimentary, 4–6 mm. long. Gills whitish, or pallid, broad, somewhat distant, rather thick, torn into teeth at the edge. Spores white, "cylindrical, 8–9 × 2–2·5μ" Rick, "minutely echinulate" Quél. On stumps. Feb. Rare.

**CANTHARELLINEAE.**

Hymenium inseparable from the pileus, spread over the surface of narrow, obtuse veins, gills, or folds, or quite smooth.

**CANTHARELLACEAE.**

Same characters as the suborder.
NYCTALIS. CANTHARELLUS

*Spores white.

Receptacle fleshy, stipitate; gills simple. Parasitic on other Agarics.

Nyctalis Fr.

(νυξ, night.)

Pileus fleshy, regular. Stem central, fleshy, confluent with the pileus. Gills adnate, or decurrent, thick, soft, edge obtuse. Spores white, elliptical, smooth. Chlamydospores often present. Growing on other Agarics, more rarely on the ground.

1786. N. parasitica (Bull.) Fr. Cke. Illus. no. 1068, t. 1113.

Parasitica, parasitic.

P. 1.5–3 cm., whitish fuscous, then becoming pale whitish, somewhat fleshy, conico-campanulate, then convex, plane, and obtuse, or obliquely umbonate, unequal, pellicle persistent, pruinose, grey. St. 2.5–6 cm. x 2–4 mm., white, straight, or curved, equal, or slightly attenuated upwards, pubescent, bristling with hairs at the base. Gills white, becoming fuscous, adnate, thick, distant, with alternate shorter ones intermixed, at length contorted and anastomosing. Flesh dark grey. Spores white, elliptical, 5–7 x 3–4 μ. Smell like Polyporus squamosus. On dead Russula adusta, Russula foetens, Russula chloroides and Lactarius vellereus. Aug.—Dec. Common. (v.v.)

1787. N. asterophora Fr. ἄστήρ, a star; φέρω, I bear.

P. 1–1.5 cm., white, then fawn colour from the large stellate chlamydospores, 15–20 μ, fleshy, conical, then hemispherical, floccoso-pulverulent. St. 1–2 cm. x 2–4 mm., white, then fuscous, equal, often twisted, pruinose. Gills white, becoming dingy, adnate, distant, thick, tense and straight, somewhat forked, often wanting. Flesh dark grey. Spores white, “elliptical, 6 x 4 μ” Rick. On dead Russula nigricans. July—Nov. Common. (v.v.)

N. caliginosa W. G. Sm. = ? a diseased state of some Clitocybe.

Trogia Fr. = Plicatura Peck.

Receptacle fleshy, stipitate; gills forked.

Cantharellus Adans.

(κάνθαρος, a drinking cup.)

Pileus fleshy, regular, excentric, or lobed. Stem central, confluent with the pileus. Gills decurrent, thick, branched. Spores white, rarely pale ochraceous in the mass, elliptical, oval, or pip-shaped, smooth; basidia with 4–8-sterigmata. Cystidia present, or absent. Growing on the ground.
CANTHARELLUS

*P. and solid st. fleshy.

1788. **C. cibarius** Fr. Cke. Illus. no. 1055, t. 1103.

*Cibarius*, pertaining to food.


**var. albus** Fr.

Albus, white.

Differs from the type in being entirely white, or here and there tinged with pink. Woods. Aug.—Oct. Uncommon. (v.v.)

**var. rufipes** Gillet. Cke. Illus. no. 1056, t. 1131.

Rufus, red; pes, foot.

Differs from the type in the rufous base of the stem. Woods. Sept.—Oct. Not uncommon. (v.v.)

**var. ramosus** Schulz. Kalchbr. Icon. t. 27, fig. 4. Ramosus, branched.

Differs from the type in the branched stem, and in the pileoli becoming finally infundibuliform. Woods. Sept. Rare. (v.v.)


*ἀμέθυστος*, amethyst.

P. 5–10 cm., egg-yellow, covered with a lilac down either in zones, or more especially at the margin, fleshy, firm, turbinate, then plane and somewhat depressed; margin often scalloped. St. 3–4 × 2–5–3 cm., egg-yellow, obconic, attenuated downwards. Gills egg-yellow, vein-like, thick. Flesh white, then yellowish. Spores white, oval, 10 × 5–6 μ, filled with granular protoplasm. Smell and taste pleasant. Beech woods. Sept.—Oct. Not uncommon. (v.v.)


Elias Fries, the eminent Swedish mycologist.

P. 2–4 cm., orange, soon becoming ochraceous, convex, then depressed, thin, villose; margin scalloped. St. 2–4 cm. × 2–4 mm., yellow, pruinose, base white villose. Gills yellow, flesh colour, or orange, decurrent, fold-like, narrow, branched. Flesh white, yellowish under the cuticle. Spores pale ochre in the mass, hyaline under the microscope, elliptical, 6–7 × 3–4 μ, 1-guttulate. Taste somewhat sour. Edible. Beech woods. Aug.—Nov. Uncommon. (v.v.)

**C. aurantiacus** (Wulf.) Fr. = **Clitocybe aurantiaca** (Wulf.) Studer.

**C. hypnorum** Brond. = **Clitocybe hypnorum** (Brond.) Rea.
1791. **C. Brownii** B. & Br. (= *Naucoria pediades* Fr. sec. Pat., a monstrous form described as a *Ptychella*) Cke. Illus. no. 1058, t. 1106, fig. A.

_J. Brown._

*Entirely ochraceous white, or cream coloured.* P. 10–15 mm., thin, convex, subumbonate, obscurely silky. St. 4–5 cm. × 1–2 mm., tough, nearly equal, *somewhat furfuraceous*, furnished with a little white, fibrillose mycelium at the base, which sometimes forms a small earthy ball. Gills *fold-like*, obtusely decurrent, rather distant, *linear, very narrow*, sometimes forked. Hymenium nearly white. Spores white, broadly elliptical, 7 × 5–6 μ. Amongst grass. Autumn. Rare.

1792. **C. carbonarius** (A. & S.) Fr. (= *Xerotus degener* Fr. sec. Quél.; *Cantharellus radicosus* (B. & Br.) Fr.) Cke. Illus. no. 1059, t. 1105. _Carbonarius,_ pertaining to charcoal

_P. 1–6 cm., date brown, then black, umbilicate, or infundibuliform, coriaceous, minutely squamulose; margin lobed. St. 3–6 cm. × 3–10 mm., paler than the pileus, rooting, striate, sometimes branched. Gills white, then glaucous, or grey, decurrent, straight, narrow. Flesh whitish._ Spores white, elliptical, 9–10 × 5–6 μ, 2–3-guttulate. Cystidia fusiform, apex acute, 3–4 μ in diam., 95–120 × 13–14 μ, very thick walled, upper portion incrusted. Charcoal heaps, and burnt ground. July—Dec. Common. (v.v.)

1793. **C. umbonatus** (Gmel.) Fr. _Umbonatus,_ umbonate.

_P. 1·5–4 cm., cinereous blackish, convex, umbonate, at length depressed, flocculosely-silky; margin incurved, white. St. 5–8 cm. × 7–10 mm., concolorous, base white floccose, elastic, equal. Gills shining white, decurrent, thin, straight, crowded, repeatedly dichotomous. Flesh white, often becoming red when wounded._ Spores white, pip-shaped, 8–9 × 3–4 μ, 1-guttulate. Cystidia none. Woods, and heaths. April—Oct. Uncommon. (v.v.)

1794. **C. albidus** Fr. _Albidus,_ whitish.

_P. 1–2·5 cm., whitish, inclining to yellowish, or rufescent, convex, umbilicate, thin, lobed, slightly villose. St. 2–4 cm. × 4–8 mm., white, rarely yellowish, tough, flexuose. Gills white, then yellowish, decurrent, crowded, repeatedly dichotomous. Flesh white, yellowish under the cuticle._ Spores white, elliptical, 6–7 × 4–5 μ, 1-guttulate. Cystidia none. Taste mild. Edible. Woods, and pastures. Sept.—Oct. Uncommon. (v.v.)

**P. submembranaceous; st. tubular, polished.**

1795. **C. tubaeformis** Fr. Cke. Illus. no. 1061, t. 1108.

_Tuba,_ a trumpet; _forma,_ shape.

_P. 2–6 cm., fuscos when moist, becoming pale when dry, fleshy-membranaceous, infundibuliform, deeply umbilicate, repand and lobed,
flocculose. St. 3–7 cm. × 3–8 mm., orange-tawny, at length compressed and lacunose. Gills yellow, then pruinose and greyish, fold-like, decurrent, thick, distant, branched. Spores white, elliptical, 8–10 × 6 μ. Woods. Aug.—Nov. Common. (v.v.)

var. *lutescens* (Bull.) Fr.  
*Lutescens,* becoming yellowish.

Differs from the type in the *convexo-umbilicate,* somewhat regular and rather even pileus, in the more equal stem, attenuated upwards and in the dichotomous gills being less divided. Woods. Sept.—Oct. Uncommon. (v.v.)

1796. *C. infundibuliformis* (Scop.) Fr. Cke. Illus. no. 1062, t. 1109.  
*Infundibulum,* a funnel; *forma,* shape.

P. 2–5 cm., yellowish-cinereous, or fuliginous when moist, becoming pale when dry, submembranaceous, umbilicate, then infundibuliform, here and there pervious to the base, rugose, fibrillose. St. 4–8 cm. × 4–6 mm., light yellow, base somewhat thickened. Gills light yellowish, then pruinose and grey, fold-like, thick, distant, branched, anastomosing. Spores white, broadly elliptical, or subglobose, 7–9 × 7 μ. Woods. July—Jan. Common. (v.v.)

Sub, somewhat; *ramosus,* branched.


*Lutescens,* becoming yellowish.


1798. *C. cinereus* (Pers.) Fr. Cke. Illus. no. 1063, t. 1110, fig. A.  
*Cinereus,* colour of ashes.

P. 2–5 cm., hoary fuliginous, becoming whitish, submembranaceous, infundibuliform, often pervious to the base of the stem, villososquamulose. St. 3–8 cm. × 4–8 mm., concolorous, then blackish, attenuated downwards, curved, fibrillosely-striate. Gills cinereous, then whitish pruinose, fold-like, decurrent, thick, distant, connected by veins, slightly branched. Flesh blackish Spores white, elliptical, 7 × 5 μ. Smell pleasant, “like the Mirabelle plum” Quél. Woods. Sept.—Nov. Uncommon. (v.v.)
1799. **C. leucophaeus** Nouel. Cke. Illus. no. 1064, t. 1111, fig. A.  
λευχος, white; φαιος, dusky.

P. 2–3 cm., *dusky brown*, submembranaceous, tough, plane, then depressed or infundibuliform; margin incurved, then reflexed. St. 3–4 cm. × 2–4 mm., *concolorous*, or *paler*, slightly thickened at the base. Gills *white*, decurrent, distant, simple, or forked, with intermediate shorter ones. Spores *white*, elliptical, 9 × 5μ. Woods, and heaths. Sept.—Oct. Uncommon. (v.v.)

1800. **C. Houghtonii** Phill. Cke. Illus. no. 1060, t. 1107, fig. B.  
Rev. William Houghton.


1801. **C. cupulatus** Fr. (= *Cantharellus helvelloides* (Bull.) Quél.)  
Boud. Icon. t. 71, as *Cantharellus helvelloides* (Bull.) Quél.  
*Cupulatus*, pertaining to a little tub or cask.

P. 10–15 mm., *pallid fuscous when moist, becoming pale, somewhat rufescent when dry, membranaceous, plano-infundibuliform* (exactly *cup-shaped*), reexpand, lobed, flocculose when dry; *margin striate*. St. 2–3 cm. × 3–5 mm., *paler than the pileus*, expanding into the pileus, tough, pruinose. Gills *grey*, decurrent, very distant, narrow, branched, with intermediate simple ones. *Flesh greyish, becoming white*. Spores *white*, pip-shaped, or elliptical with a lateral basal apiculus, 8–10 × 5–6μ. Open heathy ground and old walls. Oct. Uncommon. (v.v.)

1802 **C. Stevensonii** B. & Br. Cke. Illus. no. 1064, t. 1111, fig. B.  
Rev. John Stevenson, the eminent Scotch mycologist.


1803. **C. replexus** Fr.  
*Replexus*, bent back.

P. 1·5–2·5 cm., *fuscous, then cinereous*, membranaceous, *campanulate, convex*, expanded and inverted, striate. St. 3–5 cm. × 2 mm., *grey*, thickened above. Gills *white, then glaucescent*, adnato-decurrent, connected by veins, distant, branched, and dimidiate. On the ground amongst grass, moss, and leaves. Oct.—Nov.

var. **devexus** Fr. Cke. Illus. no. 1098, t. 1150, fig. A.  
*Deveexus*, inclining downwards.

Differs from the type in the *cuculate pileus*, and the *simple, cinereous* gills. Spores *white*, elliptical, 9–10 × 6μ, 1-guttulate. Burnt ground, and amongst moss on heaths. Nov. Rare. (v.v.)

R. R. B.

35
**Cantharellus. Craterellus**

*C. muscigenus* (Bull.) Fr. = *Dictyolus muscigenus* (Bull.) Quél.
*C. glaucus* (Batsch) Fr. = *Dictyolus glaucus* (Batsch) Quél.
*C. retirugus* (Bull.) Fr. = *Dictyolus retirugus* (Bull.) Quél.

Receptacle fleshy, membranaceous, funnel-shaped, or umbilicate. Hymenium veined, or smooth.

**Craterellus** Fr.

(κρατηρ, a large bowl.)

Pileus fleshy, or membranaceous, funnel-shaped, or umbilicate. Stem central, confluent with the pileus. Hymenium smooth, becoming wrinkled. Spores white, rarely pale ochraceous in the mass, elliptical, ovoid, or oblong elliptical, smooth, or punctate; basidia with 2–4-sterigmata. Cystidia none. Growing on the ground.

*Tubaeform,* pervious to the base of the stem.

*C. lutescens* (Pers.) Fr. = *Cantharellus lutescens* (Pers.) Fr.

1804. **C. cornucopioides** (Linn.) Fr. Berk. Outl. t. 19, fig. 6. 

*Cornu copiae,* horn of plenty; εἴδος, like.


**Infundibuliform,* st. stuffed.

1805. **C. sinuosus** Fr. Fr. Icon. t. 196, fig. 2. *Sinuosus,* undulated.

P. 2–3 cm., fuscous grey, slightly fleshy, infundibuliform, undulated, floccose. St. 2.5–4 cm. x 3–8 mm., grey, apex ochraceous. Hymenium grey, then ochraceous, at length with interwoven wrinkles. Spores *pale ochraceous* in the mass, elliptical, 7–9 x 5–6 μ, punctate. Smell none, or of musk. Woods. Aug.—Nov. Uncommon. (v.v.)

1806. **C. crispus** (Sow.) Fr. *Crispus,* curled.


P. 10–12 mm., cinereous, convex, umbilicate, thin, rugose, villose. St. 5–20 x 2–4 mm., grey, somewhat compressed. Hymenium bluish-
grey, smooth, or slightly wrinkled, pruinose. Spores white ovoid, or elliptical, 8–10 × 6–7μ, finely punctate. Beech woods, and under beeches. Aug.—Oct. Not uncommon. (v.v.)

Receptacle membranaceous, spathulate, or cup-shaped pendant. Hymenium veined, or smooth.  

**Dictyolus** Quél. (= Cantharellus p.p.).  
(§ικτυον, network.)

Pileus membranaceous, spathulate, or cup-shaped and pendant. Hymenium consisting of vein-like gills, anastomosing in a reticulate manner, or almost smooth. Spores white, elliptical, or pip-shaped, smooth. Cystidia none. Growing on wood, or on mosses.

*P. attached by the apex, resupinate, then reflexed.

1805. **D. retirugus** (Bull.) Quél. (= Cantharellus retirugus (Bull.) Fr.) Cke. Illus. no. 1066, t. 1112, fig. A, as Cantharellus retirugus Fr.  
Rete, a net; ruga, a wrinkle.

P. 1–2 cm., cinereous, becoming whitish, pellucid, membranaceous, cup-shaped, then expanded, repando-lobed, very tender. Gills grey, or whitish, fold-like, radiating from the centre, connected by veins and reticulated, very tender. Spores white, elliptical, 7–8 × 5–6μ. On twigs, and mosses. April—June. Uncommon. (v.v.)

1809. **D. lobatus** (Pers.) Quél. (= Cantharellus lobatus (Pers.) Fr.)  
Lobatus, lobed.

P. 1.5–3 cm., dark fuscous when moist, becoming pale when dry, pellucid, membranaceous, somewhat round, or reniform, then somewhat lateral and lobed, white cottony at the base. Gills concolorous, fold-like, subdistant, distinct, branched. Spores white, broadly elliptical, 8–10 × 6–7μ. On mosses, and Carices in bogs. April—Oct. Uncommon. (v.v.)

D. cyphellaeformis (Berk.) Cost. & Duf. = Pleurotus cyphellaeformis Berk.

**P. lateral, substipitate, or sessile.

1810. **D. muscigenus** (Bull.) Quél. (= Cantharellus muscigenus (Bull.) Fr.)  
Muscus, moss; genus, born.

P. 1–2.5 cm., fuscous when moist, cinereous whitish and zoned when dry, membranaceous, tough, spathulate, slightly undulate when full grown. St. 2–4 × 2–4 mm., lateral, villose at the base, horizontal and continuous with the pileus. Gills concolorous, slightly swollen, diverging from the apex of the stem, distant, branched. Spores white, pip-shaped, 7–9 × 4–6μ, 1–2-guttulate. On mosses. June—Nov. Uncommon. (v.v.)

35—2
1811. D. glaucus (Batsch) Quél. (= Cantharellus glaucus (Batsch) Fr.) Cke. Illus. no. 1065, t. 1115, fig. B, as Cantharellus glaucus Batsch.

γλαυκός, pale green.


**Spores ochraceous.

Receptacle fleshy coriaceous, stipitate. Hymenium fold-like.

Neurophyllum Pat.

(νεῦρος, a sinew; φύλλον, a leaf.)


1812. N. clavatum (Pers.) Pat. (= Craterellus clavatus (Pers.) Fr.) Krombh. t. 45, figs. 13–17, as Cantharellus clavatus.

Clavatum, club-shaped.

P. 3–15 cm., lilac, or rose colour, then flesh colour, and finally ochraceous, fleshy, turbinate, truncate, or depressed, flexuose, attenuated into the solid stem. St. 1–5 × 1–3 cm., whitish lilac, or amethyst, then pale, occasionally branched, obconic. Hymenium purplish, then concolorous, fold-like, thick, reticulated, reticulations anastomosing, decurrent. Spores ochraceous, elliptical, or fusiform, 10–12 × 4–5 μ, 1–2-guttulate. Smell and taste pleasant. Edible. Mountainous fir woods; the British record is beech woods. June—Oct. Rare. (v.v.)

BOLETINEAE.

Hymenium soft, separable from the pileus, and lining the inside of pores, or pore-like gills.

BOLETACEAE.

Same characters as the suborder.

1. Hymenium spread over gills, which anastomose by veins, and form irregular pores, especially at the apex of the stem. Spores white, ochraceous, or ferruginous.

Paxillus Fr.

(Paxillus, a small stake.)

Pileus fleshy, regular, excentric, dimidiate, or resupinate. Stem central, excentric, lateral, or none, confluent with the pileus. Gills decurrent, soft, almost mucilaginous, separable, often anastomosing. Spores white, ochraceous, reddish, or ferruginous; elliptical, pip-shaped, or globose, smooth. Cystidia present, or absent. Growing on the ground, or on wood.
I. P. entire, central. Spores dirty white, only in P. panaeolus with a tendency to ferruginous.

1813. **P. giganteus** (Sow.) Fr. (**= Clitocybe gigantea** (Sow.) Quél.)

Cke. Illus. no. 150, t. 106, as **Clitocybe gigantea** Sow.

Entirely tan white. P. 3–30 cm., fleshy, convex, then plane, or depressed, then plano-infundibuliform, soft, minutely adpresso-squamulose, often guttate, the whole surface under a lens clothed with a fine matted silkiness; **margin strongly involute** and pubescent at first, then spreading, and becoming smooth, at length revolute and sulcate with small shallow channels, often splitting. St. 3–7·5 x 2–5 cm., equal, or attenuated upwards, base subbulbous, smooth, or minutely pubescent. Gills whitish, then tan colour, subdecurrent, often branched and anastomosing, narrow, or broad, very crowded. Flesh white, very firm, thin at the margin. Spores whitish, broadly elliptical, 7–8 x 5–6 μ, 1–3-guttulate. Smell pleasant, taste mild. Edible. Often forming large rings. Pastures, heaths, rarely in woods. Aug.—Nov. Not uncommon. (v.v.)

1814. **P. Alexandri** Fr. (**= Clitocybe gilva** Fr. sec. Quél.)

P. 5–7·5 cm., fawn colour, fleshy, compact, plane, then depressed, dry, unpolished; **margin closely involute**, somewhat striate when expanded. St. 12 mm. x 2·5–3 cm., ventricose. Gills boxwood colour, subdecurrent, crowded. Flesh white, becoming yellow. Spores whitish. Amongst moss in woods. Sept.—Oct. Rare.

1815. **P. lepista** Fr. Fr. Icon. t. 164, fig. 1.

**λεπαστή**, a drinking vessel.

P. 4–10 cm., dingy whitish, fleshy, convex, then plane and depressed, obtuse, rimuloso-squamulose towards the circumference, dry; **margin involute**, often undulato-flexuose, smooth. St. 2·5–10 cm. x 12–15 mm., whitish, sometimes rufescent, or inclining to fuscous, equal, or attenuated downwards, always blunt at the white villose base, cuticle somewhat horny and continuous with the hymenophore. Gills dingy white, at length darker, deeply decurrent, somewhat branched, simple at the base, 3–6 mm. broad, very crowded. Flesh whitish, compact, or thin, spongy-elastic in the st. Spores reddish, becoming fuscous pallid, elliptical, 7–8 x 5 μ. Cystidia none. Smell mealy, often rather rancid. Woods, and pastures. Oct.—Nov. Uncommon. (v.v.)

1816. **P. extenuatus** Fr. Fr. Icon. t. 164, fig. 2. Extenuatus, thinned.

P. 3–7·5 cm., clay, or becoming fuscous tan, fleshy, convex, gibbous, then expanded, obtuse, tough, smooth, moist; **margin involute**, pubescent, at length expanded, rigid-fragile. St. 3–5 cm. x 6–12 mm,
pallid, somewhat horny, elastic, fibrillose, firm, conico-elongate, or clavate, becoming more equal; base incrassated, rooting, and condensing the earth into a large ball. Gills whitish, then mouse colour, arcuate, very narrow, 3-4 mm. broad, linear, very crowded. Flesh watery whitish, rigid, compact at the disc, very thin at the margin, spongy in the st., scissile. Spores white, "elliptical, 6-7 × 3-4 μ, smooth. Cystidia none" Rick. Grassy places in pine woods. Oct. Rare.

1817. P. panaeolus Fr. Cke. Illus. no. 863, t. 874, fig. A.

Entirely whitish, the st. becoming rufescent. P. 2-5 cm., fleshy, convexo-plane, then somewhat depressed, smooth; margin thin, involute. St. 3-5 cm. × 3-6 mm., attenuated upwards or downwards, striato-fibrillose. Gills at length watery-ferruginous, slightly decurrent, narrow, crowded, separated from the hymenophore by a horny line, and readily separating from the p. Flesh becoming black, thin. Spores very pale ferruginous, globose, 5 μ, 1-guttulate. Coniferous woods. Oct.—Nov. Rare. (v.v.)

var. spilomaeolus Fr. σπιλόμαεος, a spot; ἀιώλος, variegated.

Differs from the type in the yellowish white p. spotted as with drops, in the slender, yellowish white st. and in the gills being horny grey at the base. Amongst fir leaves. Oct. Rare.


Orcella, the species Clitopilus orcella; eiδος, like.

P. 2-5 cm., snow white, becoming stained with livid or greyish blotches, fleshy, convex, then flattened, minutely silky, shining; margin thin, persistently incurved. St. 2-5-6 cm. × 3-6 mm., ochraceous, gradually tapering to the base, elastic, silky fibrillose. Gills whitish, then livid, at length dingy yellowish brown, adnato-decurrent, crowded, 3 mm. broad, separated from the flesh of the p. by a horny line. Flesh white, thin at the margin. Spores pale dingy ochraceous, elliptical, 5-8 × 3-4 μ, 1-guttulate. Woods, and amongst grass. Sept.—Nov. Rare. (v.v.)


Lividus, of a leaden colour.

P. 2-5-5 cm., dingy white, or livid ochraceous, opaque, convex, at length slightly depressed at the disc. St. 7-5-10 × 1 cm., white, attenuated downwards, fibrillose. Gills white, decurrent, arcuate, 3 mm. broad, almost crowded. Flesh whitish, thick at the disc. Spores nearly white, globose, 3-3-5 μ. Smell pleasant. Woods. Oct. Uncommon. (v.v.)
1820. **P. revolutus** Cke. Cke. Illus. no. 865, t. 862.

Revolutus, rolled back.

P. 2·5–4 cm., pale ochraceous, disc slightly darker, fleshy, convex, obtuse; margin thin, even, sometimes at first tinged with violet, a little revolute. St. 3·5–1 cm., paler than the p., often tinted violet at the base, attenuated downwards. Gills pallid, then clay coloured, very decurrent, scarcely crowded. Flesh white, thin at the margin. Spores pale, globose, 3·5–4 μ. Smell mealy. Fields. Oct. Uncommon.

II. P. commonly excentric, or resupinate. Spores ferruginous.


P. 5–8 cm., deep rufous umber, or yellowish brown, fleshy, convex, or pulvinate, then plane, adpressedly tomentose, becoming smooth, dry; margin often lobed and sinuate. St. 3·5–5 cm. × 6–15 mm., yellow, often with a dingy purplish tinge, bulbous, or attenuated at the base, equal, or fusiform, somewhat rooted, adpressedly fibrillose, the cuticle often breaking up into square-sessile revolute flaps. Gills yellow, then golden, becoming reddish when bruised, decurrent, distant, the alternate ones broader, connected by veins at the base, and in some cases anastomosing to form pores towards the margin. Flesh reddish, becoming yellow, soft, juicy. Spores lurid ochraceous, oblong, 12–13 × 4–5 μ, often 2-guttulate. Cystidia "almost flask-shaped-lanceolate, 60–70 × 9–15 μ" Rick. Woods. Aug.—Nov. Rather uncommon. (v.v.)

1822. **P. involutus** (Batsch) Fr.

Involutus, rolled in.

P. 7–20 cm., ochrey ferruginous, fleshy, convexo-plane, then depressed, for the most part central, pubescent, soon becoming smooth, somewhat viscid when moist, shining when dry; margin obtuse, villous, closely involute, then extenuated and acute. St. 5–8 × 1–4 cm., dingy yellowish, generally spotted, thickened upwards, more rarely bulbous at the base, naked. Gills pallid, then ferruginous, at once dingy-spotted when touched, decurrent, rather broad, branched behind, and often anastomosing and forming pores near the st. Flesh pallid, or yellowish, compact, soft. Spores deep ochraceous, elliptical, 8–10 × 5–7 μ. Cystidia "lanceolate, 60–75 × 8–15 μ" Rick. Taste mild. Edible. Woods, heaths, and pastures. June—Dec. Common. (v.v.)

var. excentricus Fr. EKKEVTROS, out of the centre.


var. subinvolutus (Batsch) W. G. Sm.

Sub, somewhat; involutus, rolled in.

Differs from the type in the less involute margin of the p.
1823. **P. porosus** Berk.  

P. 10–11 cm., reddish claret, or olive brown, fleshy, viscid when moist; margin thin, even, not involute. St. 8–9 × 1–5–2 cm., claret brown, darker below, excentric, tough, equal, or attenuated downwards, somewhat reticulate above with the pores. Gills yellow to sulphur green, changing to pale blue, and then brownish when bruised, dull green when old, decurrent, shallow, poriform, pores round to elongate, irregular large to small. Flesh dull pale vinous brown, mottled and streaked, darker and changing colour in the st. Smell very strong, unpleasant. Moist woods under firs. Sept.—Oct. Rare.

1824. **P. leptopus** Fr. Fr. Icon. t. 164, fig. 3.  

λεπτός, thin; πούς, foot.

P. 4–8 cm., fuscous yellowish, always excentric, or lateral, at length depressed, but gibbous at the disc, fleshy, dry, covered with dense down, soon torn up into dense, villose, fuscous, or yellowish scales. St. 1–2·5 × 1 cm., lemon-yellow-olivaceous, short, attenuated downwards, somewhat incurved. Gills yellowish, then darker, not spotted when touched, decurrent, simple, not anastomosing, tense and straight, very narrow, crowded. Flesh yellow, thin at the margin. Spores “pale dingy yellow, pip-shaped, 8–9 × 5 μ” Massee. Woods, bogs, and on stumps. Aug.—Oct. Not uncommon. (v.v.)

1825. **P. atrotomentosus** (Batsch) Fr. Cke. Illus. no. 869, t. 876.  

Ater, black; tomentosus, woolly.

P. 5–30 cm., ferruginous, fleshy, excentric, convex, then plano-infundibuliform, sometimes wholly lateral and ascending, dry, rivuloso-granular, sometimes also slightly tomentose; margin thin, involute. St. 5–8 × 1–2·5 cm., covered over with dense, soft, umber blackish, or inclining to violaceous, velvety down, elastic, somewhat equal, curved, ascending, rooting. Gills yellowish, adnate, scarcely decurrent, branched at the base, somewhat anastomosing, 6 mm. broad, crowded, easily separating from the sulcate hymenophore. Flesh white, compact, firm. Spores pale ochraceous, broadly elliptical, 4–6 × 3–4 μ, 1-guttulate. Cystidia none. Taste mild. Edible. Pine woods and on pine stumps. Aug.—Nov. Not uncommon. (v.v.)

1826. **P. crassus** Fr. Cke. Illus. no. 870, t. 877.  

Crassus, thick.

P. 5–7–5 cm., becoming ferruginous, fleshy, oblique, almost plane, becoming smooth. St. 1–2 × 1 cm., concolorous, tapering downwards, excentric, ascending. Gills cinnamon, decurrent, straight, 4 mm. broad, subdistant. Flesh somewhat concolorous, thick, soft, spongy. Spores “ferruginous, elliptical, 15–18 × 7–8 μ” Cke. On trunks, worked wood, ground of rifle butts, and in woods. Nov. Rare.
1827. **P. panuoides** Fr. (= *Paxillus lamellirugus* (DC.) Quél.) Cke. Illus. no. 871, t. 878. *Panus*, the genus *Panus*; εἶδος, like.


var. *fagi* (B. & Br.) Cke.

Differ from the type in being crisped, pallid upwards, orange beneath and having orange gills. Gregarious. Beech stumps. Sept.—Oct. Rare.

2. Hymenium lining the inside of fleshy tubes.

Spores white, or pale yellowish.

**Gyroporus** (Quél.) Pat. (= *Boletus* p.p.).

(*γύρος*, round; *πόρος*, pore.)

Pileus fleshy, tomentose, or smooth. Stem central, velvety, or glabrous, externally firm, fragile, internally spongy, often cavernous, base immersed in the soil. Pores white, then often yellowish, entire, round; tubes concolorous, free. Flesh white, firm, sometimes becoming blue on exposure to the air. Spores white, or pale yellowish, oval, elliptical, pip-shaped, or elliptic-oblong, smooth. Cystidia clavate. Growing on the ground.


P. 5–13 cm., subfuscous, or tan, convexo-expanded, adpressedly tomentose, floccosely-scaly, opaque. St. 5–9 × 2–3 cm., concolorous, *ventricose*, villoso-pruinose, firm, fragile, stuffed with a spongy pith, at length cavernous. Tubes white, at length light yellow, becoming bluish when touched, free; orifice of pores minute, round. Flesh white, instantly becoming deep indigo blue on exposure to the air, pouring out an azure blue juice when compressed, firm. Spores whitish, elliptical, often with a basal apiculus, 8–9 × 4–5 μ, multi-guttulate. Woods. July—Oct. Uncommon. *(v.v.)*

1829. **G. lacteus** (Lév.) Quél. (= *Boletus cyanescens* (Bull.) Fr.) *Lacteus*, milk-white.

P. 10–15 cm., pure white, convex, gibbous, minutely tomentose. St. 9–12 × 4–6 cm., pure white, incrassated at the base, firm, velvety, stuffed with a spongy pith and cavernous, at length hollowed out. Tubes white, free, short; orifice of pores white, minute, round, or
angular. Flesh white, becoming deep indigo blue on exposure to the air, spongy, thick at the disc, thin at the margin of the p. Spores white, pip-shaped, 8–9 × 4–5 μ, 3–5-guttulate. Woods. Aug.—Oct. Uncommon. (v.v.)

1830. **G. castaneus** (Bull.) Quél. ( = Boletus castaneus (Bull.) Fr.; Gyroporus fulvidus (Fr.) Pat. sec. Quél.) Rolland, Champ. t. 79, no. 177.

P. 5–10 cm., *cinnamon*, or chestnut coloured, convex, then expanded, or depressed, firm, minutely velvety. St. 5–7 × 2–3 cm., concolorous, attenuated upwards from the somewhat bulbous base, minutely velvety, stuffed, then hollow. Tubes white, becoming yellowish, free, short; orifice of pores white, then yellowish, minute, round. Flesh white, very firm. Spores white, or pale yellow, elliptical, 8–9 × 5–6 μ, often 1-guttulate. Taste pleasant, nutty. Edible. Woods, rarely in pastures under trees. Aug.—Oct. Not uncommon. (v.v.)

1831. **G. fulvidus** (Fr.) Pat. ( = Boletus fulvidus Fr.; Gyroporus castaneus (Bull.) Quél.) Rostk. Bol. t. 45, as Boletus fulvidus Fr.

**Fulvidus**, somewhat tawny.

P. 5–9 cm., becoming tawny, convex, then plane, rigid, firm, smooth, shining. St. 4–7 × 1–5–2.5 cm., concolorous, equal, firm, smooth, shining, stuffed, then hollow. Tubes white, then citron yellow, free, elongated; orifice of pores white, then lemon yellow, angular. Flesh white, becoming yellowish, firm. Spores “yellowish, elliptic-oblong, 10–11 × 5 μ” Masse. Taste pleasant. Edible. Heaths, and under trees. Aug.—Sept. Uncommon.

Spores pink.

**Tylopilus** Karst ( = Boletus p.p.).

(τύλας, a knot; πτιλας, cap.)

Pileus villose, or glabrescent. Stem central, reticulate, apex granular, or smooth. Tubes white, then pinkish, adnate, or sinuate, long, or short; orifice of pores concolorous, angular, or round. Flesh unchangeable, or slightly pinkish when exposed to the air. Spores pink, fusiform, or oblong, smooth. Growing on the ground.

1832. **T. felleus** (Bull.) Karst. ( = Boletus felleus (Bull.) Fr.) Rostk. Bol. t. 43, as Boletus felleus Bull.

**Fel**, gall.

P. 6–10 cm., pale yellowish, chestnut, or tawny, pulvinate, or hemispherical, then expanded, fleshy, smooth. St. 7–8 × 2–3 cm., concolorous, attenuated upwards from the thickened base, tomentously reticulated. Tubes white, then flesh colour, adnate, convex, long; orifice of pores white, then pinkish, fairly broad, angular. Flesh white, becoming flesh colour, thick, soft. Spores pink, fusiform, or oblong, 12–14 × 3–4.5 μ, 2–3-guttulate. Taste very bitter. Poisonous. Woods, especially on calcareous soil. July—Dec. Not uncommon. (v.v.)
1833. **T. alutarius** (Fr.) Rea. (= *Boletus alutarius* Fr.)

*Alula*, tanned leather.


Spores purple.

**Phaeoporus** Bataille (=Boletus p.p.).

(φαυός, dusky; πόρος, pore.)

Pileus tomentose, or velvety-silky. Stem central, blackish bistre, velvety, or glabrous. Tubes grey, or pinkish grey, sinuate, or free, fairly long; orifice of pores *concolorous*, becoming *greenish blue* when touched. Flesh compact, becoming blue, or grey when exposed to the air. Spores *fuscous purple*, elliptic-fusiform, smooth. Growing on the ground.

1834. **P. porphyrosporus** (Fr.) Bat. (= *Boletus porphyrosporus* Fr.)

Boud. Icon. t. 149, as *Boletus porphyrosporus* Fr.

πορφύρα, purple; σπόρα, seed.

P. 5–15 cm., *olivaceous*, or *brownish fuliginous*, becoming blackish when bruised, hemispherical, then convex, fleshy, *minutely velvety*. St. 7–12 × 1·5–3 cm., *concolorous*, attenuated upwards from the thickened, paler base, *velvety*. Tubes *pale grey* or *olivaceous*, adnate, fairly long; orifice of pores *yellowish*, becoming *bluish green* when bruised and staining *white paper* an *emerald green* colour, broad, angular. Flesh *dirty white*, becoming *bluish*, or *fuliginous*, compact. Spores dull, or brownish purple, fusiform, 14–16 × 3–4 μ, 2–4-guttulate. Smell strong. Woods and pastures under trees. July—Oct. Uncommon. (v.v.)

var. **fuligineus** (Fr.) Bat. (= *Boletus fuligineus* Fr.) *Fuligineus*, sooty.

Differs from the type in the *villosely silky p. and glabrous st*. Under conifers. Sept. Rare. (v.v.)

Spores blackish, or fuscous. Pileus covered with imbricate scales.

**Strobilomyces** Berk.

(στρόβιλος, a fir cone; μύκης, fungus.)

Pileus fleshy, firm, floccose, clothed with large, imbricate scales. Stem firm, rigid, woolly, or scaly, annulate. Tubes white, then greyish bistre, adnate, long, orifice of pores *concolorous*, angular. Flesh floccose, not putrescent, firm, light, becoming reddish, or bluish grey, and finally blackish on exposure to the air. Spores blackish purple, subglobose, verrucose. Cystidia present. Growing on the ground.
1835. **S. strobilaceus** (Scop.) Berk. (= **Boletus strobilaceus** (Scop.) Fr.)

Rostk. Bol. t. 38, as **Boletus strobilaceus** Scop.

\[\sigma\tau\rho\omicron\acute{\beta}i\lambda\omicron\acute{s}, \text{a fir cone.}\]

P. 5–10 cm., white, becoming brownish or blackish umber, pulvinate, then convex, broken up into large, thick, floccose scales; margin appendiculate with the white floccose veil. St. 7–15 × 1–2 cm., *concolorous*, equal, apex white, sulcately reticulated, floccosely scaly below the ring. Ring white, floccose, thick. Tubes *white*, *becoming brownish*, adnate, or with a decurrent tooth, long; orifice of pores *white*, *becoming reddish when touched or bruised*, broad, angular. *Flesh white, becoming reddish and finally blackish bistre*, thick, floccose. Spores blackish purple, subglobose, verrucose, 9–11 × 8–9μ. Smell pleasant. Deciduous and coniferous woods. Aug.—Oct. Uncommon. (v.v.)

Spores ochraceous, ferruginous, or olivaceous.

Tubes short, alveolar, decurrent.

**Boletinus** Kalchbr.

(*Boletinus*, diminutive of **Boletus**.)


*Cavus*, hollow; *pes*, foot.

P. 3–8 cm., tawny, or *brownish tawny*, convex, subumbonate, fibrillosely scaly, fleshy. St. 5–8 × 5–1 cm., *lemon yellow above the ring, concolorous below*, subequal, or attenuated upwards, thickened at the base and rooting, incurved, tough, stuffed, then hollow especially at the base, apex reticulate, rough or fibrillosely scaly. Ring white, floccose, thick, evanescent. Tubes yellow, or sulphur coloured, becoming greenish or olivaceous, compound, broad, honey-comb-like, decurrent. *Flesh becoming yellow in the p., white in the st.*, firm. Spores yellow, elliptic-fusiform, 10μ. Taste pleasant. Edible. Under larches and on mossy beech trunks. Sept.—Oct. Rare.

Tubes very short, gyroso-plicate.

**Gyrodon** Opatowski.

(*γυρός*, round; *δῶν*, a tooth.)

Pileus fleshy, viscid, or villose. Stem central, smooth, or punctate. Tubes very short, 1–2 mm. long; orifice of pores sinuous, torn, or gyroso-plicate. Spores ochraceous, or olivaceous, elliptical, elliptic cylindrical, or fusiform, smooth. Growing on the ground, often fasciculate.
1837. G. caespitosus Massee.  

P. 2.5–5 cm., olivaceous umber, becoming paler towards the margin, hemispherical, dry, tomentose; margin pale pink, wavy, acute. St. 4–8 × 2–3 cm., yellow, dingy red at the base, connate, ventricose, glabrous. Tubes yellow, subadnate, 1 mm. long; orifice of pores yellow, very irregular, elongate, sinuous. Flesh yellow, instantly changing to intense blue, then fading to a dirty white, and finally rufous, dingy red at the base of the st., thick, firm. Spores pale olive, narrowly elliptical, 12 × 4 μ. Densely fasciculate. Under trees amongst grass. Aug. Rare.

1838. G. sistotrema Fr.  

σειστός, shaking; τρήμα, a hole.

P. 6–8 cm., reddish, or brownish olive, convex, then flattened, glabrous, or minutely pubescent, thin, dry. St. 5–7 × 1 cm., pale lemon yellow, becoming reddish, equal, or enlarged below, smooth. Tubes yellow tawny, or pale sulphur, adnate, very short; orifice of pores yellow, becoming tawny, sinuous, round, becoming gyroso-plicate. Flesh cream colour, tawny under the cuticle of the p., firm. Spores “cream-olive, elliptic cylindrical, 10–14 μ long, guttulate” Quél. Taste somewhat sharp. Coniferous woods. Aug.—Oct. Rare.

var. brachyporus (W. G. Sm.) Rea.  

βραχύς, small; πόρος, pore.

Differs from the type in the white p., the white st. sulphur coloured below, and in the flesh changing to pale green.

1839. G. rubellus McWeeney.  

Rubellus, reddish.

P. 1–1.5 cm., red, with a tinge of purple at the disc, becoming yellowish towards the margin, convex, even, smooth, dry. St. 1 cm. × 3 mm., bright yellow, equal, smooth, even. Tubes pale yellow, 1 mm. long; orifice of pores bright yellow, linear, elongate, sinuous, dissepiments thick. Flesh yellow, unchangeable, firm. Spores greenish olive, cylindric fusiform, with a minute basal apiculus, 10 × 4 μ. Amongst moss. Oct. Rare.

Tubes long.

Boletus (Dill.) Pat.

(βόλος, a clod.)

Pileus fleshy, dry, glabrous, tomentose, silky, viscid, or glutinous. Stem central, equal, ventricose, or bulbous; dry, glabrous, tomentose, or viscid, sometimes reticulate; with or without a ring. Tubes long, adnate, sinuato-adenate, or decurrent, rarely free; orifice of pores round, angular, unequal, or toothed, often compound. Flesh thick, soft, putrescent. Spores ochraceous, ferruginous, olivaceous, or fusaceous, rarely colourless, fusiform, oblong-elliptic, elliptical, or pip-shaped, smooth. Cystidia present. Growing on the ground, solitary, gregarious, caespitose, or subcaespitose.
I. Pores angular, or large, rarely round, often unequal, or toothed; tubes often compound, sometimes connate, long or rather short, more or less adnate, sometimes decurrent, rarely slightly sinuate. 
P. dry, glabrous, tomentose, silky or glutinous: St. often slightly thick, sometimes furnished with a ring, rarely reticulate at the apex. Plants of medium, or small size, rarely large.

A. P. glutinous, or viscid, at least in wet weather, never pruinously granular. Pores, tubes, and flesh of various colours.

1. St. annulate.

*Pores yellow; spores yellow olivaceous.


\( \sigmaφα\rhoα \), a ball; \( κ\epsilonφαλ\'\), head.

P. 10–20 cm., ochraceous yellow, deeper coloured at the centre, and sometimes tinged with brown, globose, viscid; margin light yellow, appendiculate with fragments of the ring. St. 4–6 × 3–4 cm., tawny yellow, becoming darker, furrowed. Ring yellowish, membranaceous, shaggy, usually fugacious. Tubes bright yellow, becoming tawny or brownish with age, short, decurrent; orifice of pores round, or angular. Flesh light yellow, bluish under the cuticle, very thick, soft, watery. Spores olivaceous, fusiform, 8–10 × 3–4\( \mu \), 2-guttulate. On the ground, and on rotten sawdust. Sept.—Oct. Uncommon. (v.v.)

1841. B. luteus (Linn.) Fr. Rolland, Champ. t. 78, no. 174.

\( L\text{uteus}, \) yellow.


\( E\text{legans}, \) nice.


Differs from the type in the adnate tubes, the larger orifice of the greyish yellow pores, and the paler flesh which is rosy when broken. Coniferous woods. Aug.—Nov. Uncommon. (v.v.)

var. *pulchellus* (Fr.) Rea. Fr. Icon. t. 178, fig. 1, as *Boletus pulchellus* Fr.

Differs from the type in its smaller size, 3–4 cm. broad, its short, smooth, yellow st., its less viscid, greenish yellow p., its narrow, linear ring and its rosy flesh. Coniferous woods. July—Sept. Rare. (v.v.)

1843. *B. flavidus* Fr. Krombh. t. 4, figs. 35–37.

*Flavidus*, light yellow.


**Pores white, grey, or green. Spores brownish.**

1844. *B. viscidus* (Linn.) Fr. (= *Boletus larinicus* Berk. sec. Quél.)

Fr. Icon. t. 178, fig. 3. *Viscidus*, viscid.


2. St. *exannulate*.

*Pores yellowish, yellow, golden, or orange; spores yellow.*

P. never white.


P. 5–6 cm., *chestnut, becoming pale when the fuscous gluten separates, and veined with brown*, convex, pulvinate. St. 5–7.5 × 1½–2½ cm.,

1846. **B. granulatus** (Linn.) Fr. Rolland, Champ. t. 78, no. 175.

*Granulatus*, granulated.


1847. **B. tenuipes** (Cke.) Massee.

*Tenuis*, thin; pes, foot.

P. 2.5–5 cm., yellowish brown, or gilvous, convex, then almost plane, viscid, streaked with minute fibrils when dry. St. 5–8 cm. x 6–8 mm., yellow, attenuated at the base, smooth. Tubes yellowish, adnate, shortened round the st., about 6 mm. long; orifice of pores rather large, angular. Flesh white, rosy under the cuticle of the p., thick. Spores pale yellow, fusiform, 10 x 3 μ. Taste mild. Edible. Woods, and heaths. July—Oct. Uncommon. (v.v.)

1848. **B. badius** Fr. Rostk. Bol. t. 5.

*Badius*, bay-brown.


1849. **B. paludosus** Massee.

*Paludosus*, marshy.

P. 7.5–10 cm., bright rufous brown, paler when dry, slightly convex, then quite plane, slightly viscid, smooth. St. 7.5–12.5 x 1–1.5 cm., rather paler than the p., equal, smooth, base attenuated. Tubes yellow, then olive green, adnate, or subdécurrent, short, about 4 mm. long; orifice of pores large, angular, compound. Flesh with a very pale tinge of brown, firm, thin. Spores olive, elongat-fusiform, 16 x 4 μ. Gregarious. Bogs, amongst *Sphagnum*. Sept. Rare.
1850. **B. rutilus** Fr.  
*Rutilus,* red, inclining to golden yellow.  

1851. **B. aurantioporus** Howse.  
*Aurantius,* orange; πόρος, pore.  
P. 5–6 cm., *fulvous ferruginous,* then pale *gilvous,* convex, then expanded, *adpressedly squamulose,* viscid. St. 4–7.5 × 1–1.5 cm., yellow, equal, beautifully reticulated with yellow and red. Tubes golden yellow, then orange, turning red when bruised, deeply decurrent; orifice of pores broad, angular. Flesh *yellowish,* often tinged reddish, thin at the margin, firm. Spores yellow, oblong elliptical, or subfusiform, 9–10 × 4–5 μ, 1–4-guttulate. Smell and taste pleasant. Coniferous woods, and under yew trees. Aug.—Oct. Uncommon. (v.v.)  

**Pores becoming olive, bistre olive, brown olive, or olive rust or rust colour; tubes short; spores concolorous.** P. sometimes white.

1852. **B. bovinus** (Linn.) Fr. Krombh. t. 75, figs 1–6.  
*Bovinus,* pertaining to oxen.  
P. 5–10 cm., *pale reddish yellow,* *dull orange yellow,* or *deep buff,* hemispherical, then convex, smooth, viscid; *margin white,* often tomentose. St. 5–10 × 1 cm., *concolorous,* or *paler,* equal, smooth, base whitish. Tubes *grey light yellow,* becoming *ferruginous,* subdecurrent, at first very shallow like those of *Merulius lacrymans,* then elongating with age; orifice of pores compound, toothed. Flesh *yellowish-flesh colour,* *reddish in the st.,* soft. Spores yellow, or olivaceous, oblong fusiform, 8–10 × 3–3.5 μ, 1–multi-guttulate. Taste pleasant. Edible. Gregarious, or subcaespitose. Woods and heaths, especially near pines. Aug.—Nov. Common. (v.v.)

1853. **B. piperatus** (Bull.) Fr. Rostk. Bol. t. 6.  
*Piperatus,* peppery.  
P. 2–10 cm., *cinnamon,* or *yellow to pale yellowish,* convexo-plane, smooth, slightly viscid. St. 4–12 × 5–1.5 cm., *concolorous,* fragile, equal, or attenuated at the base, containing *yellow milk at the base,* and *springing from a yellow mycelium.* Tubes *ferruginous,* decurrent; orifice of pores *large,* angular, often toothed. Flesh *sulphur yellow,* *tinged reddish in the p.,* soft. Spores brownish, oblong elliptic, 8–10 × 3–4 μ, 1–3-guttulate. Taste very acrid, or peppery. Woods, and heaths. Aug.—Nov. Common. (v.v.)

B. P. dry, rarely moist when wet, *tomentose,* *silky, pruinose,* *powdery,* or *granular,* sometimes *squamulose.* Pores *yellowish,* or *yellow,* rarely slightly olivaceous or red. Flesh yellow, rarely cream, or white. Spores yellow, rarely tawny bistre.
1854. **B. variegatus** (Swartz) Fr. Rostk. Bol. t. 16.

*Variegatus*, variegated.

P. 6–12.5 cm., dark yellow, or ochraceous, sprinkled with fasciculate-hairy, superficial, brown squamules, convex, then plane, obtuse, slightly moist; margin acute, at first flocculose. St. 5–8 × 1–2.5 cm., dark yellow, or straw colour, sometimes reddish, firm, equal, base white. Tubes brown, or yellow olive, then cinnamon, adnate; orifice of pores round. Flesh yellow becoming here and there azure blue. Spores greenish ochre, oblong elliptic, 9–10 × 3–4 μ. Smell unpleasant, “of chlorine” Quél. Coniferous woods, heaths, and moorlands. July—Nov. Common. (v.v.)

1855. **B. sulphureus** Fr. Quél. As. fr. (1887), t. 9.

*Sulphureus*, sulphur-yellow.

P. 5–10 cm., sulphur yellow, compact, convex, then plane, silky-tomentose with innate flocci. St. 4–10 × 1–5 cm., sulphur yellow, at length becoming dingy ferruginous, firm, ventricose, smooth, springing from a golden, woolly mycelium. Tubes sulphur yellow, becoming spotted ferruginous, and at length becoming green, adnate, short, 2–4 mm. long; orifice of pores minute, compound. Flesh yellow, becoming greenish, or azure blue when broken, but golden when exposed to the air, here and there reddish under the tubes, firm. Spores light yellow, elliptical, 6–7 × 3 μ, 1-guttulate. Caespitose. Pine sawdust, and twigs. Sept.—Nov. Uncommon. (v.v.)

1856. **B. chrysenteron** (Bull.) Fr. Rolland, Champ. t. 80, no. 180.

χρυσός, gold; ἐντερόν, intestine.

P. 3–10 cm., fuscous, or somewhat brick colour, convexo-plane, soft, minutely tomentose, often cracked into patches with the interstices red. St. 5–8 cm. × 6–12 mm., scarlet, or light yellow, subequal, or attenuated at the base, rigid, fibroso-striate. Tubes sulphur yellow, then greenish yellow, subadnate, or depressed round the st.; orifice of pores rather large, angular, compound. Flesh yellow, scarcely turning blue, red beneath the cuticle of the p., soft. Spores deep ochraceous, fusiform, or oblong elliptic, 13–14 × 4–5 μ, 1–4-guttulate. Taste mild. Edible. Woods, heaths, and pastures. May—Dec. Common. (v.v.)

var. *nanus* Massee.

 différences from the type in its smaller size, in the flesh becoming red when cut and in the elongated, narrow, sinuous, or gyrose orifice of the pores. Parks, gardens, and pastures. Aug.—Sept. Not uncommon. (v.v.)


P. 2–7 cm., blood red, or brightish crimson, disc becoming brownish, hemispherical, convex, then plane, firm, opaque, dry, rough under a
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lens; margin almost even. St. 2-5-6-5 x 1-2 cm., yellowish, streaked or blotched with dilute crimson, or brownish, slightly bulbous at the base, and with traces of long reticulations at the apex. Tubes golden yellow, or dullish yellow, becoming bluish or greenish when bruised, and finally orange, adnate, or slightly depressed round the st., 4-7 mm. long; orifice of pores angular, medium in size. Flesh yellow, then rosy, "becoming bluish when cut or broken" Perceval, soft. Spores "15-18 μ, guttulate" Quél. Taste somewhat acid. Woods, and pastures. July—Sept. Rare.

1858. B. subtomentosus (Linn.) Fr. Rolland, Champ. t. 80, no. 181.

Sub, somewhat; tomentosus, downy.

P. 3-10 cm., more or less deep brownish olivaceous, convex, then pulvinato-expanded, soft, dry, villosa-tomentose, sometimes cracked into patches with the interstices yellow. St. 5-12 x 1-2 cm., yellowish, usually streaked with red, attenuated downwards, sulcately ribbed, the tawny ribs sometimes anastomosing, rough with dots under a lens. Tubes golden sulphur yellow, adnate; orifice of pores large, angular. Flesh white, or yellowish, rust colour under the cuticle of the p., soft. Spores pale yellow, oblong elliptical, 12-14 × 5 μ. Taste mild. Edible. Woods, heaths, and pastures. July—Dec. Common. (v.v.)

var. radicans (Krombh.) Massee. Krombh. t. 48, figs. 1-6.

Radicans, rooting.

Differs from the type in the usually undulated, bright yellowish olive green p., the st. whitish below, yellow and strongly grooved above and the tubes greenish-olive at maturity. Woods.

var. striaepes (Secr.) Quéll. Stria, a line; pes, foot.

Differs from the type in the bistre olive, silky p., and the yellow stem with thin bistre ribs, brownish red at the base. Woods. Oct. Rare.

var. marginalis Boud. Boud. Icon. t. 142 Marginalis, bordered.

Differs from the type in being more slender, in the fuliginous p. being bordered with a pale, tomentose zone at the margin, in the longer almost smooth st., and in the narrower pores. Woods. Uncommon. (v.v.)

1859. B. cruentus Vent. Venturi, t. 43, figs. 3 and 4.

Cruentus, bloody.

P. 7-10 cm., olivaceous with a reddish tinge, becoming instantly red where bruised, convex, then plane, soft, minutely tomentose. St. 5-8 x 2-5-4 cm., yellow with reddish markings, gradually attenuated upwards from the incassated, rooting base, minutely flocculose. Tubes pale yellowish olive, sinuate-free, long; orifice of pores yellowish, minute, subangular. Flesh yellow, becoming red when cut, thick, firm. Spores "pale olive, elliptic-fusiform, 14-16 × 5 μ" Massee, 1-guttulate. Smell strong. Under beeches. Aug.

36—2
1860. **Boletus spadiceus** (Schaeff.) Fr. Krombh. t. 36, figs. 19, 20, as *Boletus tomentosus* Krombh. *Spadiceus*, date brown.


1861. **B. Rostkovii** Fr. Rostk. Bol. t. 18, as *Boletus lividus* Bull. Dr Friedrich Wilhelm Theophilus Rostkovius.

P. 7-5–10 cm., dingy olive brown, or rufous, convex, or almost plane, very minutely tomentose, often areolately cracked, interstices pale. St. 2-5–5 × 2-5 cm., pale reddish yellow, obconic, tapering almost to a point at the base. Tubes pale yellow green, adnate, about 12 mm. long; orifice of pores irregularly angular, compound. Flesh white, becoming tinged red when cut, with here and there a shade of blue. Spores “pale olive, elongato-fusoid, 20 × 5μ” Massee, 2-guttulate. Under beeches. Aug. Rare.


P. 6–8 cm., olivaceous cinereous, then pale yellowish, convex, pulvinate, dry, subtomentose; margin thin, incurved. St. 7–10 × 1-5–2-5 cm., light yellow, attenuato-rooted, flocculose with reddish pruina, naked and dark when touched, firm. Tubes lemon yellow, becoming greenish or bluish when touched, adnate; orifice of tubes unequal, large, angular. Flesh pale lemon yellow, becoming immediately deep blue on exposure to the air, soft, watery. Spores yellow, oblong fusiform, 13–14 × 4–5μ, 1–2-guttulate. Taste bitter. Woods, and hedgerows. July—Sept. Rare. (v.v.)


P. 4–8 cm., yellow fuscous, pulvinato-gibbous, then plane, dry, subtomentose, slightly cracked. St. 5–7-5 × 2 cm., yellow, smeared with crimson, equal, or attenuated downwards. Tubes wholly carmine, subdecurrent, short at first; orifice of pores medium size, compound. Flesh yellow, becoming whitish when dry in the p. Spores pale, oval, 6 × 4–5μ. Woods, roadsides, and under oaks. Aug.—Sept. Uncommon. (v.v.)


P. 2–7 cm., blood red, or deep rose-pink, becoming tawny at the disc, or all over with age, convex, then plane, minutely tomentose, rarely
cracked. St. 4–8 cm. × 6–12 mm., yellow, rose-red in the middle and at the base, becoming blue when rubbed, equal, often attenuated at the base, slightly viscid in wet weather, minutely granular, or pruinose. Tubes yellow, becoming blue when touched, adnate, decurrent by a tooth; orifice of pores fairly large, angular. Flesh yellow, reddish at the base of the st., turning blue when cut especially near the tubes, soft. Spores yellow, or olivaceous, oblong fusiform, 9–10 × 4–5 μ, 1–2-guttulate. Woods, pastures, and roadsides. Aug.—Oct. Not uncommon. (v.v.)

1865. **B. parasiticus** (Bull.) Fr. Boud. Icon. t. 145.

Parasiticus, parasitic.

P. 2–8 cm., dingy yellow, or tawny, and more or less brown, convex, then plane, minutely tomentose, dry, often cracked in a tessellated manner. St. 3–7 × 1–2 cm., yellow, or paler than the p., equal, attenuated at the base, rigid, incurved, slightly fibrillose, apex mealy. Tubes yellow, then vinous, decurrent, short; orifice of pores compound, of medium size, round or angular. Flesh yellow, often becoming reddish in the st., firm. Spores deep olivaceous, fusiform, 12–15 × 4–5 μ, 1-guttulate. Parasitic on *Scleroderma aurantium* and *S. verrucosum*. Woods, and heaths. Sept.—Oct. Not uncommon. (v.v.)

1866. **B. pruinatus** Fr. Pruinatus, covered with hoar-frost.

P. 5–6 cm., purplish bay brown, covered with a whitish, or greyish bloom, convex, then plane, rigid, dry. St. 5–10 × 5–1.5 cm., variegated yellow and reddish, equal, or ventricose, firm, smooth. Tubes light yellow, adnate; orifice of pores small, slightly angular. Flesh yellow, red under the cuticle of the p., turning bluish and reddish, firm. Spores olivaceous, pip-shaped, 9–10 × 4 μ, 1-guttulate. Amongst grass in woods, and parks. Sept.—Oct. Uncommon. (v.v.)

1867. **B. pusio** Howse, ex B. & Br. Pusio, a little boy.

P. reddish buff, hemispherical, pulvinate, pulverulent. St. dull yellowish white, white above, becoming blackish, slightly thickened downwards, plicate, pulverulent. Tubes dull sulphur white.


Purpurascens, becoming purple.

P. 6–16 cm., bay purple, convex, then plane, smooth, dry. St. 3–5 × 1.5–2 cm., deep purple red, firm, attenuated downwards to the rooting base, smooth. Tubes dingy yellow, adnate, 12–15 mm. long, becoming greenish when touched; orifice of pores small. Flesh dirty whitish with darker streaks, reddish under the cuticle of the p., thick, compact. Spores brownish grey, subfusiform, 10 × 5 μ. Woods, especially pine. Sept.—Oct. Uncommon.
II. Pores small, round, equal; tubes free, or sinuate, sometimes adnate, long, connate. P. dry, smooth, or tomentose, rarely viscid or moist in wet weather. St. thick, smooth, tomentose, or floccose, often ribbed or reticulate. Spores yellow, ochraceous, or olivaceous, rarely brown, or white, elliptic fusiform. Generally large in size and thick.

A. St. fibrilloosely fleshy, generally firm, thick, ovoid at first; either covered with a network of white, straw-coloured, yellow, or red veins, or minutely punctate, or granular, rarely smooth. Pores small, round, white, or coloured; tubes concolorous, free, or sinuate, rarely adnate. Flesh generally firm, white, or coloured, changing colour or not, but never becoming black. Generally large in size.

†Flesh white, or yellow, unchangeable, sometimes reddish or vinous rosy under the cuticle, tasty, often fragrant. Pores white, cream, or yellow, sometimes becoming greenish with age, never becoming blue or green when touched. St. with a white, straw-coloured, or brownish cream network, sometimes smooth, rarely floccose, or reddish.


1870. B. edulis (Bull.) Fr. Rolland, Champ. t. 81, no. 182. Edulis, etatable.

P. 10–20 cm., bay, brown, fuliginous, or bistre, rarely white, the margin often white, convex, pulvinate, smooth, often rugose, somewhat viscid in wet weather. St. 10–15 × 3–6 cm., pallid fusceous, delicately reticulated, equal, or attenuated upwards from the bulbous base. Tubes white, then yellow, and finally greenish, somewhat free, long; orifice of pores small, round. Flesh white, often faintly tinged reddish under the cuticle of the p., compact, then softer, thick. Spores yellow, fusiform, 13–16 × 4-4-5μ, 1–3-guttulate. Smell and taste pleasant. Edible. Woods, especially beech. June—Nov. Common. (v.v.)

var. laevipes Massee. Laevis, smooth; pes, foot.

Differs from the type in the absence of reticulations on the perfectly even, white, or faint buff st. Woods. Aug.—Oct. Common. (v.v.)

var. bulbosus (Bull.) Big. & Guill. (= Boletus crassus Massee.) Bulbosus, bulbous.

Differs from the type in the bulbous st. often exceeding, or equalling in width the diameter of the p., in the flesh becoming pale primrose yellow,
in the smaller spores, and in the strong acid smell. This variety is a condition of the type brought about by the attack of a parasitic Hypomyces. Woods. July—Nov. Common. (v.v.)

P. 9–20 cm., rich chestnut colour, bordered by a narrow white line at the margin, convex, slightly viscid when moist, then dry and floccose. St. 9–15 × 4–5 cm., concolorous, subbulbous, rugose, slightly reticulate. Tubes greenish, adnate, 15–20 mm. long, ventricose; orifice of pores round, or angular, 1 mm. broad. Flesh white, reddish under the cuticle of the p., thick. Spores olivaceous, fusiform, 15–18 × 4–5 μ, 1–3-guttulate. Smell and taste pleasant. Edible. Coniferous woods. Sept.—Oct. Not uncommon. (v.v.)

Reticulatus, netted.  
P. 8–15 cm., ochraceous yellow, or greyish fawn, convex, finely tomentose, often cracked in dry weather. St. 6–9 × 4–6 cm., concolorous, or paler, slightly constricted at the base, reticulated to the base. Tubes greenish yellow, free, or almost free, fairly long; orifice of pores round, small, 1 mm. across. Flesh white, slightly coloured under the cuticle of the p. and at the base of the tubes, firm, thick. Spores olivaceous, oblong fusiform, 13–18 × 4–5 μ, 1–3-guttulate. Smell and taste pleasant. Edible. Deciduous woods. May—Oct. Not uncommon. (v.v.)

Aestivalis, pertaining to summer.  
P. 10–20 cm., whitish, bistre cream, or reddish, convex, pulvinate, somewhat repand, smooth, then granular in dry weather. St. 8–11 × 5–6 cm., light yellow, ovoid, bulbous, smooth, or minutely reticulate. Tubes yellow, or greyish, somewhat free, long; orifice of pores small, round, equal. Flesh yellow, white above, reddish at the base of the st., thick. Spores yellow, oblong fusiform, or oblong elliptical, 12–14 × 4–5 μ, 1–2-guttulate. Smell and taste pleasant. Edible. Woods, and heaths. June—Oct. Uncommon. (v.v.)

1874. B. aereus (Bull.) Fr. Krombh. t. 36, figs. 1–7.  
Aereus, made of copper.  
P. 6–9 cm., olivaceous fuscous, somewhat blackish, hemispherical, then convex, pulvinate, minutely pubescent, or villose. St. 7–9 × 2.5–3.5 cm., yellowish, becoming fuscous downwards, beautifully reticulate. Tubes white, then sulphur yellow, somewhat free; orifice of pores minute, round, or angular. Flesh white, reddish under the cuticle of the p. and st., and reddish purple when the surface of the p. has been eaten by slugs, firm, compact. Spores yellow, oblong elliptical, or


P. 5–10 cm., *chestnut*, convex, then expanded, minutely tomentose, margin obtuse. St. 5–8 × 1–2 cm., *concolorous, or paler than the p.*, bulbous, or attenuated downwards, smooth; base becoming *tawny*, lacunose. Tubes *white*, then *light yellow*, free; orifice of pores round or subangular, small. Flesh *whitish, reddish under the cuticle of the p.*, firm. Spores *yellow*, oblong fusiform, 12–14 × 4–5 μ. Taste mild. Edible. Subcaespitose. Woods. Sept.—Oct. Uncommon. (v.v.)

1877. **B. impolitus** Fr. Fr. Sverig. ätl. Svamp. t. 42.

*Impolitus*, unpolished.

P. 8–20 cm., *pale yellow brown*, or *tawny brown*, convex, then more or less expanded, flocculose, at length granuloso-rivulose, sometimes cracking into areolae. St. 6–9 × 3–5 cm., *yellow*, often tinged with *brownish red* when full grown and forming a ring-like zone at the apex, equal, or subbulbous, pubescent. Tubes *pale lemon yellow*, then tinged with *olivaceous green*, free, or slightly adnate, depressed near the st.; orifice of pores small, round. Flesh *whitish yellow, pale yellow under the cuticle of the p.*, thick. Spores *olivaceous*, oblong-fusiform, 16–17 × 5–6 μ. Smell and taste pleasant. Edible. Woods. June—Oct. Uncommon. (v.v.)

1878. **B. candidans** Fr.

*Candidans*, shining-white.


1879. **B. fragrans** Vitt.

*Fragrans*, scented.

P. 6–9 cm., *fuscous umber*, pulvinate, repand, *subtomentose*; margin incurved. St. 7–9 × 3–4 cm., *variegated yellowish and red*, stout, ventricose, often fusiform at the base and *ovato-bulbous*, *even*. Tubes
BOLETUS


1880. **B. rubiginosus** Fr.  

Rubiginosus, rusty.

P. 5–12·5 cm., reddish brown, pulvinate, or convex, soft, pubescent, soon becoming very glabrous, dry; margin acutely incurved, then patent. St. 5–8 × 2·5–3 cm., whitish, then yellowish, becoming slightly greyish or yellowish olive when bruised, attenuated upwards, glabrous, very distinctly reticulated. Tubes white, adnate, short; orifice of pores white, angular, unequal. Flesh white, unchangeable, thick, spongy. Spores “colourless, elongato-fusiform, 12 × 4 μ” Massee. Beech woods. Sept.—Oct. Rare.

††Flesh generally yellow, changing colour on exposure to the air, often immediately turning bluish, or greenish, sometimes poisonous, or bitter. Pores more or less yellowish, yellow, orange, or red, immediately tinged blue, green or black when touched. St. reticulately veined, or punctate, rarely smooth, generally red, at least in part.

*Pores at first cream, lemon yellow, or yellow, rarely finally becoming reddish. St. reticulate with white, or yellow veins, sometimes flesh colour or punctate on the veins. Flesh often bitter.

1881. **B. appendiculatus** (Schaeff.) Fr. Rostk. Bol. t. 26, as *Boletus radicans* Pers.  

Appendiculatus, with a small appendage.

P. 5–15 cm., brown, bright bay, or fuscosus brick colour, convex, pulvinate, then expanded, subtomentose. St. 6–9 × 2·5 cm., sulphur yellow, ventricose, rooting, apex minutely reticulate with white veins, often tinged rosy towards the base. Tubes sulphur yellow, becoming greenish when touched, adnate; orifice of pores round, small. Flesh yellow, becoming blue on exposure to the air, tinged with rose at the base of the st., compact, firm. Spores light yellow, oblong elliptic, 9–11 × 4 μ, 1–3-guttulate. Smell and taste pleasant. Edible. Woods. Aug.—Oct. Uncommon. (v.v.)

1882. **B. variecolor** B. & Br. B. & Br. no. 1020, t. 13, fig. 3.  

Variecolor, with diverse colours.

P. 4–6 cm., olivaceous, convex, subtomentose; margin involute. St. 5–8 × 2 cm., yellowish downwards, rufescent and delicately pubescent upwards, bulbous, attenuated upwards, apex reticulated. Tubes yellow, free; orifice of pores minute. Flesh pale, here and there inclining to yellow and partially marbled, dark purple under the cuticle of the p.


καλός, beautiful; πούς, foot

P. 6–15 cm., olivaceous, globose, then convex, pulvinate, subtomentose. St. 7–10 × 2–3 cm., scarlet throughout, or at the apex, apex often yellow, conical, then subequal, reticulated with white, or flesh coloured veins. Tubes yellow, becoming bright green, adnate; orifice of pores minute, angular, becoming spotted with greenish blue. Flesh yellow, becoming blue on exposure to the air, compact. Spores olivaceous, 10–14 × 4 μ, 1–3-guttulate. Said to be poisonous. Woods, especially coniferous woods. July—Nov. Not uncommon. (v.v.)


Olivaceus, olivaceous in colour.

P. 3–8 cm., olivaceous fuscosus, convex, pruinose, becoming smooth; margin at first inflexed. St. 5–8 × 2–3 cm., red, or pale citron yellow, yellowish at the apex and reticulate with white veins, punctate with rose red at the base, firm, clavate, bulbous, or fusiform. Tubes light yellow, then olivaceous, adnate; orifice of pores minute, round, unequal. Flesh cream colour, becoming blue on exposure to the air, firm. Spores elliptical, “17 μ long, 2–5-guttulate” Quél. Woods, especially beech. Aug.—Sept. Uncommon.

1885. B. pachypus Fr.

παχύς, thick; πούς, foot.

P. 10–20 cm., fuscosus, then pallid tan, convex, pulvinate, subtomentose; margin at first incurved, exceeding the tubes. St. 5–12–5 × 3–5 cm., variegated light yellow and red, often wholly intensely blood red, often with a rosy purple zone at the apex of the st., firm, ovato-bulbous, then elongated, equal, reticulated with white veins. Tubes light yellow, then somewhat green, free, somewhat elongated, shortened round the st.; orifice of pores round, becoming spotted with green, or blue. Flesh yellow, then azure blue when exposed to the air, becoming reddish at the base of the st., compact, thick. Spores olivaceous, oblong elliptic, 9–12 × 4 μ. Said to be poisonous. Woods, especially pine. Sept.—Oct. Uncommon. (v.v.)

1886. B. albidus (Roques) Quél. Roques, Champ. com. et vén. t. 8, fig. 2.

Albidus, whitish.

P. 6–9 cm., whitish, with a slight greenish tinge, convex, subtomentose. St. 6–7 × 3–4 cm., pale citron yellow, ventricose, finely reticulated with veins, which become brownish on handling. Tubes pale citron yellow, adnate; orifice of pores round, small. Flesh cream colour, or pale citron, becoming blue when cut or broken. Spores deep ochre, boat-shaped, 10–11 × 4–5 μ, 1–2-guttulate. Woods, and pastures. July—Oct. Uncommon. (v.v.)
**Pores at first red, or orange, rarely yellow. St. reticulated with red veins, often punctate with red, rarely white, or yellow.**

1887. **B. satanas** Lenz. (= Boletus tuberosus (Bull.) Quél.) Krombh. Icon. t. 38, figs. 1–6, as Boletus sanguineus Pers.

Σατάνας, the Devil.

P. 9–20 cm., at first more or less tinged with red, then becoming brownish, and finally whitish, globose, then convex, pulvinate, somewhat viscid, smooth. St. 7–10 × 5–6 cm., dingy yellow, reticulated with blood red veins, ovato-ventricose. Tubes yellow, free; orifice of pores yellow, then rubiginous, and finally orange, round, minute. Flesh white, then cream colour, becoming bluish or greenish on exposure to the air, reddish in the st., thick, firm. Spores olivaceous, oblong elliptic, 11–13 × 4–5 μ, 2–3-guttulate. Taste mild. Woods, and heaths. July—Oct. Uncommon. (v.v.)

1888. **B. luridus** (Schaeff.) Fr. Rolland, Champ. t. 85, no. 189.

Luridus, lurid in colour.

P. 5–20 cm., umber olivaceous, or fuliginous, hemispherical, convex, then plane, tomentose. St. 5–15 × 3–6 cm., yellow, reticulated with blood red veins, equal, or incrassated at the base. Tubes yellow, at length becoming green, free; orifice of pores at first vermillion, then orange, round, small. Flesh yellow, becoming immediately deep indigo on exposure to the air, and then again yellow, reddish at the base of the tubes and at the base of the st., thick, compact. Spores yellowish, oblong fusiform, or oblong elliptical, 12–13 × 4 μ, 2–3-guttulate. Taste pleasant. Edible. Woods, especially deciduous woods, heaths, and pastures. May—Dec. Common. (v.v.)

1889. **B. erythropus** (Pers.) Quél.  

ἐρυθρός, red; ποντος, foot.

P. 10–15 cm., brown, or bay, often tawny rufescent, convex, minutely pubescent. St. 5–12 × 2–4 cm., yellow, punctate with red, ventricose, minutely tomentose. Tubes yellow, free; orifice of pores dark blood red, round, or subangular. Flesh yellow, becoming deep indigo in the p. and upper part of the st. on exposure to the air, blood red in the rest of the st., yellow at the base of the tubes, thick, compact. Spores yellow, fusiform, 12–13 × 4 μ, 2–3-guttulate. Taste pleasant. Woods, especially coniferous woods. Aug.—Nov. Not uncommon. (v.v.)

1890. **B. purpureus** Fr. Fr. Sverig. ätl. Svamp. t. 41.

Purpureus, purple.

P. 7–12 cm., purplish red, or violet, rarely brownish, hemispherical, pulvinate, somewhat velvety, opaque, dry. St. 6–11 × 2–3 cm., yellow, reticulate with purple veins and dots, and often dotted on the veins, equal, attenuated at the base. Tubes light yellow, becoming greenish, somewhat free; orifice of pores purple orange, round, minute. Flesh yellow, becoming bluish on exposure to the air when young and reddish at the base.


P. 5–16 cm., reddish purple, or reddish brown, hemispherical, then convex, pruinose, then subtomentose; margin at first involute, pruinose and flesh colour. St. 7–10 × 2–3 cm., yellow straw colour, then pale ochraceous, densely punctate with red and dark purple at the base, more or less bulbous and fusiform, slightly rooting. Tubes yellowish, then pure yellow, becoming blue and finally black when touched, free, sinuate; orifice of pores greyish orange, then purple orange or saffron colour, small, round, or slightly irregular. Flesh yellow, becoming blue and finally blackish, reddish purple at the base of the st. Spores olivaceous, elliptical-oblong, 8–10 × 4–5 μ, 1–3-guttulate. Taste pleasant. Calcareous woods. Uncommon.

B. St. fibrillosely fleshy, generally floccosely squamulose and mucronate, rarely rugosely or reticulately ribbed. Pores white, or whitish, rarely yellow. Tubes concolorous, free, or sinuate, rarely adnate. Flesh generally white, and soft, often becoming bistre colour on exposure to the air, then becoming black. Large or medium in size.

1892. **B. duriusculus** Schulz. Boud. Icon. t. 150.

Duriusculus, somewhat hard.

P. 5–15 cm., grey fuliginous, or grey bistre, convex, minutely tomentose, viscid in wet weather, often areolate and cracked when dry. St. 10–20 × 1·5–4 cm., white, densely striate and black punctate, the striae often anastomosing in a reticulate manner, often spotted greenish at the attenuated, or incrassated base, very firm, equal, or subventricose. Tubes dirty white, somewhat free, fairly long; orifice of pores minute, round, or subangular. Flesh white, becoming reddish on exposure to the air especially in the p. and apex of the st., then becoming blackish, very firm. Spores fuliginous in the mass, pale under the microscope, oblong fusiform, 13–15 × 4·5–6 μ, 2–multi-guttulate. Taste pleasant. Edible. Woods, heaths, and pastures, especially under poplars. Aug. —Oct. Uncommon. (v.v.)

1893. **B. versipellis** Fr. (= *Boletus rufus* (Schaeff.) Quél.; *Boletus aurantiacus* Bull. sec. Quél.) Rolland, Champ. t. 87, no. 193, as *Boletus aurantiacus*. Versipellis, changeable in appearance.

P. 5–15 cm., rufous, hemispherical, pulvinate, dry, tomentose, then scaly, and becoming even; margin often appendiculate with the remains of the membranaceous, fugacious veil. St. 8–12 × 3–5 cm., whitish,
covered with rufous or greyish, mucronate floccii, attenuated upwards, often tinged greenish when eaten by slugs or snails. Tubes dingy white, free, long; orifice of pores often grey or blackish at first, minute, round. Flesh white, often greenish near the cuticle of the stem, thick, compact. Spores ochraceous, oblong fusiform, 16–18 × 5–7 μ, 1–4-guttulate. Smell and taste pleasant. Edible. Woods, heaths, and pastures. July—Nov. Common. (v.v.)


P. 5–20 cm., ochraceous fuliginous, greyish bistre, or brownish bistre, hemispherical, pulvinate, smooth, viscid when moist, at length rugulose, or rivulose; margin at first furnished with a cortina. St. 7–20 × 2–4 cm., whitish, or greyish, rough with fibrous scales that become blackish with age, often greenish or bluish especially towards the base when eaten by slugs or snails, attenuated upwards. Tubes white, then dingy, free, long; orifice of pores minute, round. Flesh white, watery, soft. Spores ochraceous, oblong fusiform, 16–18 × 5–6.5 μ, multi-guttulate. Taste pleasant. Edible. May—Dec. Common. (v.v.)

var. **niveus** Fr. Rostk. Bol. t. 48, as *Boletus holopus* Rostk.

Niveus, snow-white.

Differs from the type in the white p. becoming greenish grey at the disc, and in the white granularly punctate st. which becomes greenish grey at the base. Spores pale ochraceous, oblong fusiform, 14–16 × 5 μ, multi-guttulate. Deciduous woods. Sept.—Oct. Not uncommon. (v.v.)


Nigrescens, becoming black.

P. 4–12 cm., yellowish, convex, tomentose, cracking with age. St. 6–11 × 2–4 cm., yellowish, dotted with grey scales, ventricose, attenuated at both ends, striate. Tubes white, soon becoming bright yellow, free; orifice of pores small, 0.5 mm. across, round, or oblong, unequal. Flesh yellowish white, becoming red on exposure to the air, and finally dark brown. Spores olivaceous, fusiform, 12–16 × 5–6 μ, 1–3-guttulate. Taste pleasant. Edible. Deciduous woods. July—Sept. Uncommon. (v.v.)


P. 5–6 cm., bay, or brown, convex, pulvinate, dry, smooth. St. 7–12 × 2–3 cm., whitish, or ochraceous, attenuated upwards from the subbulbous base, longitudinally ribbed; ribs dark, anastomosing, or reticulate. Tubes whitish, then ochraceous, free; orifice of pores small, round. Flesh white, reddish under the cuticle of the p., compact. Spores olivaceous, fusiform, 9–10 × 3–4 μ. Taste mild. Edible. Woods. Aug.—Oct. Uncommon. (v.v.)
APHYLLOPHORALES.

Hymenium indefinite, increasing by centrifugal growth, fully exposed from the first, amphigenous, or unilateral, lining the interior of pores, covering the surface of teeth, tubercles or anastomosing gills, or forming a smooth surface.

I. POROHYDNINEAE.

Receptacle pileate, stipitate, sessile, or resupinate; hymenium inferior.

1. POLYPORACEAE.

Hymenium lining tubes coherent throughout their length, forming a layer distinct from the substance of the pileus, sometimes becoming torn into teeth, or gill-like plates, and separated by dissepiments sterile on the edge.

**Polyporus** (Micheli) Fr.

(πολύς, many; πόρος, a pore.)

Pileus fleshy, cheesy, coriaceous or corky, often at length becoming hard with age; entire, lobed, excentric, or dimidiate, simple, or branched. Stem central, lateral, or none, simple or branched. Tubes homogeneous, or heterogeneous, long, or short; orifice of pores round, angular, entire, torn, or toothed. Flesh white, or coloured. Spores white, or coloured, elliptical, pip-shaped, globose, subglobose, pruniform, oblong, or elliptic fusiform; smooth, punctate, or verrucose. Cystidia present, or absent, hyaline, or coloured. Annual, or perennial. Growing on wood, or on the ground; solitary, caespitose, imbricate, or connate at the base.

A. Stipitate, or caespitose.


*P. tomentose, or velvety. Cystidia coloured.

1897. **P. tomentosus** Fr. Kalchbr. Icon. t. 38, fig. 1, as Polyporus *Kalchbrenneri* Fr. **Tomentosus**, woolly.

P. 5–10 cm., tawny ferruginous, nankeen yellow, or yellowish cinnamon, convex, then plane and cyathiform, leathery, zoned, radiately rugose, clothed with tawny ferruginous hairs; margin thin. St. 2·5 cm. × 4–8 mm., fuscous umber, becoming blackish, subequal, firm, pulverulent, or tomentose, sometimes a mere base or central point. Tubes greyish, becoming fuscous, adnate, 1 mm. long; orifice of pores grey, glistening,

**P. silky, or glossy. Cystidia wanting.


J. F. C. Montagne, the eminent French mycologist.

P. 3–8 cm., ferruginous, cyathiform, irregular, uneven, zoneless, tomentose, becoming smooth; margin thin. St. 2–3 cm. × 5–9 mm., concolorous, unequal, pubescent. Tubes yellowish white, then ferruginous, short, decurrent; orifice of pores large, round, obtuse, entire. Flesh ferruginous, somewhat corky, thick. Spores hyaline, ovoid pruniform, 5–6 × 4–5μ, punctate. Woods, and heaths. Sept.–Oct. Uncommon. (v.v.)


P. 2–3 cm., bright cinnamon, plano-depressed, then subinundibuliform, somewhat corky, flaccid, velvety becoming glabrous, silky, shining, at first with darker fuscous zones, then becoming tawny, and zoneless. St. 3–4 cm. × 4–5 mm., concolorous, attenuated at the base, or somewhat bulbous, velvety. Tubes fuscous cinnamon, becoming tawny when dry, adnate, 1–2.5 mm. long; orifice of pores greyish, somewhat large, pentagonal, or hexagonal. Flesh concolorous, spongy. Spores yellowish, broadly elliptical, with an oblique apiculus, 6–7 × 4–5μ. Smell unpleasant. Under trees, and burnt places. Oct. Rare. (v.v.)

1900. P. perennis (Linn.) Fr. Rolland, Champ. t. 89, no. 197. Perennis, perennial.

P. 3–8 cm., cinnamon, then date brown, often becoming whitish with age, hemispherical, plane, or cyathiform, coriaceous, tough, thin, zoned, velvety, becoming smooth; margin fimbriate, then entire. St. 2.5–5 cm. × 3–8 mm., tawny, or concolorous, attenuated upwards, often bulbous at the base, velvety, firm. Tubes tawny, decurrent, 2–3 mm. long; orifice of pores silvery, becoming tawny, minute, angular, acute, then torn. Flesh tawny, fibrillosely leathery, tough. Spores hyaline, elliptical, 8–9 × 4–5μ, 1-guttulate. Charcoal heaps, and about stumps. Jan.–Dec. Common. (v.v.)

II. P. thin, hemispherical, or excentric, firm, squamulose, villose, or smooth. St. generally thin, corky, rarely branched, sometimes black at the base. Flesh leathery, white. Tubes heterogeneous; pores round, or polygonal, small, white. Spores hyaline. Perennial. Growing on wood.
1901. P. brumalis (Pers.) Fr.  Brumalis, pertaining to winter.

P. 2–10 cm., fuliginous, becoming pale and tan colour with age, convex, then plane, more or less umbilicate, fleshy pliant, then coriaceous, villose, or squamulose, becoming smooth; margin fimbriolate, or velvety. St. 1.5–5 cm. × 4–8 mm., concolorous, velvety, or squamulose. Tubes white, decurrent, 1 mm. long; orifice of pores white, becoming yellowish, round, angular, or oblong, small, toothed. Flesh whitish, very firm, thin at the margin. Spores white, oblong, often curved, 6–8 × 2–3 μ, 1–2-guttulate. Dead branches, and twigs in woods, and wood heaps. Sept.—May. Not uncommon. (v.v.)


Arcula, a casket.

P. 1–3 cm., fuscosus, becoming yellow with age, convex, subumbilicate, pliant, then coriaceous, at first covered with fuscosus squamules, then becoming smooth and ochraceous; margin strigose. St. 1–2.5 cm. × 1–2 mm., greyish fuscosus, or bistre, subsquamulose, becoming smooth. Tubes whitish, adnato-decurrent, 1–2 mm. long; orifice of pores white, becoming tawny, oblong, rhomboidal, thin, rather large, entire. Flesh white, thin, leathery. Spores white, globose, 3 μ. Dead twigs, and branches in woods, and shrubberies. Sept.—May. Uncommon. (v.v.)

1903. P. lentus Berk. Berk. Outl. t. 16, fig. 1. (?= Polyporus tubarius Quél.)

P. 2.5–5 cm., reddish brown, becoming ochraceous, convex, umbilicate, thin, tough, furfuraceo-squamulose, becoming smooth. St. 1–2.5 cm. × 4–9 mm., concolorous, central, or excentric, straight, or curved, hispid, or furfuraceous, often covered with pores to the base. Tubes white, decurrent, 2–3 mm. long; orifice of tubes white, large, angular, irregular. Flesh white, leathery, tough. Spores “white, elliptic fusiform, 12 × 4–5 μ” Massee. Dead roots, fallen branches, and gorse stems. April—Sept. Not uncommon. (v.v.)

1904. P. melanopus (Swartz) Fr.  μελας, black; πούς, foot.

P. 3–10 cm., white, then yellowish fuscosus or greyish bistre, convexo-convex, then infundibuliform, fleshy pliant, at first minutely flocculose, or pruinose. St. 2–4 cm. × 6–10 mm., dark brown, bistre, or black, gradually incrassated upwards, or thickened downwards, excentric, minutely velvety. Tubes white, decurrent, 5–1 mm. long; orifice of pores white, minute, round, fimbriate under a lens. Flesh white, thick, soft. Spores white, oblong, or pip-shaped, 7–8 × 3 μ, 1-guttulate. Smell often pleasant. Dead pine roots, and branches in woods. Aug.—Oct. Uncommon. (v.v.)
**P. and st. glabrous. St. often black at the base.

1905. **P. fuscidulus** (Schrad.) Fr.  *Fuscidulus*, somewhat dark.

P. 2-5–6 cm., *fuscous yellowish*, convexo-plane, fleshy, pliant, subcoriaceous, smooth. St. 2-5-5 cm. × 4 mm., *fuscous*, then *yellow*, equal, or thickened at both ends, *smooth*. Tubes *yellowish*, adnate, ·7 mm. long; orifice of pores *yellowish*, subangular, *quite entire*, minute. Flesh *yellowish white*, thin, tough. Spores “*hyaline, elliptico-oblong, 5–6 × 2μ*” Massee. On twigs, and chips of wood. Sept.—Feb. Rare.

1906. **P. leptocaephalus** (Jacq.) Fr.  λεπτός, thin; κεφαλή, head.

P. 2–3 cm., *pale*, then *fawn colour*, convexo-plane, pliant, then coriaceous, *thin*, smooth; margin rather wavy. St. 1–2-5 cm. × 3–4 mm., *pallid*, smooth. Tubes *whitish*, adnate; orifice of pores *whitish*, round, minute, obtuse. Flesh *white*, leathery. Spores “*hyaline, oblong pruniciform, 8μ, guttulate*” QuéL. On stumps, and dead birch trunks in woods. Oct.—March. Rare.


*Nummularius*, like money.

P. 1–2-5 cm., *whitish cream colour*, then *ochraceous and becoming whitish*, convexo-plane, hemispherical, rarely umbonate, thin, smooth. St. 1–2 cm. × 3–5 mm., *blackish bistre*, *whitish cream at the apex*, equal, or attenuated downwards, *firm*, pruinose. Tubes *white*, then *yellowish*, decurrent, 1–2 mm. long; orifice of pores *white*, then *straw colour*, minute, round, ciliate under a lens. Flesh *white*, *hard*, woody. Spores white, oblong, 7–9 × 2-5–3 μ, 1–2-guttulate, sometimes curved. Dead twigs, and branches in woods, and wood heaps. Aug.—Dec. Common. (v.v.)

1908. **P. picipes** Fr. Pers. Icon. pictae rar. fung. t. iv, fig. 1, as *Boletus infundibulis*.

Pix, *pitch*; pes, *foot*.

P. 5–10 cm., *pallid*, then *chestnut*, or *pale yellowish vivid* and *chestnut at the disc*, *cyathiform*, or depressed at the disc or behind, *fleshy coriaceous*, then *rigid*, smooth; margin *scalloped*. St. 2–7 × 5–2 cm., *brownish bistre*, or *olivaceous*, punctate with black up to the pores, *excentric*, or lateral, *pruinose velvety*, becoming smooth, *firm*. Tubes *white*, then *yellowish*, decurrent, 1-5 mm. long; orifice of pores *white*, then *yellowish*, or *pinkish*, very small, round. Flesh *white*, tough. Spores *hyaline*, pruiniform, 7–8 × 4 μ, 1-guttulate. Smell pleasant. On pollarded willows, and stumps. July—Dec. Common. (v.v.)


P. 5–12 cm., *pallid ochraceous*, then *tan colour*, or *cinnamon streaked with brown*, very *coriaceous*, *cyathiform*, or plane and depressed at
the disc or beyond, smooth. St. 1·5—5 cm. × 4—12 mm., pale ochraceous at the apex, black lower down, central, excentric, or lateral, smooth, tough, firm. Tubes whitish, then ochraceous or cinnamon, decurrent, 1—3 mm. long; orifice of pores white, becoming yellowish, small, round. Flesh white, then yellowish, very tough, woody, thin. Spores white, oblong or elliptical, 7 × 2·5—3μ. Smell slight. Taste bitter. On stumps, trunks, and fallen branches. July—Nov. Common. (v.e.)

1910. P. petaloides Fr. πέταλον, a leaf; εἶδος, like.

P. 5—6 cm., chestnut fuscous, spathulate, submembranaceous, rugose, smooth, flaccid when moist. St. 2 cm. × 8—10 mm., whitish, lateral, ascending, compressed, expanding into the p., smooth, dilated at the base into a shield-like organ of attachment. Tubes shining white, decurrent, very short; orifice of pores white, very small. Spores “almost colourless, elliptical, 6 × 2·5—3μ” Massee. Old stumps. Jan. Rare.

1911. P. osseus Kalchbr. (= Polyporus albidus (Schaeff.) Quél.) Kalchbr. Icon. t. 34, fig. 2. Osseus, like bone.

P. 2·5—8 cm., white, becoming yellowish, convex, often imbricate, lobed, smooth. St. white, simple, branched, or obsolete, smooth, hard, firm. Tubes white, decurrent, 1 mm. long; orifice of pores white, round, at length torn, or denticulate, minute. Flesh white, compact, becoming firm. Spores white, subglobose, 4—5μ. Smell somewhat acid. Taste becoming bitter. Larch stumps. Oct. Rare.

III. P. simple, rarely compound. Stipitate, or caespitose. Flesh soft, or slightly leathery, fragile, or firm, white. Tubes heterogeneous, pores round, or polygonal, of medium size, white. Spores white, or coloured. Annual. Growing on the ground, rarely on wood.


P. 4—12 cm., black fuliginous, convex, then expanded, often irregular and lobed, fleshy, fibrillose, disc often squamulose. St. 2·5—10 × 2—3 cm., concolorous, pale at the apex, equal, or tuberous, submentose, sometimes squamulose from the breaking up of the cuticle, firm. Tubes white, decurrent, 1—2 mm. long; orifice of pores white, becoming grey, rather large, entire, then torn. Flesh white, reddish when broken, and often blackish in the st., thick, soft. Spores white, subglobose, 5—6μ, warted. Taste slightly bitter. Edible. Coniferous woods. Sept.—Oct. Rare. (v.e.)

1913. P. flavo-virens Berk. & Rav. Flavus, yellow; virens, green.

P. 8—10 cm., dirty yellowish green, pulvinate, or depressed, irregularly lobed, fleshy, submentose. St. 5 × 2—3 cm., pallid, subcon-
colorous, incrassated upwards. Tubes white, then yellowish green, very
decurrent, ·5 mm. long; orifice of pores yellowish, angular, very
irregular, finally torn. Flesh white, thick, soft. Spores dirty green,
broadly fusiform, 15–18 × 7–8µ. Under pines. Sept. Rare. (v.v.)

IV. P. simple, rarely compound. St. generally thick. Flesh soft, or
leathery, white. Tubes heterogeneous; pores honey-comb-like, broad.
Spores white or pale coloured. Annual. Growing on the ground, or
on wood.

*P. velvety, hispid or squamulose.

1914. **P. squamosus** (Huds.) Fr. Grev. Scot. Crypt. Fl. t. 207; and
forma *erecta* Bres. Fung. Trid. t. 133. Squamosus, scaly.

P. 10–60 cm., ochraceous, variegated with broad, adpressed, centri-
fugal, darker, fuscous scales, fan-shaped, or hemispherical, convex,
then plane and at length concave, often umbilicate when young,
fleshy pliant, often imbricate and flattened. St. 1–5 × 1–5 cm., ochra-
ceous, base blackish, excentric, or lateral, or wanting, apex reticulate.
Tubes white, then yellowish, adnato-decurrent, 5–10 mm. long; orifice
of pores pallid, at first minute, then large, angular, and torn. Flesh
white, soft, becoming leathery, thick. Spores white, oblong, 10–12 ×
4–5µ, 1–2-guttulate. Smell strong. Said to be edible. On trunks of
ash, apple, walnut, maple, elm, yew, oak, birch, lime, etc. April—
Dec. Common. (v.v.)

1915. **P. Boucheanus** (Klotzsch) Fr. (= *Polyporus Forquignoni* Quél.
sec. Lloyd.)

P. 3–7 cm., bright tawny, or yellowish, plane, or cyathiform, fleshy,
smoother, then breaking up into floccose, erect squamules. St. 3–4.5 × 1–
2 cm., concolorous, becoming fuscous at the base, excentric, or lateral,
rarely central, tomentose. Tubes whitish becoming yellow, adnato-
decurrent, 2–5 mm. long; orifice of pores yellowish, large, angular,
toothed. Flesh yellowish, soft, becoming firm. Spores white, oblong,
or oblong fusiform, 14–16 × 6µ, 1-guttulate. On dead oak branches,


P. 5–10 cm., yellowish white, depressed, repand, fleshy pliant,
minutely silky, subsquamulose. St. 2–5 × 1 cm., white, becoming fuscous
at the base, somewhat lateral, bulbous, rough. Tubes white,
adnato-decurrent, 1–2 mm. long; orifice of pores white, large, 2 mm.
across, round, or oblong. Flesh white, firm. Spores “almost colourless,
elongato-elliptical, 16–17 × 7µ” Massee. Trunks, and stumps, es-
pecially willow. Sept. Rare.

37—2
**P. smooth.**

1917. **P. Rostkovii** Fr. Rostk. Polyp. t. 17, as *Polyporus infundibuliformis* Rostk.

Dr Friedrich Wilhelm Theophilus Rostkovius, one of the editors and illustrators of Sturm’s Deutschlands Flora.

P. 3–15 cm., smoke colour, or sometimes yellowish, dimidiato-infundibuliform, fleshy pliant, thin, smooth, even. St. 7–15 cm., black, excentric, often connate and caespitose at the thickened base, reticulated. Tubes white, then dingy yellowish, very decurrent, 4–8 mm. long; orifice of pores white, then ochraceous, large, pentagonal, or oblong, acute, toothed. Flesh white, soft. Spores “almost colourless, elongato-elliptical, 14–16 × 5–6μ” Massee, “guttulate” Quél. Smell pleasant. Stumps, and trunks, especially ash. July—Jan. Uncommon.

V. P. compound, many pileoli arising from a common trunk, or tubercle, or caespitose and imbricate. Spores white, or pale yellowish. Of large size, growing on wood or the roots of trees.

A. P. fleshy, firm, many pileoli arising from a common stalk.

1918. **P. umbellatus** Fr. Rolland, Champ. t. 91, no. 200.

_Umbella,_ a parasol.

P. 1–4 cm., fuliginous, rusous, or pallid light yellow, rarely white, convex, umbilicate, entire, pruinose, or villose. St. 2–3 × 5–1 cm., white, branched, arising from a common stalk which is often developed from a sclerotium, each branch giving rise to a separate p., pruinose. Tubes white, decurrent, 5 mm. long; orifice of pores white, minute, round, or angular. Flesh white, soft, elastic. Spores white, oblong, or pip-shaped, 7–9 × 3μ, 1–2-guttulate. Smell pleasant. Edible. Forming large tufts on and around old stumps. July—Oct. Not uncommon. (v.v.)

1919. **P. frondosus** (Fl. Dan.) Fr. Rolland, Champ. t. 91, no. 201.

_Frondosus,_ leafy.

P. 2–6 cm., fuliginous grey, or greyish tan colour; margin often white, dimidiate, spathulate, lobed, intricately recurved, rugose, pruinose, or villose. St. 10–30 × 5–10 cm., white, becoming discoloured, sparingly branched, smooth. Tubes white, decurrent, 5 mm. long; orifice of pores white, very small, round, or polygonal, then denticate. Flesh white, becoming discoloured, fibrous, firm. Spores white, subglobose, 6 × 5μ, punctate. Smell of new meal. Edible, but rather tough. Forming large tufts on oaks, hornbeam, and old stumps. Sept.—Oct. Not uncommon. (v.v.)


_εντυβαςιον,_ chicory.

P. 3–6 cm., pale yellowish inclining to fuscous, nut colour becoming
brownish, much branched, and divided up into numerous spatulate lobes, undulate, sinuous, often conchate. St. 2–3 × 1·5–4 cm., white, gradually spreading and dividing into the lobes of the p. Tubes white, decurrent, 5 mm. long; orifice of pores white, becoming fuscous, minute, round. Flesh white, often becoming reddish, soft, elastic. Spores white, elliptical, 6–7 × 3 μ. Smell often like that of mice. Edible but rather tough. Forming large tufts on beech, oak trees and on stumps. Sept—Dec. Not uncommon. (v.v.)

1921. P. cristatus (Pers.) Fr. Krombh. t. 48, figs. 15 and 16.

Cristatus, crested.

P. 5–10 cm., rufous greenish, or greenish yellow, entire, or dimidiate, or spathulate, scalloped, or lobed, depressed, subpulverulently villose, then rimosely squamulose. St. 2·5–6 × 1–2 cm., white, or lemon yellow, becoming discoloured, irregularly shaped, connate, rarely simple, glabrous. Tubes whitish, decurrent, 1–2 mm. long; orifice of pores whitish, becoming discoloured, minute, angular, toothed. Flesh white, becoming discoloured, soft, fragile. Spores white, subglobose, 5–6 × 5 μ, with a large central gutta. Beech woods. Sept.—Oct. Rare. (v.v.)

B. P. at first soft and succulent, then dry and fragile, arising from a tubercle, or caespitose. Pores yellow, or flesh colour.

*Flesh white, or yellowish.


Sulphureus, like sulphur.

P. 10–40 cm., reddish yellow, or orange, becoming paler with age, imbricated, undulated, pruinose, sessile, rarely stalked. Tubes sulphur yellow, becoming paler, 5 mm. long; orifice of pores bright sulphur yellow, becoming pale, minute, round. Flesh light yellowish, then white, soft, cheesy, often exuding a sulphur yellow milk when broken and quite fresh. Spores white, elliptical, 7–8 × 5 μ, minutely papillose. Taste acid. Said to be edible. On stumps, and trunks of willows, oaks, alders, walnuts, poplars, apples, ashes, yews, pines, etc. May—Nov. Common. (v.v.)

var. ramosus (Bull.) Quél.

Ramosus, branching.

Differs from the type in dividing up into several digitate-like, cylindrical branches covered with the pores. On oaks, and willows. Aug.—Sept. Not uncommon. (v.v.)

var. albolabyrinthiporus Rea.

Albus, white; λαβύρινθος, intricate; πόρος, a pore.

Differs from the type in the white, labyrinthiform, torn pores, and in the flesh being white from the first. On an oak. Nov. Uncommon. (v.v.)
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1923. **P. imbricatus** (Bull.) Fr. (= Polyporus sulphureus (Bull.) Fr. sec. Lloyd.) Rostk. Polyp. t. 21.

*Imbricatus*, covered with tiles.

P. 50–100 cm., yellowish tawny, or buff, becoming pale; margin pale, somewhat zoned, imbricated, very broad, lobed, and undulated, glabrous, sessile, rarely stalked. Tubes pale, becoming dirty yellowish, long, thin; orifice of pores pale, becoming concolorous with the p., minute, round. Flesh becoming fuscous when moist, white when dry, somewhat firm, fibrillosely cheesy. Taste bitter. Smell "like Gentian root" Bulliard, or "seed-cake" W. G. Sm. Oak trunks. June—Nov. Rare.


Herbergius.

P. 10–20 cm., bright rusty bay, becoming sulphur yellow towards the margin, imbricated, minutely velvety, becoming almost glabrous, sessile. Tubes pale grey, 4–8 mm. long; orifice of pores pale grey, labyrinthiform, unequal, torn, and toothed. Csaspitose. On trunks. Oct. Rare.

**Flesh deeply coloured.**

1925. **P. spongia** Fr. (= Polyporus Schweinitzii Fr. sec. Lloyd.) Fr. Icon. t. 180, fig. 2. σπόργια, a sponge.

P. 5–30 cm., brownish ferruginous, becoming tawny ferruginous when dry, dimidiate, connate in broad, dense tufts, or imbricate, then flattened, wrinkled, rugulose, strigously tomentose, sessile, or stalked. Tubes light yellow, becoming brownish, 2 mm. long; orifice of pores light yellow, soon becoming brownish, small, round, or angular, entire. Flesh rhubarb colour, becoming paler, spongy, soft, finally fragile. Spores very pale yellow, elliptical, 7 × 4 μ. Csaespitose. Coniferous stumps. Oct.—Nov. Uncommon. (v.v.)

1926. **P. Schweinitzii** Fr. Fr. Icon. t. 79, fig. 3.

Ludwig David von Schweinitz, the American mycologist.

P. 10–40 cm., bright tawny, disc becoming date brown with the exception of the yellowish tawny margin, and finally becoming entirely fuscous, regular and plano-cup-shaped, or irregular, dimidiate, and imbricate, rugose, strigously tomentose, fibrillosely. St. 3–12 × 5–6 cm., ferruginous, sometimes wanting, strigose. Tubes greenish yellow, decurrent, 3–5 mm. long; orifice of pores greenish yellow, broad, angular, often irregular. Flesh rhubarb colour, becoming fuscous, spongy, then fibrillosely, and finally fragile. Spores white, elliptical, 7–8 × 4 μ, with a large central gutta. On stumps, and roots of conifers. July—Nov. Not uncommon. (v.v.)

**P. rufescens** Fr. = *Daedalea biennis* (Bull.) Quél.
C. P. firm, tough, subcoriaceous, corky, or leathery. Caespitose.

1927. **P. giganteus** (Pers.) Fr. (= *Polyporus acanthoides* (Bull.) Quél.) Boud. Icon. t. 153.

P. 10–80 cm., *date brown*, *at first pale*, then brownish yellow, disc at length black, densely imbricated, dimidiate, very broad, flaccid, subzoned, rivulose, depressed behind, cuticle breaking up into granules or fibrillose squamules. St. 3–10 × 2–5 cm., *whitish*, connato-branched from a common tubercle, sometimes wanting. Tubes *whitish*, *decurrent*, 1–2 mm. long; orifice of pores *whitish*, *becoming fuliginous and black when touched or rubbed*, round, or angular, minute. Flesh *white*, *becoming black*, tough, subcoriaceous. Spores white, globose, 4–5 μ, with a large central gutta. Smell sour. Taste unpleasant. Forming dense masses at the base of beeches, oaks, elms, chestnuts, and robinias. July—Jan. Common. (v.v.)

1928. **P. acanthoides** (Bull.) Fr. ἀκανθός, acanthus; ἑίδος, like.

P. 5–90 cm., *ferruginous*, or *pale chestnut*, densely imbricated, infundibuliform, inciso-dimidiate, subzoned, longitudinally rugose, thin. St. *white*, *then rufescent*, connato-branched. Tubes *white*, *then rufescent*, short; orifice of pores *white*, *then rufescent*, lamellose-sinuate, thin, toothed. Flesh *faintly rufous*, thin, 4–6 mm. thick, pliant, then coriaceous. Spores white, “subglobose, 4 × 3 μ” Massee. In dense clusters on trunks, roots, and buried wood. Sept. Rare.

1929. **P. alligatus** Fr. (= *Polyporus imberbis* (Bull.) Quél.)

Alligatus, bound up.


1930. **P. heteroclitus** (Bolt.) Fr. Bolt. Hist. Fung. t. 164, as *Boletus heteroclitus* Bolt. ἑτέροκλιτος, leaning to one side.


**P. salignus** Fr. = *Daedalea saligna* Fr.

B. Sessile.

VI. P. with a *rigid crust*, often resinous. Tubes *heterogeneous*, separable; pores round, rarely polygonal. Spores white, or slightly coloured. Cystidia coloured, or none. Annual. Growing on wood.
*Betula,* birch.

P. 7–30 cm., pale, becoming brownish with age and often mottled, roundish, or reniform, attached by a narrow, bossy base which sometimes forms a short stalk; pellicle smooth, thin, separating; margin very obtuse, sterile. Tubes white, 2–8 mm. long, often separating; orifice of pores white, becoming darker, minute, round. Flesh white, soft, then corky. Spores white, oblong, 5–7 × 2μ, often curved. Birch, rarely beech. Common. (v.v.)

1932. **P. quercinus** (Schrad.) Fr. Boud. Icon. t. 154.  
*Quercus,* oak.

P. 7–15 × 5–12 cm., pale tan, or tinged with red, and becoming reddish when bruised or with age, tongue-shaped, convexo-plane, narrowed behind into a thick horizontal stem, at first floccoso-granular, or minutely squamulose, becoming smooth; margin obtuse, sometimes lobed. Tubes whitish, 4 mm. long; orifice of pores whitish, or yellowish, becoming reddish when bruised, and finally concolorous, minute, round. Flesh whitish, lemon yellow under the cuticle and at the base of the tubes, often pinkish elsewhere when young, especially in the stem, 1.5–2.5 cm. thick, floccose, soft, then hardened. Spores white, often yellowish, oblong, 10–12 × 4–5μ, slightly granular inside. Taste very bitter. Oaks, and oak logs. May—Dec. Rare. (v.v.)

*Quercus,* oak.

P. 7–30 cm., yellowish, then ferruginous and becoming brown, dimidiate, horizontal, pulvinate, imbricate, cuticle thin, soft, pruinose, rugged, becoming even, smooth; margin often exuding watery drops. Tubes ferruginous, 10–30 mm. long; orifice of pores whitish, round, small. Flesh ferruginous, subzoned, soft, becoming corky, thick. Spores pale ferruginous in the mass, yellowish under the microscope, globose, 6–8 × 6–7μ, 1-guttulate. Cystidia “sparse, straight, 40 × 8μ.” Lloyd. Taste acid, the drops very astringent from the tannic acid they contain. At the base of oaks. May—Dec. Common. (v.v.)

VII. P. villose, velvety, or strigose, without a cuticle. Flesh coloured, moist, then firm, and fragile. Tubes heterogeneous, separable, coloured. Spores white, or coloured. Cystidia coloured, or wanting. Annual. Growing on wood.

1934. **P. hispidus** (Bull.) Fr. Boud. Icon. t. 158.  
*Hispidus,* shaggy.

P. 10–30 cm., yellowish, then ferruginous and finally blackish, dimidiate, pulvinate, thick, very hispid, shaggy. Tubes ferruginous, 2–3 cm. long; orifice of pores yellowish, becoming concolorous, small, round, becoming torn, often exuding watery drops. Flesh ferruginous, 2/5–10 cm. thick, spongy, fibrous, becoming dry and fragile. Spores brown, subglobose, 9–10 × 7–8μ, often apiculate, 1–multi-guttulate.
Cystidia sparse, or absent. Ashes, apples, and walnuts. May—Feb. Common. (v.v.)

1935. P. cuticularis (Bull.) Fr. Cuticula, a thin external skin.

P. 7–30 cm., tawny, then ferruginous fuscous and finally blackish, applanate, dimidiate, rather triquetrous, imbricate, becoming plane, thin, hairy, tomentose, obsolescently zoned, becoming smooth; margin incurved, fimbriate. Tubes dark brown, 3–10 mm. long; orifice of pores whitish, glistening, then concolorous, small, round, or angular, often torn. Flesh dark brown, thin, 3–10 mm. thick, fibrillose, hard. Spores ferruginous, elliptical, 6–7 × 4–5μ. Cystidia sparse, or absent. Beeches, birches, and hornbeams. Aug.—Feb. Not uncommon. (v.v.)


Benzoin, a fragrant, resinous juice.

P. 7–12 cm., ferruginous rubiginous, shell-shaped, dimidiate, often constricted at the base, subimbricate, often marked with metallic, bluish zones, tomentose, becoming rugose when old, and darker. Tubes whitish, or yellowish, 6–10 mm. long; orifice of pores whitish, becoming ferruginous, minute, round, or deltoid. Flesh fuscous, then pale wood colour, firm. Spores white, oblong, 4–5 × 2–2.5μ, curved. Smell very pleasant, aromatic. Cedars and Abies. Oct.—March. Uncommon. (v.v.)

1937. P. cryptarum (Bull.) Fr. Кρυπταρι, a vault.

P. 10–20 cm., tawny, or brown, becoming paler, effuso-reflexed, imbricate, wrinkled, silky, distilling drops. Tubes cinnamon, very long; orifice of pores ochraceous, minute, round. Flesh cinnamon, thick, or thin, spongy, then corky. Abies, and rotting coniferous wood. Not uncommon.

1938. P. rutilans (Pers.) Fr. (= Polyporus nidulans Fr. sec. Quél.) Pers. Icon. et Desc. fung. min. cogn. t. 6, fig. 3.

Rutilans, becoming reddish.

P. 2–6 cm., tawny-cinnamon or reddish grey, becoming pale, convex, effused behind, imbricate, rarely solitary, villose, becoming smooth; margin inflexed, obtuse, unequal. Tubes white, becoming concolorous, 1–3 mm. long; orifice of tubes white, glistening, soon becoming concolorous, minute, round. Flesh concolorous, firm, pliant, giving a blue juice when extracted with alcohol. Spores white, globose, 4μ. Smell pleasant. Fallen branches, and dead aspens. Jan.—Dec. Not uncommon. (v.v.)

1939. P. nidulans Fr. (= Polyporus rutilans (Pers.) Fr. sec. Quél.) Saund. & Sm. t. 45, as Polyporus rutilans. Nidus, a nest.

P. 2.5–5 cm., pale yellowish, or flesh colour, pulvinate, solitary, convex above and below, villose, becoming smooth; margin spreading, obtuse.
Tubes cinnamon, 2–5 mm. long; orifice of pores concolorous, becoming purplish when bruised, rather large, angular. Flesh pale cinnamon, very soft, easily compressed, giving a blue juice when extracted with alcohol. Spores white, pip-shaped, 4–5 × 1.5–2.5 μ. Smell pleasant when dried. Twigs, and fallen branches. Jan.—Dec. Not uncommon. (v.v.)

1940. **P. gilvus** Schwein. Gilvus, pale yellow.

P. 5–10 cm., brown, becoming pale yellowish, applanate, often imbricate, even, often rugulose. Tubes brown, 3–10 mm. long; orifice of pores brown, small, round. Flesh bright yellow, becoming cinnamon brown when old, hard, firm. Spores white, subglobose, 4–5 × 3.5–4 μ, 1-guttulate. "Cystidia abundant, slender, sharp, projecting, 12–16 μ.” Lloyd. Deciduous trees, especially beech. Jan.—Rare. (v.v.)

1941. **P. radiatus** (Sow.) Fr. Radiatus, radiate.

P. 2–6 cm., tawny, margin yellow, becoming ferruginous fuscous, dimidiate, very imbricate, radiately rugose, minutely velvety, becoming smooth; margin spreading, repand. Tubes ferruginous, 4–5 mm. long; orifice of pores silvery, glistening, minute, round, or angular. Flesh pale cinnamon, fibrous, hard, rigid. Spores white, subglobose, 5 × 4 μ. Cystidia coloured, fusiform, 20–30 × 5–8 μ, sparse. Beeches, birches, and especially on alders. Sept.—April. Common. (v.v.)


P. 1–3 cm., fulvous, then rust coloured, triquetrous, nodular, connate, villose, rugose, rough. Tubes light cinnamon, 1–5 mm. long; orifice of pores silvery, glistening, minute, round, unequal, acutely torn. Flesh paler, very hard. Spores white, elliptical, 4–5 × 3 μ. Beeches. Sept.—Nov. Not uncommon. (v.v.)

**P. polymorphus** Rostk. = *Polyporus nodulosus* Fr.


†Pores coloured.

1943. **P. amorphus** Fr. ἀμορφός, misshapen.

P. 3–4 cm., white, effuso-reflexed, or dimidiate, imbricate, sometimes resupinate, silky, or tomentose. Tubes white, becoming golden, or pinkish, short; orifice of pores concolorous, round, or irregular and torn. Flesh white, soft, pliant, "subgelatinous” Lloyd. Spores white, subglobose, 4–5 μ, 1-guttulate. Trunks, stumps, and needles of various conifers. Sept.—March. Not uncommon. (v.v.)
1944. **P. armeniacus** Berk. (= *Polyporus amorphus* Fr. sec. Cke.)

*Armeniaca*, apricot.

P. 8 cm., **white**, broadly effused, suborbicular, confluent; margin minutely downy. Tubes **white**, then **bright buff**, changing to deep cinnamon during drying, short; orifice of pores **concolorous**, minute, round, rather irregular, often confined to the centre. Flesh **whitish**, very thin. Spores “**white**, elliptical, **7 × 4.5μ**” Massee. *Fir*, and pine bark. Sept.—March. Uncommon. (v.v.)


Lloyd, Synop. Sec. Apus. Gen. Polyp. figs. 662 and 663, as *Polyporus undatus*.

*Adiposus*, fat.

P. 1–1.5 cm., **white**, here and there acquiring a foxey tinge, effus-reflexed, often entirely resupinate, obscurely tomentose. Tubes **whitish**, tinged in places with brown, short, or long; orifice of pores **whitish**, becoming brownish, either small and round, or angular and torn. Flesh **white**, waxy, soft. Spores white, globose, 4–5μ, 1-guttulate. The whole fungus turns brown in drying. Ditch sides, ground beside stumps, and mosses. Sept.—Dec. Uncommon. (v.v.)

1946. **P. albus** (Huds.) Fr.

*Albus*, white.


1947. **P. fumosus** (Pers.) Fr.

*Fumosus*, smoky.


Fragrans, scented.

Differs from the type in the sweet smell, and **concolorous margin of the p.** Willow, and elm stumps. Sept.—Dec. Not uncommon. (v.v.)

1948. **P. adustus** (Willd.) Fr. Quél. Jur. et Vosg. t. 18, fig. 2.

*Adustus*, swarthy.

P. 3–7 cm., **cinereous pallid**, becoming **black at the margin**, effuso-reflexed, dimidiate, orbicular, imbricate, sometimes entirely resupinate, villose, obsoletely zoned, slightly wrinkled. Tubes **cinereous**, short; orifice of pores at first **whitish pruinose**, soon **cinereous fuscous**,
becoming blackish when dry, minute, round, marginal ones obsolete and leaving a whitish margin on the underside. Flesh white, then grey or black, soft, floccose, pliant, 3–5 mm. thick. Spores white, elliptical, \(4-5 \times 2-5-3\mu\). Smell none, rarely fragrant. Trunks, stumps, and fallen branches. Jan.—Dec. Common. (v.v.)


Differs from the type in the lobed, crisped margin of the p., and the larger, unequal pores becoming labyrinthiform. Stumps, and fallen branches. Jan.—Dec. Not uncommon. (v.v.)

††Pores white.

*Orifice dentate.*

1949. **P. lacteus** Fr. Fr. Icon. t. 182, fig. 1. *Lacteus*, milk white.

P. 3–7 cm., shining white, triangular, transversely elongated, sloping downwards, gibbous behind, pubescent, at length smooth and uneven; margin inflexed, acute. Tubes white, 2–6 mm. long; orifice of pores concolorous, medium sized, toothed, at length labyrinthiform and torn into Sistotrema-like teeth. Flesh white, soft, fragile, generally thinner than the length of the tubes. Spores white, elliptical, or pip-shaped, \(4-5 \times 2-2.5\mu\), 1-guttulate. Taste astringent. Stumps, and fallen branches. Sept.—Dec. Uncommon. (v.v.)

1950. **P. fragilis** Fr. Fr. Icon. t. 182, fig. 2. *Fragilis*, brittle.

P. 3–6 cm., whitish, becoming spotted with fuscous when touched, plano-depressed, reniform, dimidiate, sometimes attenuated behind into a stem-like base and pendulous, convex beneath, villose, rugose. Tubes whitish, 2–6 mm. long; orifice of pores whitish, becoming fuscous when bruised, round, or angular, becoming sinuous and labyrinthiform, pubescent. Flesh white, becoming discoloured, fragile, fibrous. Spores white, elliptical, \(5-6 \times 2.5-3\mu\), 1–2-guttulate. Taste somewhat bitter. Stumps, and branches of conifers. Aug.—Nov. Uncommon. (v.v.)


P. 1–6 cm., tan colour, sometimes whitish at first, effuso-reflexed, adnate behind, confluent, incrusting, marked with silky raised lines. Tubes white, 1–2 mm. long; orifice of pores white, becoming tan colour when dried, angular, fimbriate. Flesh white, soft, becoming hard and fragile. Spores white, elliptical, or pip-shaped, \(3-4 \times 2-3\mu\), 1-guttulate. Incrusting twigs, leaves, and branches. Sept.—Dec. Uncommon. (v.v.)


P. 2.5–8 cm., white, becoming reddish when bruised or with age, dimidiate, imbricate, rugose, silky, fibrillose; margin acute. Tubes
white, 3–10 mm. long; orifice of pores white, spotted with red when touched, large, elongate, unequal, flexuose. Flesh white, becoming reddish when cut, soft, firm when dry, fragile, thick. Spores white, elliptical, 5–6 × 2–3 \( \mu \). Pine stumps. Sept.—Nov. Uncommon. (v.v.)


P. 12 mm., bright red brown, shell-shaped, effuso-reflexed, narrowed behind, rough with rigid, tooth-shaped processes. Tubes and pores pallid, large, angular, lacerated. Flesh white, becoming reddish when cut, soft, firm when dry, fragile, thick. Spores white, elliptical, 6 × 3 \( \mu \). Pine stumps. Sept.—Nov. Uncommon. (v.v.)

1954. **P. caesius** (Schrad.) Fr. Caesius, bluish grey.

P. 1–8 cm., white, then tinged with bluish grey, dimidiate, often imbricate, rarely stipitate, sometimes resupinate, villose, or silky. Tubes white, 3–9 mm. long; orifice of pores white, becoming bluish grey when touched, small, unequal, flexuose, toothed. Flesh white, bluish when broken, soft, watery, then firm. Spores pale blue, oblong, 4–5 × 1–1.5 \( \mu \), 1-guttulate, often curved. Stumps, and dead branches of conifers, more rarely on deciduous trees. March—Dec. Common. (v.v.)

1955. **P. trabeus** Fr. Rostk. Polyp. t. 28. \( \tau \rho \alpha \phi \nu \xi \), a beam.

P. 5–10 cm., white, becoming pallid, often tinged with ochre or bistre, effuso-reflexed, transversely elongated, minutely pubescent, or smooth. Tubes white, 2–6 mm. long; orifice of pores white, somewhat round, or toothed and labyrinthiform. Flesh white, obsoletely zoned, floccose, then firm. Spores white, elliptical, 5–6 × 3–4 \( \mu \). Conifers, and yews. Oct.—Feb. Rare. (v.v.)

1956. **P. destructor** (Schrad.) Fr. Krombh. t. 5, fig. 8. Destructor, destroyer.

P. 5–15 cm., fuscous whitish, effuso-reflexed, sometimes resupinate, rugose, subundulate, pubescent. Tubes white, 3–8 mm. long; orifice of pores white, becoming discoloured with age, somewhat round, toothed, or torn. Flesh whitish, watery, fleshy, thick, zoned. Spores white, subglobose, 3–4 × 3 \( \mu \). Smell sometimes strong. Conifers, and worked wood. May—Dec. Uncommon. (v.v.)

**var. undulatus** (Fr.) Sacc. Undulatus, wavy.

Differs from the type in the broadly expanded, marginate, whitish bay brown p.

**Orifice entire.**

1957. **P. epileucus** Fr. \( \epsilon \pi \lambda \varepsilon \nu \kappa \omega \), whitish.

P. 7–12 cm., whitish, or yellowish, becoming ochraceous when dried, dimidiate, pulvinate, concave below, villous-rugous. Tubes whitish, 4–18 mm. long; orifice of pores whitish, becoming yellowish, minute, round. Flesh whitish, becoming yellowish, cheesy-soft, 2.5–5 cm. thick,
scarcely zoned. Spores white, oval, 4 μ. Beech, birch, elm, poplar, willow, and fir stumps. Sept.—Nov. Rare. (v.v.)

1958. **P. spumeus** (Sow.) Fr. Sow. Eng. fung. t. 211.

**Spumeus**, frothy.


**P. borealis** Fr. = **Daedalea borealis** (Wahlenb.) Quél.


*τεφρός*, ash-coloured; *λευκός*, white.

P. 5–10 cm., **grey**, triquetrous, applanate, often imbricate, plane beneath, unequal, villose, becoming smooth; margin obtuse, flexuose, often white, and becoming blackish when touched. Tubes **white**, 10–15 mm. long; orifice of pores **white**, round, small, becoming toothed and fimbriate. Flesh **white**, zoned with grey or bister, subgelatinous, soft, becoming firm and fragile. Spores white, allantoid, 4–5 × 1–1.5 μ, slightly curved. Beech, and pine stumps, and logs. Sept.—Oct. Not uncommon. (v.v.)

1960. **P. alutaceus** Fr. Rostk. Polyp. t. 30, as *Polyporus epixanthus* Rostk.

**Aluta**, tanned leather.

P. 2.5–5 cm., **tan**, reniform, convex, or flattened, often connate, subimbricate, plane beneath, somewhat velvety and rugose; margin acute, even. Tubes **whitish tan colour**, 3–18 mm. long; orifice of pores **yellowish**, minute, round. Flesh **white**, or **yellowish**, soft, then tough and fragile, obsolutely zoned. Spores "with a slight ochraceous tinge, subglobose, 4 μ" Massee. Beech, and pine stumps and trunks. Sept.—Oct. Uncommon.

1961. **P. stipticus** (Pers.) Fr. Fr. Icon. t. 181, fig. 2.

*στυπτικός*, astringent.

P. 3–6 cm., **white**, dimidiate, pulvinate, often imbricate, minutely pubescent, becoming smooth; margin obtuse, becoming reddish. Tubes **white**, 6–8 mm. long; orifice of pores **at first with white milk-like drops**, becoming slightly rufescent when dry, small, round, or irregular. Flesh **white**, soft, then hard, 1.5 cm. thick. Spores white, elliptical, 3–4 × 1.5 μ, slightly curved, guttulate. Taste astringent. Pine trunks and stumps. Sept.—Oct. Uncommon. (v.v.)

P. 2–5 cm., white, dimidiate, sometimes constricted behind into a stem-like base, becoming even, smooth; margin inflexed, thin, acute. Tubes white, short; orifice of pores white, minute, round, becoming toothed with age. Flesh white, soft, watery, then rigid. Spores white, “elliptical oblong, 5μ, incurved” Quél. Taste astringent. Birch stumps, and fallen branches. June—Dec. Uncommon. (v.v.)

1963. **P. pallescens** Fr. 

Pallescens, growing pale.

P. 4–7.5 cm., yellowish, dimidiate, subcaespitose, even, smooth; margin acute. Tubes white, short; orifice of pores white, becoming yellowish, minute, round. Flesh yellowish, soft, then corky. Spores “ellipsoid, 6–8 × 4μ” Sacc. Old stumps. Rare.

1964. **P. albidus** Trog. Schaeff. Icon. t. 124. 

Albidus, whitish.

P. 6–10 cm., white, globose, shell-shaped, triquetrous, or sub-applanate, sometimes slightly stalked, dry, dull smooth. Tubes white, short; orifice of pores white, round, at length sinuate and splitting. Flesh white, hard, corky-woody. Spores white, elliptical, 5–6 × 3–4μ. Abies. Sep.—Oct. Rare. (v.v.)


Cerebrinus, brain-like.

P. 2–5 cm., snow white, pulvinate, resupinate, delicately tomentose, becoming smooth; margin crenate. Tubes and orifice of pores white, rather large, round, entire, smooth. Flesh white, 6 mm. thick. Spores “white, subfusiform, 5 × 2.5μ” Masse. Fir. Aug. Rare.

**Sistotrema** (Pers.) Fr.

(σειστός, shaking; τρυπήμα, a hole.)

Pileus fleshy, hemispherical, spathulate, effuso-reflexed, or resupinate. Stem central, lateral, or none. Tubes becoming broken up into teeth, or plates, and anastomosing at the base. Flesh pale, or coloured. Spores white, subglobose, obval, or oblong; smooth, or echinulate; basidia with 4–8-sterigmata. Cystidia none. Growing on the ground, or on wood.


Confluens, confluent.

P. 1–2.5 cm., white, then yellowish, hemispherical, spathulate, or irregular, horizontal, villose; margin often yellowish, flexuose. St. 5–2.5 cm. × 2–3 mm., white, or ochraceous, central, or lateral, often connate, attenuated downwards, pruinose. Tubes concolorous, becoming broken up into teeth, or plates, flexuose, entire, or toothed, pruinose. Flesh white, often yellowish at the base of the teeth, thin, firm. Spores white, oval, subglobose, 4–5 × 3–4μ, 1-multi-guttulate. Coniferous woods. Sept.—Nov. Not uncommon. (v.v.)
1967. **S. sulphureum** (Quél.) Bourd. & Galz. Quél. Ass. fr. (1893), t. iii, fig. 10, as *Daedalea sulphurea* Quél.

*Sulphureum*, sulphur colour.

P. 1–2 cm., whitish sulphur, or citron yellow, effused, little adnate; margin *concolorous*, similar, or fibrillosely fringed. Spines *sulphur*, then *ochraceous orange*, or *tawny*, apex *white*, pubescent, obtuse, scattered, forming flexuose plates. Flesh *concolorous*, flocose, spider-web-like, fibrillose, membranaceous, thin. Spores "*light yellow*, subhyaline, at first smooth, then *rough*, spines *hyaline*, fugacious, oboval, oblong, apiculate at the base" Bourd. & Galz. Bare earth, stones, herbaceous roots and buried twigs. Jan.—Dec. (The type has not yet been recorded for Britain.)

var. **variecolor** (Fr.) Bourd. & Galz. (*= Hydnum variecolor* Fr.)

*Variecolor*, of different colours.

Differs from the type in the *white subiculum*, the variable, scattered, yellow, then *tawny* spines, and the *oboval*, *echinulate* spores, 7–8 × 4–6 μ. Dead oak stumps. Oct. Rare.

**Fomes** Fr.

(Fomes, tinder.)

Pileus hard, woody, or corky, dimidiate, hoof-shaped, or resupinate, sessile, often concentrically zoned, and covered with a rigid crust. Tubes homogeneous, or heterogeneous, often stratose. Flesh white, or coloured. Spores white, or coloured, globose, subglobose, elliptical, or oblong-oblong, smooth. Cystidia present, or absent, coloured or hyaline. Perennial. Growing on wood.

*Flesh deeply coloured.*


*Fomentum*, touch-wood.

P. 10–60 cm., greyish, becoming hoary, hoof-shaped, or dimidiate, attached by a broad base, 7–20 cm. thick, remotely and concentrically sulcate, opaque, pruinose, *cuticle thick and very hard*. Tubes *ferruginous*, 1–3 cm. long, stratose; orifice of pores *glaucous pruinose*, then *ferruginous*, minute, round. Flesh *dark brown*, soft, flocose, very thick. Spores *hyaline*, elliptic oblong, 16–18 × 5 μ, 1–3-guttulate. Beeches, oaks, limes, hornbeams, and birches. Jan.—Dec. Common. (v.v.)


*Nigrescens*, becoming black.

Differs from the type in its *black*, *shining*, strongly concentrically sulcate crust. Beeches. Jan.—Dec. Not uncommon. (v.v.)

*Igniarius*, belonging to fire.

P. 10–30 cm., floccosely hoary, then ferruginous, and at length blackish especially at the base, tuberculoso-globose, immarginate, hoof-shaped, or flattened, rarely resupinate, covered with a very hard, rough, uneven, often rimose cuticle; margin at first whitish, rounded, obtuse. Tubes cinnamon, becoming whitish with deposits of lime with age, 2–8 mm. long, stratose; orifice of pores hoary, then cinnamon, minute, round. Flesh dark brown, very hard, zoned. Spores hyaline, globose, 5–7 μ, 1-multi-guttulate. Cystidia dark coloured, sparse, subulate, base ventricose, 25–30 × 7–8 μ. Willows, and occasionally on ashes. Jan.—Dec. Common. (v.v.)

var. **nigricans** (Fr.) Lloyd. Fr. Icon. t. 184, fig. 2.

*Nigricans*, blackish.

Differs from the type in the smooth, shining, black crust. Birches, rarely on willows. Jan.—Dec. Common. (v.v.)

var. **roburneus** (Fr.) Lloyd.

*Robur*, oak.

Differs from the type in the slight, resinous exudation on the crust and the strongly silvery, glancing orifice of the pores. Willows, and oaks. Jan.—Dec. Rare.


*Robustus*, firm.

P. 10–40 cm., fuscous, becoming black with age, hoof-shaped, or subhemispherical, sessile, remotely and concentrically sulcate; cuticle concrete, rough, uneven, rigid, very hard, pilose at first, then glabrous, cracked; orifices of pores silvery white, then concolorous, minute, round. Tubes rhubarb root colour, or pale fulvous, stratose, cylindrical. Flesh concolorous with the tubes, very firm, zoned. Spores white, globose, 7–8 μ, with a large central gutta. Setae none. *Abies pectinata* and oak. Jan.—Dec. Uncommon. (v.v.)

1971. **F. fulvus** Fr.

*Fulvus*, tawny.

P. 8–9 cm., tawny, at length becoming hoary, convex above and below, adnate by a broad base, triangular in section, even, not concentrically sulcate, at first hairy, or villose. Tubes cinnamon, short, not distinctly stratose; orifice of pores at first covered with cinereous yellow pruina, minute, round. Flesh very hard, woody-corky. On decaying trunks, especially poplar. Oct.—March. Rare.

1972. **F. salicinus** (Pers.) Fr. Fr. Icon. t. 185, fig. 1.

*Salicinus*, belonging to willows.

P. 5–30 cm. and more, cinnamon, then hoary, blackish bay at the base, undulated, smooth, pubescent, for the most part resupinate, or
in vertical positions incircled above with a narrow, undulated, short, obtuse, spreading margin. Tubes ferruginous cinnamon, short; orifice of pores silvery grey, glistening, minute, round. Flesh ferruginous cinnamon, woody, thin. Spores yellowish tawny, “elliptical, 5 x 3 µ. Cystidia abundant, slightly thickened at the base, 12–35 x 6 µ.”

1973. F. conchatus (Pers.) Fr. kòrχη, a mussel-shell.

P. 5–8 cm., date brown, effuso-reflexed, the reflexed portion somewhat shell-shaped, concentrically sulcate, often imbricate, sometimes wholly resupinate, tomentose; margin acute. Tubes cinnamon, short; orifice of pores ashy pruinose, glistening, minute. Flesh light brown, hard, coryck. Spores ferruginous, subglobose, 5–6 x 4 µ, 1-guttulate. Cystidia abundant, slightly thickened at the base, 15–30 x 7–9 µ. Willows, and beeches. Feb.—Nov. Not uncommon. (v.v.)

1974. F. Ribis (Schum.) Fr. (= Polyporus pectinatus (Klotzsch) Quél.) Ribes, currant.

P. 5–25 cm., ferruginous fuscous, bright yellow at the margin, becoming dark at the base, horizontal, imbricate, flattened, concentrically zoned, velvety, strigose. Tubes cinnamon, 2–4 mm. long, often stratose; orifice of pores yellow, then cinnamon, minute, round. Flesh cinnamon, floccose, soft. Spores fuscous, globose, 3–4 x 3 µ, 1-guttulate. Currants, gooseberries, hawthorns, and spindle. Jan.—Dec. Not uncommon. (v.v.)

F. Euonymi (Kalchbr.) Cke. = Fomes Ribis (Schum.) Fr. F. pectinatus (Klotzsch) Fr. = Fomes Ribis (Schum.) Fr.

1975. F. pomaceus (Pers.) Big. & Guill. Pomum, fruit.

P. 3–5 cm., fuscous, becoming cinereous, dimidiate, triquetrous, or somewhat hoof-shaped, often subresupinate, delicately silky, or almost smooth. Tubes cinnamon, 4–6 mm. long, stratose; orifice of pores whitish, then cinnamon, minute, round, pruinose. Flesh light brown, firm, woody. Spores white, globose, 6 x 5–6 µ. Cystidia abundant, deep mahogany brown, apex hyaline, flaseh-shaped, 15–20 x 7–8 µ. Plums, rarely cherries. Jan.—Dec. Common. (v.v.)

var. fulvus (Quél.) Rea.

Fulvus, tawny.

Differs from the type in its brighter tawny colour, and more tomentose


P. 1–3 cm., bright ferruginous brown, becoming dusky ferruginous, effuso-reflexed, imbricate, often entirely resupinate, subtomentose,
FOMES


F. obliquus (Pers.) Fr. = Poria obliqua (Pers.) Quél.

**Flesh white, pallid, rosy, or violet.**

1978. **F. ulmarius** (Sow.) Fr. (= Polyporus incanus Quél.) Hussey, Illus. Brit. Myc. t. 64.

P. 7–30 cm., white, becoming yellowish and discoloured with age, effused, flattened, incrusted, tubercular, becoming smooth; margin obtuse, sometimes free. Tubes cinnamon, 5–20 mm. long, stratose; orifice of pores whitish, becoming yellowish, minute, round. Flesh white, becoming yellowish with age, corky-woody, very hard. Spores white, globose, 6–7 µ, 1-guttulate. At the base of old elms, and elm stumps, rarely higher up. Jan.—Dec. Common. (v.v.)

1979. **F. fraxineus** (Bull.) Fr. (= Polyporus incanus Quél.; Polyporus cytisinus Berk.)

Fraxinus, an ash tree.

P. 7–25 cm., whitish, becoming rubiginous and fusceous, planate, dimidiate, sometimes imbricate, glabrous, often coarsely tuberculated; margin incurved, pubescent at first. Tubes pale cinnamon, 5–25 mm. long, stratose; orifice of pores white, becoming greyish, minute, round, or oblong. Flesh yellowish, somewhat zoned, soft, becoming hard and woody. Spores white, subglobose, 6–7 × 6 µ. Smell often strong. Ashes, and laburnums. Jan.—Dec. Uncommon. (v.v.)

F. cytisinus (Berk.) Massee = Fomes fraxineus (Bull.) Fr.

1980. **F. annosus** Fr. Fr. Icon. t. 186, fig. 2. Annosus, full of years.

P. 7–45 cm., bay brown, becoming blackish, convex, then becoming plane, imbricate, sometimes resupinate, rugosotubercular, sulcately zoned, silky, then with a rigid, smooth crust; margin at first white, thin. Tubes yellowish, 4–8 mm. long, stratose; orifice of pores whitish, round, or polygonal, obtuse. Flesh white, or yellowish, soft, becoming hard. Spores white, subglobose, 4–5 × 4 µ, 1-guttulate. At the base
of conifer trunks, and on felled and worked conifer wood, rarely on frondose trees, and wood. Jan.—Dec. Common. (v.v.)

1981. **F. castaneus** Fr.

*Castaneus, chestnut.*


*Carneus, flesh colour.*


1983. **F. roseus** (A. & S.) Fr. Fr. Icon. t. 186, fig. 1, as *Polyporus rufopallidus* Trog.

*Roseus, rose-coloured.*


*Connatus, connate.*


1985. **F. populinus** Fr.

*Populus, poplar.*


1986. **F. variegatus** (Secr.) Fr. (= *Ganoderma resinaceum* Boud. sec. Lloyd,) Sow. Eng. Fung. t. 368, as *Polyporus variegatus*.

*Variegatus, variegated.*

GANODERMA

Ganoderma (Karst.) Pat.
(γάνος, shining; δέρμα, skin.)

Pileus corky, stipitate, or sessile, covered with a resinous, laccate crust. Stem lateral, rarely central, or none. Tubes heterogeneous, often stratose. Flesh coloured. Spores coloured, elliptical, ovate oblong, or obovate, truncate at the base, smooth, punctate, verrucose, or echinulate, thick-walled. Cystidia none, or very rare. Annual or perennial. Growing on wood, rarely on the ground.

*Spores verrucose.


P. 5–28 cm., light yellow, becoming blood-red-chestnut, more or less reniform, sometimes flabelliform, rarely orbicular, or imbricate and sessile, polished, shining, sulcato-rugose. St. 5–18 × 1–5 cm., concolorous and shining like the p., lateral, rarely central, sometimes wanting, rugose. Tubes white, then cinnamon, adnate, 4–12 mm. long; orifice of pores white, becoming discoloured, minute, round. Flesh whitish, at length reddish, spongy, becoming corky and woody, zoned. Spores brown, minutely verrucose, elliptical, truncate at the base, 10–12 × 6–8 μ, with a large central gutta. At the base and roots of elms, oaks, hornbeams, and also in peat beds. July—April. Common. (v.v.)

1988. G. applanatum (Pers.) Pat. (= Polyporus applanatus (Pers.) Fr.)

P. 10–40 cm., cinnamon, margin white, becoming hoary, and often dusted with the spores, dimidiate, or orbicular, often imbricate, attached by a broad base, flattened, tubercular, obsoletely zoned, pulverulent, or smooth, covered with a laccate crust. Tubes ferruginous, 1–4 cm. long, stratose; orifice of pores white, becoming fuscous when bruised, minute, round, or angular. Flesh cinnamon, becoming paler, very firm, thick. Spores ferruginous, minutely echinulate, broadly elliptical, truncate at the base, 9–13 × 6–8 μ, 1-guttulate. Beeches, oaks, and ashes. July—March. Common. (v.v.)

var. vegetum (Fr.) Romell. Vegetum, vigorous.

Differs from the type in the white mycelial layer interposed between each stratum of the tubes. Limes, and elms. Jan.—Dec. Uncommon. (v.v.)

var. laccatum (Kalchbr.) Rea. (= Polyporus resinosus (Schrad.) Quél.) Lac, a resinous excretion left by the lac insect.

**Spores smooth.


P. 15–30 cm. and more, deep umber chestnut, or paler, convexo-plane, dimidiate, sessile, incrusted on the surface with a sticky resinous coating, which dries up into tubercular ridges, and becomes laccate and shining; margin sterile. Tubes reddish umber, 2–3 cm. or more long, stratose; orifice of pores white, then fuscous, minute, round. Flesh dark umber chestnut, soft, very thin, 2–4 mm. thick. Smell aromatic. Spores ochraceous, broadly elliptical, truncate at the base, 10–12 x 7–8 \( \mu \), 1-guttulate. Elms. Aug.—May. Uncommon. (v.v.)

1990. **G. resinaceum** Boud.

P. 15–30 cm., yellow, white at the margin, becoming blood-red-umber-chestnut, and finally concolorous, semicircular, somewhat flattened, sessile, rarely stalked, or imbricate, concentrically sulcate, the primary furrows wide, becoming shallower and more crowded with age, viscid, then varnished, very shining, becoming duller and dusted with the spores; margin at first delicately pruinose and rounded, becoming glabrous and more acute. Tubes fuscous cinnamon, 5–3 cm. long, stratose; orifice of pores white, then fuscous cinnamon, minute, round. Flesh pale cinnamon, becoming paler, thick, soft. Spores fuscous, ovate oblong, or obovate, truncate at the base, 10–12 x 6–8 \( \mu \), eguttulate, or 1-guttulate, epispore thick. Oaks, beeches, and pines. Sept.—Oct. Uncommon. (v.v.)

**Poria** (Pers.) Fr.

(πόρος, a pore.)

Pileus membranaceous, coriaceous, or corky, entirely resupinate. Tubes round, or angular, often directly inserted on the mycelium. Spores white, or coloured, elliptical, pruniform, globose, subglobose, obovate, elliptic oblong, or cylindrical; smooth, or punctate. Cystidia present, or absent, hyaline, rarely coloured. Growing on wood, rarely on the ground.

I. Fleshy, soft; pores minute, equal, round.

*Pores persistently white, or at length becoming yellowish or reddish.


P. 1–30 cm., white, sometimes yellowish, broadly effused, consisting almost entirely of the pores, thin, 1 mm. thick, arid, closely adnate, inseparable, minutely tomentose; margin smooth. Pores white, glistening, 1–2 mm. long, very small, round, subequal, sometimes oblique
and gaping open. Spores white, "ovoid pruniform, 6μ" Quél., "allantoid, 4–6 × 1·25–1·5μ, hymenial hyphae firm, undulate, not fibulate, 2–4μ broad" Romell. Dead wood, and branches of frondose trees. Jan.—Dec. Common. (v.v.)


P. 1–11 cm., white, sometimes yellowish, effused, thin, soft; margin white, byssoid, radiately fibrillose. Pores white, then pale ochraceous, 5–1 mm. long, often confined to the centre, or here and there in patches, very small, thin, round, unequal, torn. Spores subglobose, 4 × 3·5μ. Stumps, dead wood, and branches of conifers, and on dead leaves. Jan.—Dec. Not uncommon. (v.v.)


P. 1–18 cm., white; mycelium thick, forming a dense membrane or creeping branched strings. Pores white, 2–4 mm. long, in scattered patches, slender, minute. Spores "colourless, elliptic-oblong, 4 × 2μ." Massee, Oak wood, causing the dry rot of ships. Jan.—Dec. Rare.

1994. P. medulla-panis (Pers.) Fr. Fr. Icon. t. 190, fig. 2, as Polyporus medulla panis (Jacq.). Medulla, pith, crumb; panis, bread.

P. 5–10 cm., white, becoming yellowish, effused, consisting almost entirely of the pores, determinate, subundulate, firm, separable, smooth; margin naked, distinct. Pores white, 2–4 mm. long, straight, or oblique, medium sized, entire, pruinose. Spores white, elliptical, 3–4 × 1·5–2μ. Rotten wood, and dead branches of frondose trees, rarely on the ground. Sept.—Feb. Uncommon. (v.v.)


P. 2–15 cm., white, becoming pale, effused, rather thick, up to 12 mm. in depth, subimmersed, soft; margin white, indeterminate, byssoid. Pores white, then pale ochraceous, 1–3 mm. long, medium sized (seated on the crust formed of the mycelium), round, unequal, torn. Spores white, "5–6 × 3–4μ" Karst. Stumps, and dead branches of conifers. Oct.—Jan. Uncommon. (v.v.)


P. 1–10 cm., whitish, subhyaline, waxy, broadly and unequally effused, 2–4 mm. or more thick, subundulate, indeterminate; margin shining white, thin, villose. Mycelium forming a woody stroma, tough and separable. Pores whitish, hyaline, 5–2 mm. long, straight, or oblique, very small, round, obtuse, entire. Spores "globose, ocellate, hyaline, 4μ; or ovoid, 4 × 2·5μ." Bres. Rotten beech trunks, rarely on dead fir wood. Aug.—March. Uncommon. (v.v.)

P. 6–7 cm., white, then flesh coloured, at length brownish, effused, bleeding, waxy, fleshy, then slightly coriaceous, contracted and involuted when dry (often tubercularly nodular and *Ptychogaster*-like); margin persistently white, tomentose. Pores white, becoming yellowish flesh coloured or reddish, 2–8 mm. long, angular, orifice pulverulent, often oblique, soft, subfleshy. Spores hyaline, cylindric-curved, 4.5–5 × 1.5–2 μ. Basidia clavate, 12–16 × 4 μ. Subhymenial hyphae hyaline, 2.5–3.5 μ in diam., thick or thin walled, gelatinous. Hyphae of pore walls yellowish, 3 μ in diam., often incrusted with mineral matter. Beech stumps. Oct.—Dec. Rare. (v.v.) **Pores yellowish.**


P. 3–10 cm., whitish, then yellowish orange, effused, thin, subadnate, subundulate, determinate; margin villose. Pores white, then yellowish orange, shining, curt, sometimes stratose, minute, round, equal. Spores whitish, tinged yellowish, oblong, 8–9 × 3.5–4 μ. Dead wood, and branches of willow, aspen, and chestnut. Nov.—May. Rare. **Pores yellowish.**

1999. **P. Laestadii** Fr. & Berk. C. P. Laestadius.

P. 5–20 cm., bright yellow, effused, forming confluent patches, 2–4 mm. thick, separable, tubercular. Pores bright lemon yellow, very short, sometimes stratose, round, or elongate and curved. Flesh white, very brittle, compact. Spores “5 × 2.5 μ” Massee. Underside of dead boards in a hot-house. Aug. Rare. **Pores yellowish.**

2000. **P. eupora** Karst. (= *Poria nitida* (Pers.) Fr. sec. Quél.)


P. 3–9 cm., white, turning pallid, or pale ochraceous and more or less tawny when dry, forming small, erect, scattered tufts, each surrounded by radiating, strigose fibres, at length confluent, up to 3 mm. thick in the centre of the tufts. Pores pallid ochraceous, darker when dry, 2–4 mm. long, extremely minute, scarcely visible to the naked eye, angular, dissepiments extremely thin, edge ragged. Spores “colourless, sub-globose, 4–5 μ” Massee. Old dead boards. Rare.

*P.* 2-9 cm., *white*, broadly effused, 2-4 mm. thick, even, tough, *entire, separable*, like soft leather. Pores *white*, *hyaline, firm*, round, equal, quite entire, obtuse. Spores *hyaline*, “obliquely elliptical, $6 \times 3.5 \mu$” Massee. Rotten wood, and branches. April—May. Uncommon. (v.v.)


*P.* 2-8 cm., *white*, effused, incrusting, innate, inseparable, firm. Pores *pallid tan*, 2 mm. long, *distinctly stratose*, very small, round, equal. Spores *hyaline*, “elliptical, $4 \times 2 \mu$” Massee, “subglobose, 4μ, 1-guttulate.” Cystidia with incrusted top, 12-15 $\times$ 9-15μ, or when the crust is removed, 4-5-7μ broad. Hyphae 3μ broad, not fibulate” Romell. Old stumps, and rotten branches of oak, elm, ash, pear, and maple. July—Feb. Uncommon. (v.v.)

"**Pores flesh colour.**"

2004. *Poria placenta* Fr. Fr. Icon. t. 188, fig. 3, as *Polyporus placenta* Fr.  

*Placenta*, a flat-cake, placenta.

*P.* 5-20 cm., *rosy flesh colour*, widely effused, rather thick, *soft, separable*; margin *white*, byssoid, sterile. Pores *rosy flesh colour*, *fuscous when dry*, 2-6 mm. long, angular, unequal, *irregularly stratose*. Smell very pleasant. Spores *white*, elliptical, $5 \times 3 \mu$, minutely punctate. Larch stumps. Aug.—Oct. Rare. (v.v.)


"****Pores red.****


*P.* 2-8 cm., *blood-red-rufous*, effused, coriaceous, thin, *adnate*, even, smooth, *determinate*; margin byssoid when young. Pores *concolorous*, very small, thin, *acute*. Dead branches, and prostrate trunks of beech, broom, and bird cherry. Rare.


*Fuscus*, dusky; *carnea*, flesh colour.

*P.* 5-15 cm., *fuscous purple*, effused, thin; margin definite, here and there inflexed, thick, tomentose. Pores *fawn colour*, or *vinous brown*, 1-5-4 mm. long, somewhat round. Rotten wood, and putrid trunks. Rare
P**or*a** ferruginous.

2008. **P. umbrina** Fr. Rostk. Polyp. t. 27, fig. 6, as *Polyporus ferruginosus* Fr. *Umbrina*, umber-coloured.

P. 5–8 cm., *rufous umber*, effused, up to 12 mm. thick, determinate, undulato-tubercular; margin *paler*, distinct, smooth. Pores concolorous, 2–4 mm. long, minute, somewhat round, unequal. Spores hyaline, “ovoid, 6–7μ” Quél. Trunks, and dead wood. Sept.—Oct. Uncommon. (v.v.)

II. Flesh thin; pores unequal, angular, or rather large.

*Pores white, or yellowish, and becoming yellowish red or greenish.


P. 5–10 cm., *white*, effused, innate, inseparable, the white floccose mycelium creeping into the wood. Pores *white, then cream colour*, 1 mm. long, large, angular, toothed, forming a continuous, firm, persistent stratum. Spores white, “allantoid, 6 × 1·5–2μ” Romell. Dead branches, and worked wood of conifers. Jan.—Dec. Uncommon. (v.v.)


P. 3–10 cm., *yellowish*, effused; margin subtomentose, soon similar; subiculum very thin, scarcely visible. Pores *concolorous*, 1 mm. long, straight, or oblique, oblong, or sinuate, entire. Spores hyaline, obovate, 4–5 × 3–3·5μ, 1-guttulate; basidia clavate, 12–15 × 4μ. Cystidia clavate, or fusoid-ventricose, 15–18 × 4–5μ; hyphae septate, often nodular on one side, 2–3μ thick. Oak wood. May. Uncommon. (v.v.)


P. 1–4 cm., *white*, effused, very soft, 1–3 mm. thick, loosely adherent; margin often separating and reflexed, incurved when dry.
Pores white, at length somewhat cream, or pallid, usually angular, variable in diameter. Spores white, 4–6 × 2–3 μ; basidium 4-spored, 20 × 5 μ; hyphae septate, with clamp connections. Rotten coniferous wood. Nov.—Jan. Not uncommon. (v.v.) “Some specimens which seem to belong to this species are partly or totally reduced into a floccose-pulveraceous state of sulphurous or pallid colour, which contains abundant subglobose or ellipsoidal, apparently asperulate, 1-guttulate, chlamydosporic, 5–7 × 5–4.5 μ, not unlike those of *Ptychoaster albus*, though more hyaline.” “The conidia are smooth, not asperulate, but have granular contents, which give a rough appearance” Wakefield & Pearson.


**Rancida**, stinking.

P. 2–8 cm., white, then pale tan colour, effused, coriaceous; margin subfimbriate, at length separating; subiculum thin, submembranaceous. Pores concolorous, 2–4 mm. long, round, oblong, or subangular, entire, or at length torn. Spores hyaline, cylindrical, somewhat curved, 5–7 × 2.5–75 μ; basidia clavate, 15–18 × 4–6 μ; hyphae thin, 2.5–4 μ thick. Smell strong, of rancid meal. Larch, and pine bark and needles. Sept. Rare.


P. 2–8 cm., white, broadly effused, orbicular, then confluent, adnate, inseparable; margin narrow, thin, tomentose. Pores white, very short, small, angular, dissepiments somewhat rigid, almost entire. Spores white, “elliptical, 5 × 3 μ” Massee. Decorticated branches of pine. Sept. Rare. (v.v.)


P. 2–5 cm., persistently shining white, effused, superficial, membranaceous, very thin, separable; margin shortly fringed. Pores shining white, becoming faintly yellowish white, minute, unequal, angular, dissepiments very thin, fimbriato-toothed. Pine poles. Feb. Rare.


Sebastian Vaillant, a French mycologist.

P. 2–15 cm., white, or slightly rufescent, broadly effused, thin, translucent, the free mycelium resulting in root-like ribs which are somewhat united by a membrane. Pores white, here and there crowded together, curt, rather large, thin, unequal. Spores “hyaline, elliptical, 4–6 × 2–3 μ” Karst. Dead wood, and on the ground. April—Oct. Rare.

1 “I am still not fully satisfied that the chlamydomorphic specimens really belong here” Romell, S.B.T. p. 643.
2018. **P. bombycina** Fr. (= *Trametes bombycina* (Fr.) Quél.) Sow. Eng. Fung. t. 387, fig. 5, as *Boletus terrestris*.

Bombycina, silky.

P. 2–7 cm., dingy yellowish, effused, silky-membranaceous, adhering laxly; margin spider-web-velvety. Pores whitish cream, then pale ochraceous, somewhat round, becoming angular and flexuose, large. Spores straw colour, “elliptic oblong, 6–7 × 4 µ” Massee. Dead wood. Sept.—Nov. Not uncommon. (v.v.)


ǔµήν, a membrane; κύστις, bladder.

P. 1–10 cm., snow-white, effused, very thin, arachnoid; margin minutely byssoid, almost indeterminate. Pores white, then pallid, large, scarios dissepiments collapsing. Spores white, rough, subglobose, 3 × 2µ, 1-guttulate. “Hyphae soft, fibulate, 2–3µ broad” Romell. Dead wood. Sept.—Nov. Uncommon. (v.v.)

2020. **P. aneirina** (Sommerf.) Fr. (= *Trametes aneirina* (Sommerf.) Quél.)

วด, not; εἰρινεὸς, woolly.

P. 1–10 cm., white, effused, orbicular, then confluent, thin, subinnate; margin byssoid. Pores white, then pallid, large, cell-like, waxy, angular, often exactly hexagonal, acute, smooth. Spores “obovate, 5–6 × 3.5–4.5µ” Bres. Dead branches of poplar, and willow. Oct. Rare.


P. 2–3 cm., white, effused, suborbicular; margin obsolete; subiculum white, tomentose, cartilaginous and horny when dry. Pores honey colour, large, 3–5–75 mm. across, subhexagonal, dissepiments thin, slightly rigid, acute. Spores white, “6 × 3µ” Massee. Dead pine branches. Sept. Rare.


P. 2–6 cm., white, becoming pallid green when dry, effused, crustaceous-adnate, thin; margin pulverulento-tomentose. Pores white, becoming pallid green, minute, angular, dissepiments very thin. Spores white, elliptical, 4–5 × 2.5µ. Rotten wood, and sticks. Sept.—Dec. Rare. (v.v.)

James Renny, an eminent English mycologist.

P. 2–6 cm., white, becoming lemon yellow when dry, at first forming a thick, somewhat frothy, then pulverulent mass. Pores white, then yellowish, 2–3 mm. long, sparingly produced, disseminations thin. Spores “colourless, elliptical, 3 x 1.5 μ” Massee. Pine stumps, and on the ground. Oct.—Nov. Rare.

**Pores flesh colour.

2024. **P. incarnata** (A. & S.) Fr. Fr. Icon. t. 189, fig. 1, as *Polyporus incarnatus* Fr.

Incarnata, flesh colour.


2025. **P. micans** (Ehrenb.) Fr. Micans, sparkling.

P. 2–8 cm., whitish flesh colour, effused, suborbicular, becoming confluent, thin, adnate, soft, fugacious; margin white, byssoid. Pores whitish flesh colour, very shallow, very thin, resembling honeycomb, angular, subcrenate. Spores white, sausage-shaped, 7–8 x 3 μ. Dead wood, and rotten trunks. Oct.—Nov. Uncommon. (v.v.)

***Pores violaceous, or purple.

2026. **P. violacea** (A. & S.) Fr. Rostk. Polyp. t. 27, fig. 3, as *Boletus purpureus* Fr.

Violacea, violet colour.

P. 2–10 cm., violaceous, effused, determinate, waxy gelatinous, thin, closely adnate, even, smooth, destitute of a distinct subiculum. Pores violaceous, translucent, very shallow, cellular, or veined, quite entire. Spores tinged yellowish, punctate, elliptical, 7 x 4.4–5 μ. Fir stumps, trunks and poles. Aug.—May. Not uncommon. (v.v.)

2027. **P. purpurea** Fr. Fr. Icon. t. 189, fig. 2, as *Polyporus rhodellus* Fr.

Purpurea, purple.

P. 10–30 cm., purple lilac, very broadly and widely effused, the mucединous, flocculose, white mycelium creeping over the surface of rotten wood; margin white, silky. Pores purple lilac, 1–2 mm. long, minute, unequal, round, or angular, interruptedly scattered, or conglomerate. Spores “ellipsoid-oblong, cylindric, curved, 6–7 x 2 μ” Sacc. Decayed trunks and stumps of beech, willow, oak, and alder. Oct.—Feb. Uncommon. (v.v.)
III. Effused, dry, tough; pores rather large, rigid, roundish, angular.

*Pores whitish, or greyish brown.

2028. **P. corticola** Fr.  
Cortex, bark; colo, I inhabit.

P. 2–8 cm., white, becoming pale, widely effused, equal, firm, smooth; mycelium forming a bare, xylostramatoid layer. Pores whitish, very minute, superficial, often obsolete, punctiform. Bark of poplar, beech, willow, oak, birch, and fir. Rare.

*P. sinuosa* Fr. = *Trametes sinuosa* (Fr.) Quél.

2029. **P. subfusco-flavida** (Rostk.) Massee. Rostk. Polyp. t. 27, fig. 11, as *Polyporus subfusco-flavidus* Rostk.

Subfuscus, somewhat dusky; flavida, yellowish.

P. 6–30 cm., white, then light yellow fuscous, broadly effused, becoming confluent, thin, coriaceous, arid, adnate; margin white, byssoid, determinate, thin. Pores greyish brown, or whitish, minute, irregular. Dead oak wood, and planks. Rare.

**Pores brown, or cinnamon.**

2030. **P. obliqua** (Pers.) Quél. (= *Fomes obliquus* (Pers.) Fr.) Fr. Icon. t. 188, fig. 1, as *Polyporus obliquus* Fr. Obliqua, slanting.

P. 5–10 cm., pallid, then date brown, becoming blackish, widely spreading, throwing off the bark, very thin, coriaceous corky; margin often reflexed, wrinkled, and laciniate. Pores brown, 2–5 mm. long, extending to the wood, pervious to the base, often oblique; orifice of the pores grey, glistening, very small, obtuse, subpentagonal, sometimes obscurely stratose. Spores white, globose, 4–5μ. Trunks, and dead branches, under the bark, especially beech. Sept.—Oct. Uncommon. (v.v.)

**P. ferruginosa** (Schrad.) Fr. = *Fomes ferruginosus* (Schrad.) Massee. P. resupinata (Bolt.) W. G. Sm. = *Fomes resupinatus* (Bolt.) Massee.

2031. **P. contigua** (Pers.) Fr. Contigua, touching together.


2032. **P. laevigata** Fr. Laevigata, made smooth.

P. 2–6 cm., cinnamon, broadly effused, coriaceous rigid, determinate, not marginate, separating when old, smooth, very glabrous, with a rigid cuticle underneath, 1–2 mm. thick. Pores cinnamon, very minute, round, entire. Spores white, "3–5 × 3–4μ. Cystidia like those in *Fomes igniarius*" Romell. Fallen birch branches. Nov. Uncommon. (v.v.)
IV. Unequally effused, membranaceous, thin, mostly incrusting; pores rather large, very short, often vein-like.

2033. *P. reticulata* (Pers.) Fr. Fr. Icon. t. 190, fig. 3, as *Polyporus reticulatus* Fr.

Reticulata, netted.


Farinella, mealy.

P. 1–11 cm., snow white, widely effused, very thin, fugacious when touched; mycelium naked, flocculoso-pulverulent, not interwoven. Pores white, thin, shallow, continuous, unequal, hexagonal, sub-flexuose, intricate. Spores white, oblong elliptical, 6–7 × 3–3·5μ, 1–2-guttulate, “cylindrical, curved, 8–9 × 2–2·5μ. Hyphae rather straight, 4–5μ in diam., no clamp connections” Wakef. & Pears. Dead wood, and logs of beech, lime, and fir. July—April. Not uncommon. (v.v.)


P. 2–8 cm., white, forming Corticium-like patches, quite smooth; margin obtuse. Pores white, arising from the mere collapsing of the substance, shallow, obtuse. Spores “colourless, elliptic-oblong, 4 × 1·5μ” Massee. Dead wood. Oct. Rare.

2036. *P. blepharistoma* B. & Br. βλεφαρίς, eyelash; στόμα, mouth.

P. 1–5 cm., snow white, very thin; mycelium arachnoid, somewhat mealy. Pores white, small, dissepiments thin; orifice of pores ciliato-dentate. Spores white, elliptical, 4–5 × 3μ. Dead wood, and fallen branches. April—Nov. Not uncommon. (v.v.)


P. 4 cm., pallid, becoming black, subgelatinous, orbicular, forming little pulvinate patches, tomentose at first; margin raised, obtuse. Pores delicate grey, very shallow, angular, acute, entire. Spores “colourless, broadly elliptical, 4 × 2·5–3μ” Massee. Parasitic on *Polyporus amorphus*. Rare.

2038. *P. terrestris* (DC.) Fr. Terrestris, pertaining to the land.

P. 2–10 cm., white, effused, very thin, spider-web-flaxy, rather tender, fugacious. Pores white, then rufescent, central, extremely small, very shallow, round, or angular, becoming torn. Spores white, subglobose, 4–5 × 4μ, 1-guttulate. Naked soil, and rotten wood. May—Nov. Uncommon. (v.v.)
2039. **P. bathypora** (Rostk.) Massee. Rostk. Polyp. iv, t. 59, as *Polyporus bathyporus* Rostk. & *Baùthís*, deep; *πόρος*, a pore.

P. 7–8 cm., white, effused; margin thin, byssoid. Pores *white*, *becoming brownish*, rather large, cup-shaped, toothed, sometimes stratose. Dead oak, and beech branches. Rare.

**2. POLYSTICTACEAE.**

Hymenium lining tubes, or covering gills, or teeth, homogeneous with the substance of the pileus, not forming a distinct layer, sterile on the edge.

**Polystictus** Fr.

(*πολυστικτός*, with many punctures.)

Pileus coriaceous, membranaceous, or somewhat spongy, dimidiate, sessile, surface often zoned. Tubes *homogeneous*, developing from the centre outwards. Spores white, elliptical, pruniform, oblong, or oblong-elliptical; smooth, or punctate. Cystidia sparse, or none. Annual. Growing on wood, often imbricate.

2040. **P. hirsutus** (Wulf.) Fr.

*Hirsutus*, hairy.

P. 3–8 cm., whitish, *often brownish* or tawny at the margin, *sometimes becoming blackish* with age, dimidiate, convexo-plane, often imbricate, *shaggy with rigid hairs*, furrowed with concentric and *concolorous* zones. Tubes *whitish*, short; orifice of pores *whitish*, *becoming brownish* or yellow, round, or angular, obtuse. Flesh *whitish*, thin, very coriaceous, soft. Spores white, oblong elliptical, 6–7 × 2.5–3.μ. Trunks, and stumps. June—March. Not uncommon. (*v.v.*)

2041. **P. velutinus** Fr.

*Velutinus*, velvety.

P. 2–5 cm., white, *becoming yellowish* or greyish, dimidiate, plane on both sides, *minutely velvety*, or pubescent, with obscure, slightly *darker zones*; margin *thin*, acute. Tubes *white*, or yellowish, very short; orifice of pores *concolorous*, round, minute. Flesh *whitish*, thin, corky coriaceous, then rigid. Spores white, oblong elliptical, 6–8 × 2–2.5μ. Birch, beech, and willow trunks, and stumps. Sept.—Dec. Uncommon. (*v.v.*)

2042. **P. zonatus** Fr.

*ζώνη*, a belt.


Versicolor, of various colours.

*P. 2–8 cm., variously coloured, dimidiate, orbicular, often imbricate, depressed behind, becoming plane, velvety, or pubescent, marked with concentric, smooth, shining, satiny zones of various colours. Tubes white, very short; orifice of pores whitish, becoming yellowish, small, round, becoming torn and irregular. Flesh whitish, thin, coriaceous. Spores white, oblong, 6–9 × 3μ. Trunks, stumps, twigs, pales, and branches. Jan.—Dec. Common. (v.v.)

var. *fuscatus* Fr.

Fuscatus, dusky.

Differs from the type in the fuscous, zoneless or obscurely zoned *p.* and the torn yellow pores. Twigs, and fallen branches. Jan.—Dec. Not uncommon. (v.v.)

var. *nigricans* Lasch.

Nigricans, becoming black.

Differs from the type in the greyish black *p.* with black zones, and the smoke grey pores. Stumps, and branches. Jan.—Dec. Not uncommon. (v.v.)

2044. *P. stereoides* Fr. (= *Trametes mollis* (Sommerf.) Fr. sec. Bres.) Fr. Icon. t. 187, fig. 3, as *Polyporus stereoides* Fr.

Stereum, the genus Stereum; εἵδεω, like.

*P. 2–3 cm., greyish fuscous, becoming black, effuso-reflexed, reniform, imbricate, pubescent, then glabrous, with concolorous, depressed, narrow zones, scarcely 1 mm. thick. Tubes white, short; orifice of pores white, medium sized, obtuse, deformed, and daedaloid. Flesh yellowish, thin, rigid, coriaceous. Spores white, “elliptical, 9μ” Quél., “oblong, 9–12 × 3·5–4μ” Romell. Trunks, and stumps of *Abies* and deciduous trees. Aug.—Oct. Rare.


*P. 1–3 cm., whitish, or greyish, becoming yellowish, reniform, or orbicular, adnate behind, or affixed by the centre, velvety hairy, often radiato-rugose; margin entire, acute. Tubes white, very short; orifice of pores whitish, becoming yellowish, small, round, absent at the margin. Flesh whitish, soft, tough, coriaceous. Spores “ovate, internally granular, externally punctato-roughened, hyaline, 8–10 × 5–6μ or 7–9 × 2–3μ, cylindrical, curved, rarely straight” Bres. Elm stumps, oak branches, and worked wood. Oct.—Jan. Uncommon. (v.v.)

2046. *P. gossypinus* (Lév.) Massee. (= *Daedalea gossypina* (Lév.) Quél.)

Gossypium, the cotton plant.

*P. 3–10 cm., white, effuso-reflexed, becoming plane, tomentose. Tubes white, 2–4 mm. long; orifice of pores greyish, labyrinthiform, then angular, rather large, denticulate. Flesh white, thin, coriaceous. Spores
white, "pruniform, 6μ, punctate" Quél. Trunks, fallen branches, and furze stems. Jan. Rare.


P. 10-13 cm., becoming dirty yellow, planate, effused at the base, imbricate, with rugoso-villosate, zone-like markings near the margin. Tubes whitish, short; orifice of pores becoming yellowish, unequal, torn. Flesh white, corky coriaceous, tough. "Spores hyaline, yellow in the mass, cylindrical, slightly curved, 6-8 × 3μ" Sacc. Old willow stumps. Rare.


P. 2.5-8 cm., cinereous white, effuso-reflexed, dimidiate, sometimes resupinate, imbricate, villose, obsoletely zoned. Tubes violaceous, becoming pale, 5-1 mm. long; orifice of pores concolorous, unequal, torn. Flesh tinged brownish or purplish, thin, coriaceous. Spores white, oblong, 3-4 × 2-2.5μ, curved, 2-3-guttulate. Trunks, and fallen branches of conifers, rarely on beeches. Jan.—Dec. Common. (v.v.)

Irpex Fr.

(Irpex, a harrow.)

Pileus corky coriaceous, or membranaceous, dimidiate, or resupinate, sessile. Tubes homogeneous, alveolar at first, then becoming torn into teeth, or plates. Flesh white, or coloured. Spores white, elliptical, oval, globose, cylindrical, or elliptic-oblong; smooth, or punctate. Cystidia present, or absent. Growing on wood, rarely on the ground.

I. Pendulous with the p. extended behind.


P. 2.5-4 cm., pale yellow, margin white, effused, more or less circular, extended behind, pendulous, free above, plicate, adpressely squamuloso-pilose, or slightly rugulose. Teeth shining white, 2 mm. long, in irregular rows, large, incised. Flesh concolorous, membranaceous, elastic, very thin. Spores white, "3-5 × 1.5-2μ" Karst. Pine, and larch sticks. Rare.

II. Sessile, or effuso-reflexed, marginate.

2050. I. fusco-violaceus Fr. (= Irpex violaceus (Pers.) Quél.; Poly- stictus abietinus (Dicks.) Fr. sec. Quél.) Fuscus, dark; violaceus, violet.

P. 5-8 cm., white, becoming greyish, or hoary, dimidiate, effuso-reflexed, often imbricate and confluent, zoned, silky. Teeth fuscos

2051. I. lacteus Fr. Lacteus, milk white.


2052. I. hypogaeus Fuck. ὑπόγαιος, under the earth.

R. 10–11 cm., white, then pale yellowish, or dark brown, widely effused; margin determinate. Teeth concolorous, 2–7 mm. long, irregular, sublabyrinthiform, lax, variable in size, straight, incised, base usually compressed, thin. Flesh white, or yellowish, byssoid. Incrusting pine leaves, twigs, grass, earth, pebbles. Oct. Rare.

2053. I. Johnstonii Berk. Dr George Johnston.

R. 2.5–5 cm., white, resupinate, effused, separable; margin reflexed, naked. Teeth white, arranged in rows, 2–3 mm. long, compressed, unequal, crowded. Flesh white, coriaceo-membranaceous. Dead beech. Rare.

2054. I. candidus (Ehrenb.) Fr. Candidus, shining white.

R. 3–5 cm., snow white, broadly effused, separable, thin, arachnoid; margin byssoid. Teeth snow white, subulate, or compressed, toothed, thin. Flesh white, membranaceous, floccose. Dead pine wood. Feb. Rare. (v.v.)

2055. I. spathulatus (Schrad.) Fr. Fr. Icon. t. 194, fig. 3. σπάθη, a broad blade.


2056. I. obliquus (Schrad.) Fr. Obliquus, slanting.

R. 5–20 cm., white, then yellowish, or wood colour, broadly effused, adnate; margin byssoid. Teeth concolorous, 2–6 mm. long, at first very pore-like, then becoming compressed, incised, or torn, oblique, lamellar at the base. Flesh whitish, crustaceous, thin. Spores white, elliptical,
Lenzites Fr.

Pileus corky, or coriaceous, dimidiate, or resupinate, sessile. Gills coriaceous, often anastomosing at the base, homogeneous with the substance of the pileus, and not forming a distinct layer. Flesh white, or coloured. Spores white, elliptical, subglobose, cylindrical, or oblong-elliptical, smooth. Cystidia sparse, or none. Growing on wood; often imbricate.

*Growing on wood of deciduous trees.

2059. L. betulina (Linn.) Fr. Cke. Illus. no. 1100, t. 1145, fig. A.

Betulina, of the birch.

P. 2.5–10 cm., whitish grey, becoming pale, corky coriaceous, firm, rigid, dimidiate, sessile, becoming plane, sometimes resupinate, tomentose, commonly obsoleteally zoned, zones sometimes darker. Gills dingy white, reaching the base, straight, simple, or branched, often anastomosing, edge acute. Flesh white, floccose. Spores white, “globose or elliptic-spheric, 5–6 μ” Karst. On stumps, trunks, posts, and rails, especially birch. Jan.—Dec. Common. (v.v.)

2060. L. flaccida (Bull.) Fr.

Flaccida, flabby.

P. 10–30 cm., whitish, then dingy, with quite concolorous zones, coriaceous, thin, scarcely 2 mm. thick, unequal, dimidiate, sessile, easily bent, strigously hairy. Gills shining white, becoming pale, thick, firm, straight, very broad, simple, or branched at the base, with shorter ones intermixed. Spores “white, 12 μ” Quél. On beech stumps. Jan.—Dec. Common. (v.v.)
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Differs from the type in the *silky, velvety zones and white flesh*. On fallen logs of beech and birch. Sept.—March. Not uncommon. (*v.v.*)

*L. cinerea* (Fr.) Quél. = *Daedalea cinerea* Fr.
*L. quercina* (Linn.) Quél. = *Daedalea quercina* (Linn.) Fr.

**Growing on coniferous wood.**

2061. *L. saepiaria* (Wulf.) Fr. Cke. Illus. no. 1101, t. 1146, fig. A.

_Saepes_, a fence.

P. 3–8 cm., *yellow tawny*, then *date brown with a yellow tawny margin*, becoming *black* when old, dimidiate, lateral, corky coriaceous, hard, convex, becoming plane, sometimes orbicular, more frequently extended longitudinally, sometimes resupinate, zoned, *strigely tomentose*, at length squamulose and pitted. Gills *yellowish*, becoming *umber*, extended to the base, very rigid, firm, branched, more or less anastomosing, 2–4 mm. broad, edge entire, or slightly toothed. Flesh *tawny*. Spores white, cylindrical, curved, 10 × 3–4μ. Coniferous stumps, branches, and worked wood. Jan.—Dec. Not uncommon. (*v.v.*)

2062. *L. abietina* (Bull.) Fr. Cke. Illus. no. 1101, t. 1146, fig. B.

_Abies_, a fir tree.

P. *umber-tomentose*, then becoming smooth, *effuso-reflexed*, often lengthened out to 30 × 1 cm., sometimes resupinate, hoary, coriaceous, thin, and comparatively *soft*. Gills *yellowish red*, becoming *glaucous with dense pruina*, decurrent in the effused base, distant, simple, unequal, here and there torn into teeth. Flesh *concolorous*, very thin. Spores white, oblong elliptical, 10 × 4μ. Coniferous stumps, branches, and worked wood. Oct. Rare.

2063. *L. heteromorpha* Fr. Fr. Icon. t. 177, fig. 3.

_ετερόμορφος_, of different shape.

P. 2–3 cm., *whitish*, becoming *pale*, and finally *yellowish when old*, effuso-reflexed, imbricate, connate, corky soft, then hard, *nodular*, often pectinately incised at the margin, always gibbose, almost glabrous with adpressed tufts of hairs, coarsely rugose. Gills *white*, very firm, thick, very broad, triquetrous, somewhat crowded, somewhat branched, incised, or forming pores, sometimes falling short of the margin. Spores white, “subglobose, 3–5μ” Karst. Flesh *white*. On fir stumps. Oct. Rare. (*v.v.*)

**Trametes Fr.**

_(Trama, the woof.)_

Pileus woody, or corky, dimidiate, or resupinate, sessile. Tubes homogeneous with the substance of the pileus, and not forming a
distinct layer, regular, round, or oblong. Flesh white, or coloured. Spores white, rarely yellowish, elliptical, ovoid, globose, subglobose, cylindrical, or oblong, smooth. Cystidia present, or absent, hyaline, or coloured. Annual, or perennial. Growing on wood, very rarely on the ground; sometimes imbricate.

I. Dimidiate, sessile.

*Flesh whitish.

2064. T. Trogii Berk. (= Trametes hispida (Bagl.) Quél.)

J. G. Trog, the Swiss mycologist.

P. 5–10 cm., fuscous, somewhat olivaceous, dimidiate, convex, solitary, or imbricate, somewhat zoned, zones at first very indistinct, then becoming evident, concolorous, clothed with rigid, fasciculate, 6 mm. long, hairs; margin acute. Pores cream colour, then coffee and milk colour, unequal, subangular, toothed. Flesh whitish, 2–8 mm. long, linear, straight, equal. Flesh whitish, corky, compact, thick, very firm. Spores white, oblong, sometimes curved, 5–7 × 2.5–3 μ. On stumps, and posts of beech, and poplar, more rarely on oak, and willow. Aug.—March. Not uncommon. (v.v.)


P. 10–20 cm., whitish, becoming greyish, dimidiate, flattened, extended behind, gibbose, villose, obsoletely zoned; margin often brownish, obtuse. Pores whitish, 2–8 mm. long, linear, straight, equal. Flesh whitish, corky, compact, thick, very firm. Spores white, oblong, sometimes curved, 5–7 × 2.5–3 μ. On stumps, and posts of beech, and poplar, more rarely on oak, and willow. Aug.—March. Not uncommon. (v.v.)


Rubescens, turning red.

P. 5–12 cm., whitish, becoming red, dimidiate, flattened, at first white pruinose, at length zoned; margin thin. Pores white, becoming crimson lake, or blood red when touched, pruinose, 1–3 mm. long, roundish, then elongate and daedaliform, narrow, obtuse. Flesh white, becoming crimson lake, or blood red when broken, corky, soft, zoned. Spores white, oblong, curved, 10 × 2 μ, 3-guttulate. On willow, and alder trunks. Aug.—Nov. Not uncommon. (v.v.)


Pierre Bulliard, the eminent French mycologist.

P. 5–14 cm., whitish, becoming fusaceous, dimidiate, flattened, often gibbose at the base, at length zoned, even, smooth; margin thin, subacute. Pores pallid, then rufescent, 3–10 mm. long, somewhat round, or linear, unequal. Flesh yellowish, at length becoming fusaceous, corky, thick. Spores white, elliptical, 4–5 × 3 μ, 1-guttulate. Smell pleasant. On willow, and alder trunks. Aug.—Oct. Uncommon. (v.v.)
2068. **T. suaveolens** (Linn.) Fr. Boud. Icon. t. 163.  

*Suaveolens*, sweet smelling.  


2069. **T. odorata** (Sommerf.) Fr. Bolt. Hist. Fung. t. 162, as *Polyporus odoratus*.  

*Odorata*, fragrant.  


2070. **T. inodora** Fr. Fr. Icon. t. 191, fig. 1. *Inodora*, without smell.  


**Flesh ferruginous.**

2071. **T. Pini** (Brot.) Fr. Boud. Icon. t. 161.  

*Pinus*, pine.  


2072. **T. odorata** (Wulf.) Fr.  

*Odorata*, scented.  

***Flesh red.


P. 5–9 cm., bright reddish orange, becoming darker, dimidiate, slightly pubescent, then glabrous, rugulose, indistinctly zoned towards the margin. Pores deep blood red, 1–3 mm. long; orifice *vermilion*, minute, round, pubescent. Flesh red, corky, pliant, thick. Spores white, oblong, curved, 6 × 2 µ. Birch, and beech trunks. July—Oct. Uncommon. (v.v.)

II. Resupinate.


R. 3–6 cm. and more, pure white, becoming yellowish, resupinate, broadly effused, furnished with long, white, string-like, mycelial rhizoids on the underside. Pores white, then yellowish, 2–3 mm. long; orifice large, flexuose, irregularly torn, often daedaliform or sistotreiform, pruinose. Spores white, elliptical, 6–9 × 2 µ, with a large central gutta. Smell very pleasant, “like liquorice” Fries, “of balsam” Quél. Ivy trailing on the ground, and conifer stumps, and branches. Oct.—Nov. Uncommon. (v.v.)


R. 2–10 cm., pallid wood colour, at length becoming fuscous, or black, resupinate, broadly effused, determinate, adnate behind in the centre, separable, submembranaceous; margin umber, at length revolute, pubescent beneath. Pores whitish cream, becoming greyish, large, shallow, angular, or round, often irregular, unequal, torn. Flesh white, soft, then coriaceous. Spores white, cylindrical, slightly curved, 8–11 × 3–4 µ. Dead beech wood, and branches. Jan.—Dec. Common. (v.v.)

2076. **T. serpens** Fr. Fr. Icon. t. 192, fig. 3. *Serpens*, creeping.

R. 10–30 cm., white, then pale ochraceous, resupinate, closely adnate, inseparable, arid, pruinose, at first erumpent in the form of a tubercle, orbicular, then confluent; margin determinate, pubescent. Pores white, then cream fuliginous, rather large, very shallow, round, or angular, then labyrinthiform, unequal, obtuse. Flesh white, corky, coriaceous. Spores “white, elliptical, 14 × 6 µ” Rabenh. Oak, beech, hornbeam, and privet logs. Aug.—Jan. Not uncommon. (v.v.)

2077. **T. Terryi** B. & Br.

R. 7–8 cm., whitish, resupinate, broad, suborbicular, pulvinate; margin determinate, undulate. Pores *pallid*, angular, here and there sinuate, rather large, shallow. Flesh white, corky, firm. Beech. Rare.

R. 2 cm., chestnut, resupinate, subcoriaceous, subtomentose. Pores becoming purple, rigid, small. Dead willow. Rare.

*T. bombycina* (Fr.) Quél. = *Poria bombycina* Fr.

*T. aneirina* (Sommerf.) Quél. = *Poria aneirina* (Sommerf.) Fr.

**Daedalea** (Pers.) Fr.

(δαιδαλος, curiously wrought.)

Pileus spongy, cork, coriaceous, or woody, dimidiate, or resupinate, stipitate, or sessile. Stem central, lateral, or none. Tubes homogeneous with the substance of the pileus, and not forming a distinct layer, irregularly sinuous, and more or less labyrinthiform, often becoming torn, or toothed. Flesh white, or coloured. Spores white, oval, pip-shaped, subglobose, elliptic-oblong, or sausage-shaped, smooth, or punctate. Cystidia present, or absent. Annual, or perennial. Growing on wood, very rarely on the ground; sometimes imbricate.

I. Dimidiate, sessile, or substipitate.

2079. **D. biennis** (Bull.) Quél. (= *Polyporus rufescens* Fr.) Sow. Eng. Fung. t. 191, as *Boletus biennis*. Biennis, two years.

P. 5–12 cm., flesh colour, whitish towards the margin, convex, then plane or depressed, sometimes dimidiate, strigose, or hairy. St. 1–5 × 1.5–2 cm., ferruginous, irregularly shaped, subcentral, or lateral, or wanting, subtomentose. Pores white, then flesh colour, 2–4 mm. long, labyrinthiform, or sinuate, at length torn, pruinose. Flesh reddish, becoming whitish, consisting of a firm, coriaceous lower layer, with a soft spongy upper layer. Spores white, broadly oval, or subglobose, 6–7 × 4.5 μ, with a large central gutta. Smell pleasant. Stumps, roots, and buried wood. Sept.—Jan. Not uncommon. (v.v.)


P. 9–50 cm., pale wood colour, or brownish becoming paler, dimidiate, sessile, rarely substipitate, or resupinate, smooth, rugulose, uneven, marked with concentric, raised, or depressed zones. Pores greyish, fuliginous, or paler than the p., 6–50 mm. long, sinuate, or lamellose, branched, and anastomosing, thick, woody. Flesh *pale reddish brown*, or *concolorous*, corky, woody, thick, firm. Spores white, pip-shaped, 6 × 2–3 μ. Oaks, oak stumps, and posts. Jan.—Dec. Common. (v.v.)

2081. **D. borealis** (Wahlenb.) Quél. (= *Polyporus borealis* Fr.) Kalchbr. Icon. t. 35, fig. 2, as *Polyporus borealis* Fr.

Borealis, northern.

P. 5–15 cm., white, then yellowish, dimidiate, reniform, or subpulvinate, sessile, or attenuated behind into a short more or less distinct
stem, velvety, or strigose, becoming matted when old; margin acute, spreading. Pores white, then yellowish, 4–6 mm. long, unequal, round, or angular, becoming sinuate and daedaliform. Flesh white, spongy, then corky, composed of parallel fibres, compact, thick, fissile. Spores white, subglobose, 5–6 × 4–5 μ, minutely punctate. Smell slightly pleasant when dried. Abies trunks, and stumps. Sept.—Oct. Uncommon. (v.v.)

2082. **D. unicolor** (Bull.) Fr. Bolt. Hist. Fung. t. 163, as *Boletus unicolor* Bolt.

Unicolor, of one colour.

P. 5–15 cm., cinereous, fuliginous when moist, whitish grey when dry, with zones of the same colour, shell-shaped, dimidiate, usually imbricate, villosos-trigose; margin sometimes whitish. Pores whitish cinereous, sometimes fuscous, very short, labyrinthiform, flexuose, imbricate, narrow, acute, at length torn into teeth. Flesh white, coriaceous, thin. Spores white, “6–9 × 3–5 μ” Karst. Stumps, trunks, and rails of birch, beech, maple, oak, willow, Robinia, chestnut, and hornbeam. Jan.—Dec. Not uncommon. (v.v.)

2083. **D. polyzona** (Pers.) Fr. πολύς, many; ξώνη, belt.

P. 13–18 cm., yellowish brown, darker or reddish at the base, dimidiate, sessile, imbricate, tomentose, with many dark brown zones. Pores pallid wood colour, or buff white, very short, equal, thin, sublabyrinthiform, sometimes 2-stratose. Flesh buff white, coriaceous, somewhat thin. Jan.—Dec. Rare.

*D. gossypina* (Lév.) Quél. = *Polystictus gossypinus* (Lév.) Massee.

2084. **D. saligna** Fr. (= *Polyporus salignus* Fr. Hym. Eur.; *Polyporus fumosus* (Pers.) Fr. sec. Lloyd.) Fr. Icon. t. 181, fig. 1, as *Polyporus salignus* *Holmiensis* Fr.

Saligna, of willows.


Confragosa, rough.

P. 5–13 cm., unicolorous, brick red fuscous, becoming ferruginous, dimidiate, reniform, constricted at the base, gibbose, convex, sessile, rough, zoned. Pores cinereous pruinose, then rufous fuscous, 5–20 mm. long, sinuous, narrow, then labyrinthiform, torn, toothed. Flesh wood colour, or reddish, then brown, fibrous, coryk, thin. Spores white, sausage-shaped, curved, 7–8 × 2 μ. Beech, oak, willow, and service trunks. Oct.—Feb. Uncommon. (v.v.)
var. **angustata** (Sow.) Fr. Sow. Eng. Fung t. 193, as Boletus angustatus

Angustata, narrowed.

Differences from the type in the brownish rufescent, repand p., the sub-tomentose paler margin of the p., and the subolivaceous pores. Poplars. Rare.

2086. **D. aurea** (Batt.) Fr. **Aurea, golden.**

P. 2–5 cm., unicolorous, golden, triangular, gibbose, imbricate, sessile, velvety, subzoned; margin swollen. Pores light yellow, somewhat long, round, then narrowly sinuato-labyrinthiform. Flesh light yellow, corky coriaceous, thin. Dead oak. Rare.

2087. **D. cinerea** Fr. (= Lenzites cinerea (Fr.) Quél.) Fr. Icon. t. 192, fig. 2. **Cinerea, ash colour.**

P. 2-5-13 cm., cinereous, dimidiate, sessile, sometimes imbricate, subundulate, zoned, tomentose; margin paler, thin. Pores white, or cinereous, 5–10 mm. long, round, or very long, labyrinthiform, flexuose, intricate, obtuse, entire, sometimes stratose. Flesh pale buff, or ochaceous, corky woody, thick. Spores white, globose, 10 μ. Beech, and oak trunks, and stumps. Jan.—Dec. Not uncommon. (v.v.)

2088. **D. ferruginea** (Schum.) Fr. Fl. Dan. t. 2029. **Ferruginea, iron rust colour.**

P. 4–8 cm., whitish flesh colour at first, then yellow ferruginous, effuso-reflexed, horizontal, imbricate, zoned; white villose when young; margin white villose, swollen, flexuose. Pores tawny, 4 mm. long, deformed, narrowly labyrinthiform, flexuose, anastomosing. Flesh yellowish sienna, 3–4 mm. thick, coriaceous. Beech trunks, and dead wood. Rare.

II. Resupinate.

2089. **D. latissima** Fr. (= Trametes latissima (Fr.) Quél.) **Latissima, very broad.**

P. 12-5–60 cm., pale wood colour, broadly effused, undulated. Pores pale wood colour, very long, somewhat round, flexuose, sinuose, narrow, distant. Flesh wood colour, corky or woody, thick, zoned, with parallel filaments. Beech trunks. Rare.

2090. **D. vermicularis** (Pers.) Fr. Sow. Eng. Fung. t. 424, as Boletus resupinatus Sow. **Vermicularis, pertaining to worms.**

3. Meruliaceae.

Hymenium spread over veins, anastomosing pores, or quite smooth; edge of veins or pores fertile.

Merulius Fr.

(Merus, pure.)

Receptacle gelatinous, coriaceous gelatinous, waxy, membranaceous, or floccose, resupinate, or effuso-reflexed. Hymenium at first smooth, becoming reticulated with irregular, obtuse folds or pores, at length gyrose or obsoletely toothed, and fertile on the edge. Spores white, or coloured, elliptical, ovoid, pip-shaped, globose, subglobose, elliptic-oblong, cylindrical, or sausage-shaped, smooth. Cystidia present, or absent. Growing on wood, rarely on the ground.

*Spores white.
†P. effuso-reflexed, margin determinate.


R. 2.5-10 cm., vinous biscuit colour, resupinate, longitudinally effused, becoming confluent, somewhat fleshy; margin biscuit colour, free, inflexed, submentose. Folds becoming pinkish cinnamon to pecan brown when dry, very small, uneven, reticulate. Flesh coriaceous, thin. Spores "hyaline, even, cylindric, flattened on one side, 4.5-5 x 2.5μ. Subhymenial hyphae incrusted" Burt. Alder branches. Aug. Rare.


R. 2.5-15 cm., white, translucent, resupinate, then free and reflexed, often connate and imbricate, tomentose; margin often pinkish, dentato-radiate. Folds ruddy, pinkish, or pale, porous, twisted, toothed. Flesh gelatinous, cartilaginous when dry. Spores white, sausage-shaped, curved, 4-5 x 1μ. Cystidia "even or incrusted, sparse, 3.5-4.5μ in diam., emerging 15-25μ above the basidia" Burt. Stumps, and dead branches of birch, beech, and oak. Aug.—Feb. Not uncommon. (v.v.)


R. 2.5-4 cm., between yellow and dirty white, here and there cinereous, effuso-reflexed, tomentose, obsoletely zoned. Folds dull orange, minute, subporiform. Flesh coriaceous, tough. Dead beech trunks. May—Sept. Rare.

2094. M. corium (Pers.) Fr. (= Merulius papyrinus (Bull.) Quél.) Grev. Scot. Crypt. Fl. t. 147, as Thelephora corium Pers. χόριον, leather.

R. 5-20 cm., whitish, resupinato-effused, often imbricate; margin

2095. M. niveus Fr. Niveus, snow white.

R. 1–5 cm., snow white, resupinate, effuso-reflexed, adnate at the centre, free elsewhere, smooth. Folds snow white, rugose, subreticulate. Flesh very soft, spongy, thin, becoming membranaceous and papery when dry. Spores white, broadly elliptical, 8 × 5–6 μ, "slightly curved, 4–5 × 5–1 μ" Burt. Dead alder branches. Nov. Rare. (v.v.)

†† Resupinato-effused, flaky membranaceous, separable, margin and underside byssoid.

2096. M. laeticolor B. & Br. (= Merulius fugax Fr. sec. Romell.) Laetus, bright; color, colour.

R. 7–8 cm., bright orange, resupinate, effused, adnate; margin white, byssoid. Folds concolorous, at first even, then plicato-rugose, distant. Flesh very thin. Spores "white, subglobose, 6–7 μ." Massee. Sawdust, and leaves and branches of oak, pine, and mountain ash. Oct.—Nov. Rare. (v.v.)

††† Crustoso-adnate, margin somewhat byssoid.

2097. M. porinoides Fr. πός, a pore; εἴδος, like.


2099. M. serpens (Tode) Fr. Fr. Icon. t. 193, fig. 3. Serpens, creeping.

R. 3–15 cm., pallid, becoming red, resupinate, crustaceo-adnate, becoming smooth; margin white, byssoid. Folds concolorous, at first in the form of wrinkles, then porous, angular, entire. Flesh thin. Spores white, cylindrical, curved, 4 × 2 μ, 2-guttulate. Dead branches of conifers, lime and ash, and on cones. Oct.—March. Rare. (v.v.)
2100. **M. pallens** Berk. *Pallens, pale.*

Captain Dugald Carmichael, a friend of Greville.
R. 2-5–10 cm., white, becoming pinkish brown when dry, resupinate, irregularly effused; margin byssoid, laciniate. Folds concolorous, forming regular, hexagonal reticulations or pores, very shallow. Flesh membranaceous, very thin. Spores white, “globose, very minute” Grev. Bark. Rare.


**Spores coloured.
†P. effuso-reflexed.**

2102. **M. lacrymans** (Wulf.) Fr. Rolland, Champ. t. 98, no. 216. *Lacrymans, weeping.*
R. 5–50 cm., yellow ferruginous, effuso-reflexed, more rarely arising from a stalk-like central tubercle; margin white, tomentose, swollen. Folds concolorous, porous, gyroso-toothed, large. Flesh greyish white, spongy-fleshy, slightly moist, exuding drops of water when growing, 2–12 mm. thick. Spores reddish rust colour in the mass, yellow under the microscope, elliptical, often subapiculate at the base, 8–10 × 5–6 μ, 1-guttulate. Cystidia none. Hyphae either yellowish, thick walled, 5–6 μ in diam., or hyaline, 3.5–4.5 μ in diam., septate, with clamp connections. Smell often strong. Worked wood in buildings, logs in timber yards, rarely on stumps, and on the ground. Jan.—Dec. Common. (v.v.)

var. **minor** Falck. (= *Merulius lacrymans* (Wulf.) Quél.)

*Minor, smaller.*

Differs from the type in the smaller, elliptical spores, 5–6 × 4.4–5 μ. Dead wood, and on the ground. July—Oct. Not uncommon. (v.v.)

var. **Guillemotii** Boud. Boud. Icon. t. 165. *Jules Guillemot.*

Differs from the type in the well developed, dimidiate, imbricate pilei. Worked wood. June—Oct. Not uncommon. (v.v.)

var. **pulverulentus** (Fr.) Quél. (= *Merulius pulverulentus* Fr.)

*Pulverulentus, full of dust.*

Differs from the type in being membranaceous, becoming even, zoned,
arid, gradually decaying from the centre to the margin, and in the folds being reticulated to the margin. Rare.

2103. **M. aureus** Fr. Fl. Dan. t. 2027, fig. 2. **Aureus,** golden.


††Resupinate.

2104. **M. terrestris** (Peck) Burt. (= *Merulius lacrymans* var. terrestris Peck, non Ferry.) **Terrestris,** pertaining to the earth.

R. 3–10 cm., bright ferruginous, drying amber brown, resupinate, widely effused, membranaceous; margin whitish. Folds concolorous, gyrose, with intermediate, shallow, labyrinthiform depressions. Flesh yellowish, membranaceous, thin. Spores brownish in the mass, yellow under the microscope, broadly elliptical, with often a basal apiculus, 7–9 × 4·5–6 μ. “Basal hyphae loosely interwoven, thick walled, rigid, 4·5–6 μ in diam., nodose-septate, aniline-yellow under the microscope; subhyphal hyphae thin walled, often collapsed, 3 μ in diam. Cystidia none” Burt. On bare soil. July—Oct. Rare. (v.v.)

2105. **M. papyraceus** Fr. **πάπυρος,** the paper reed.


2106. **M. squalidus** Fr. **Squalidus,** dirty.


2107. **M. himantioides** Fr. Fr. Icon. t. 193, fig. 1. **ἰματιός,** leather thong; ιδός, like.

R. 2–5 cm., lilac, becoming raw umber when dried, resupinate, effused, separable, fibrillose silky beneath; margin whitish, byssoid. Folds dingy yellow, then subolivaceous, porous, then gyrose. Flesh very soft, silky, thin. Spores “honey yellow under the microscope,

2108. **M. fugax** Fr. (= *Merulius molluscus* Fr. sec. Burt; *Merulius lacticolor* Berk. sec. Romell.) Fr. Icon. t. 193, fig. 2, as *Merulius molluscus* Fr.


*M. molluscus* Fr. = **Merulius fugax** Fr.

2109. **M. pinastri** (Fr.) Burt. (= *Hydnum pinastri* Fr.; *Hydnum sordidum* Weinm. sec. Burt.)

R. 2–20 cm., pinnard yellow, then olive ochre, becoming darker, and finally Dresden brown to raw-umber, resupinate, effused, loosely attached to the substratum, whitish and tomentose beneath; mycelium often reddish, or deep brownish vinaceous; margin whitish, or flesh pink. Hymenium for a long time smooth, at length raised in shallow folds forming irregular, angular pores, or reticulations, 5–1.5 mm. in diam., or prolonged into subulate, or Irpex-like teeth. Spores pale ochraceous in the mass, yellow brown, broadly ovoid to subglobose, 5–7 × 4–5μ. Cystidia none. Hyphae hyaline, 2–5μ in diam., loosely interwoven, nodose-septate. Pine wood and leaves, and cedar chips. Sept.—Nov. Rare.

**Phlebia** Fr.

(φλέβια, a vein.)

Receptacle waxy, or subgelatinous, becoming cartilaginous when dry, erect, or resupinate and effused. Hymenium from the first covering radiating, obtuse wrinkles or veins, continuous or broken up into tubercles, rarely smooth, fertile on the edge. Spores white, elliptical, reniform, oblong, or cylindrical, smooth. Cystidia none. Growing on wood, rarely on the ground.


R. 2.5–9 cm., flesh colour, then livid, widely effused, smooth, or uneven, villose and white beneath; margin orange, strigose. Wrinkles
purplish flesh colour, simple, straight, or tubercular, crowded. Flesh concolorous, subgelatinous, then membranaceous. Spores white, cylindrical, somewhat curved, $4-5 \times 1.5-2\mu$. Stumps, branches, and logs. Sept.—Feb. Common. (v.v.)

2111. P. radiata Fr. (= Phlebia aurantiaca (Sow.) Karst. sec. Pat.) Radiata, rayed.

R. 2.5-20 cm., red flesh colour, or almost orange, somewhat round, effused, often confluent, equal, smooth on both sides; margin radiately toothed. Wrinkles purplish flesh colour, straight, radiating in rows. Flesh paler, membranaceous, tough, thin. Spores white, cylindrical, somewhat curved, $4-6 \times 1-2\mu$. Dead wood, branches, and logs, especially alder. July—April. Common. (v.v.)


R. 1-3 cm., bright flesh colour, becoming blackish, clavate, erect, effused; clubs cylindrical, 2-3 mm. thick, apex obtuse, or acute, white floccose at base, smooth. Flesh concolorous, or paler, waxy. Spores white, reniform, $4-5 \times 2-3\mu$, 2-guttulate. Basidia with 4-sterigmata. Burnt ground amongst mosses. Oct.—Nov. Uncommon. (v.v.)

2113. P. contorta Fr. (= Phlebia aurantiaca (Sow.) Karst. sec. Pat.) Contorta, twisted.

R. 2.5-10 cm., rufous, then fuscous, widely effused, smooth on both sides; margin indeterminate. Wrinkles concolorous, here and there conglomerated, branched, subflexuose, irregularly arranged. Flesh membranaceous, firm. Spores white, oblong, $5-6 \times 3\mu$, bi-guttulate. Dead wood, and fallen branches. Sept.—Dec. Uncommon.

P. vaga Fr. = Hypochnus fumosus Fr.

2114. P. albida Fr. Albida, whitish

R. 2-4 cm., white, orbicular, effused, becoming confluent, adnate; margin determinate, becoming slightly free. Wrinkles white, simple, elevated, irregularly dispersed. Flesh white, waxy coriaceous, then cartilaginous. Spores white, elliptical, obtuse at both ends, $4-5 \times 2.5-3\mu$, 1-2-guttulate. Fallen trunks. Oct. Rare. (v.v.)


R. 2.5-5 cm., umber grey, resupinate; margin free. Wrinkles very small, linear, thin, straight, branched, or anastomosing to form pores. Flesh thin. Wood, and branches, especially black poplar. Rare.

Plicatura Peck (= Trogia Fr. p.p.).

(Plicatus, folded; o'pá, tail.)

Pileus spongy coriaceous, soft, flaccid, dimidiate, sessile, or substipitate. Hymenium covering obtuse veins, gill-like in front, crisped
and branched behind, fertile on the edge. Spores white, oblong, or cylindrical, smooth. Cystidia none. Growing on wood.


R. 5–3 cm., light yellow rufescent, whitish at the margin, cup-shaped, sessile, or substipitate, then reflexed, dimidiate, often lobed, villose, slightly zoned. Gills white, or bluish grey, vein-like, dichotomous, narrow, crisped, very much swollen, edge obtuse. Flesh white, fibrillose, firm, tough. Spores white, oblong, 5–6 × 3μ, 1-guttulate. Beech, and birch logs. Jan.—Dec. Uncommon. (v.v.)

**Coniophora** (DC.) Pers.

(κόνις, dust; φέρω, I bear.)

Receptacle fleshy, waxy, subcoriaceous, or membranaceous, resupinate, effused. Hymenium smooth, subundulate tubercular, or granular. Spores coloured, elliptical, navicular, or subfusiform, smooth. Cystidia none. Growing on wood, or on the ground.

2117. **C. puteana** (Schum.) Karst. (= *Corticium (Coniophora) puteanum* (Schum.) Fr.; *Coniophora cerebella* Pers.)

**Puteana**, pertaining to a well.

R. 4–20 cm., light yellowish pallid, at length fuscous olivaceous, broadly effused, roundish, separable; margin white, mucedinous. Hymenium fuscous olivaceous, even, subundulate, or gyrose, often subtubercular, pulverulent. Flesh whitish, membranaceous, rather thick. Spores fuscous olivaceous, or ferruginous, broadly elliptical, obtuse, or pointed at one end, 11–13 × 7–8μ. Hyphae hyaline, 4–7μ in diam., densely interwoven. Stumps, felled trees, logs and worked wood. Jan.—Dec. Common. (v.v.)

2118. **C. arida** Fr. (= *Corticium (Coniophora) aridum* Fr.; *Coniophora Cookei* Massee.) Fr. Icon. t 199, fig. 1. **Arida**, dry.

R. 3–20 cm., sulphur yellow, then umber inclining to ferruginous, effused, adnate, continuous; margin paler, or whitish,byssoid. Hymenium concolorous, even. Flesh whitish, membranaceous, thin. Spores olivaceous, elliptical, obtuse, or pointed at one end, 9–12 × 6–7μ. Hyphae hyaline, 2–3μ in diam., loosely interwoven, thin walled. Stumps, felled trees, logs, and worked wood, especially of conifers. Jan.—Dec. Not uncommon. (v.v.)

2119. **C. laxa** (Fr.) Quél. (= *Corticium (Coniophora) laxum* Fr.) **Laxa**, loose.

R. 5–10 cm., white, then ferruginous, effused, adhering laxly, arachnoid beneath; margin white, byssoid. Hymenium pallid, then ochra-
ceous ferruginous, papillose, pulverulent. Flesh whitish, membranaceous, floccose, loose. Spores deep rusty purple, or ferruginous in the mass, elliptical, 10–11 × 6–7 μ; basidia with 2–4-sterigmata. Bark, twigs, lichens and moss. Nov.—Jan. Uncommon. (v.v.)

2120. C. Bourdotii Bres.

L'abbé H. Bourdot, the eminent French mycologist.

R. 2–10 cm., whitish, then umber and fuscous, broadly effused, adnate; margin white, delicately fimbriate. Hymenium umber, even. Flesh pale, soft, loose. Spores brown, navicular, or subfusiform, 17–23 × 6–9 μ. Bark, and fallen branches. Sept.—Oct. Rare. (v.v.)

2121. C. pulvulenta (Lév.) Massee. Pulverulenta, dusty.


R. 5–30 cm., pallid, then dirty pale ferruginous, broadly effused, subrotund, fragile, separable; margin yellowish, minutely fibrillose. Hymenium concolorous, minutely pulverulent. Flesh thin. Spores "very pale ochraceous, elliptical, 15–17 × 6–9 μ" Massee. Running over leaves, twigs, etc. Rare.

2123. C. incrustans Massee. Incrustans, covering with a coat.

R. 3–15 cm., pale ochraceous, or dirty white, effused, indeterminate, inseparable. Hymenium concolorous, compact, waxy, pulverulent. Flesh thin. Spores "very pale ochraceous, elliptical, 15–17 × 8–10 μ" Massee. Running over leaves, twigs, etc. Rare.

2124. C. stabularis Fr. Stabularis, pertaining to a stall.

R. 3–10 cm., white, then vinous fuscous, effused, flaxy; margin white, byssoid. Hymenium concolorous, white pruinose, the tubercles collapsing. Flesh soft, floccose, thin, smell foetid. Fir wood. Rare.

2125. C. subdealbata (B. & Br.) Massee. (= Corticium subdealbatum B. & Br.) Sub, somewhat; dealbata, whitewashed.


2126. C. Berkeleyi Massee.

Rev. Miles Joseph Berkeley, the father of British mycology.

R. 3–10 cm., yellow brown, becoming purplish with age, effused, determinate; margin sometimes minutely byssoid. Hymenium

40—2
concolorous, becoming much cracked. Flesh thick, silky, compact. Spores "yellow brown, elliptical, with a minute basal apiculus, 11–12 × 6–7μ." Massee. Decorticated wood. Rare.


R. 4–12 cm., whitish, then ochraceous, very broadly effused, inseparable, usually indeterminate. Hymenium concolorous, pulverulent. Flesh yellowish, membranaceous, thin. Spores "yellowish, subglobose, 8 × 6–7μ; subhymenial hyphae pale yellow, very thick, up to 18μ in diam." Massee. Inside elm bark. July. Rare.

2128. _C. sulphurea_ (Fr.) Massee. (= _Corticium sulphureum_ Fr.) Sulphurea, brimstone colour.


var. _ochroidea_ (Berk.) Massee. 

Differs from the type in the pale ochraceous hymenium, and the larger olive spores, elliptical, with a minute apiculus at the base, 16–18 × 9–10μ. Wood, and bark. Rare.

_C. sulphurea_ (Pers.) Quél. = _Hypochnus fumosus_ Fr.

_Coniophorella_ Karsten.

(Coniophorella, diminutive of _Coniophora_.)

Like _Coniophora_, but with long, cylindrical, cystidia.


2130. _C. olivacea_ (Fr.) Karst. (= _Corticium (Hypochnus) olivaceum_ Fr.) Trans. Brit. Myc. Soc. vi, figs. in text, p. 73. 

Olivacea, olive coloured.

R. 4–30 cm., distinctly olive when fresh, drying to a colour varying
between Saccardo's olive, buffy citrine and Isabella colour, thinly effused, following the inequalities of the matrix, adnate; margin whitish, very thin. Hymenium concolorous, tomentose, setulose. Flesh brownish, loose, thin. Spores olivaceous, or yellow brown, elliptical, flattened on one side, obtuse, or pointed at the one end, 9-13 x 4-8 μ; basidia elongated, tapering gradually downwards, 40-80 x 7-8 μ, with 4 curved sterigmata, 5-8 μ long. Cystidia brownish, paler and blunt at the apex, 160-290 x 12-18 μ, projecting about 75-130 μ, many-septate, slightly constricted at the septa. Basal hyphae clear dark brown, 4-7 μ in diam., branched, frequently septate with clamp connections. Nov.—Jan. Uncommon. (v.v.)


4. Fistulinaceae.

Hymenium inferior, lining free and separate tubes.

Fistulina (Bull.) Fr.

(Fistulina, a little pipe.)

Pileus fleshy, subgelatinous in the upper layer, stipitate, or sessile. Stem lateral, or none. Tubes at first papillose, then cylindrical, distinct and free from each other. Spores coloured, elliptical, smooth. Conidia present in the tissues. Growing on wood.

2131. F. hepatica (Huds.) Fr. Berk. Outl. t. 17, fig. 1.

ἡπατικός, belonging to the liver.

P. 5-30 cm., blood red, pale purplish red, liver colour, or chocolate, becoming blackish, roundish, dimidiate, or subspathulate, sessile, or stipitate, rough, thick, fleshy, viscid. St. when present, 3-7 x 2-4 cm., concolorous, punctate. Tubes pallid, becoming reddish, separate; orifice of tubes pale, round. Flesh reddish, marbled like beet root, fibrous, distilling a red pellucid juice, 2-3 cm. thick. Spores pink, subglobose, 4.5-5 x 4 μ, with a large central gutta. Taste somewhat acrid, especially when young. Edible. On trunks of trees, oak, ash, walnut, willow, beech, sweet chestnut, hornbeam, elm. Aug.—Nov. Common. (v.v.)

5. Hydnaceae.

Hymenium spread over the surface of spines, granules, warts, or other protuberances, or quite a smooth surface, with the intervening spaces fertile. Receptacle fleshy, coriaceous, waxy, crustaceous, or floccose, rarely none.

Mucronella Fr.

(Mucronella, a little sharp point.)

Receptacle none, consisting of a floccose, fugacious mycelium. Spines simple, cylindrical, subulate, acute, scattered, or fasciculate,
and then more or less connate at the base. Spores white, oblong, or subglobose, smooth, or punctate; basidia with 1-4-sterigmata. Cystidia present. Growing on wood.


Spines white, then pale, 1-3 mm. long, scattered, rigid, thin. Spores white, "oblong, hardly depressed, 4-6 × 3μ. Hyphae thin walled, 3-6μ, emerging in a sterile bundle" Bourd. & Galz. Rotten pine stumps. Sept.—Oct. Rare.


R. 5-2 cm., white, then pale, subiculum absent, or occasional. Teeth subulate, short, free, arranged in groups. Spores hyaline, elliptical, 4-6 × 2.5-4μ; basidia cylindrical or clavate, 10-20 × 3.5-5μ. Hyphae 2-4μ in diam., thin walled, clamp connections sparse. Very old rotten logs. Oct. Rare.

**Hydnun (Linn.) Fr.**

(όδων, the old name for truffles.)

Receptacle fleshy, coriaceous, or coryck, simple, or branched, pileate, or coralliform, stipitate, or sessile. Stem central, lateral, or none. Spines subulate, acute, distinct at the base. Flesh white, or coloured. Spores white, or coloured, elliptical, oval, globose, subglobose, or angularly globose, smooth, granular, verrucose, or echinulate; basidia with 2-5-sterigmata. Cystidia present, or absent. Micro- and macro-conidia present in some species. Growing on the ground, or on wood.

I. St. central.

A. P. fleshy.

*Spores white.


P. 5-15 cm., pale buff flesh colour, or subrufescent, convex, somewhat repand, often irregular and excentric, smooth, or minutely floccose and pruinose, firm; margin often lobed. St. 3-12 × 1.5-4 cm., white, or pallid, ochraceous at the base, irregularly shaped. Spines white, then flesh colour, 4-8 mm. long, decurrent, unequal, conical, entire, rarely bifid, or tubular, brittle. Flesh white, firm, fragile, thick. Spores white, subglobose, apiculate, 6-7 × 5-6μ. Smell pleasant. Taste bitter. Edible. Woods. Aug.—Nov. Common. (v.v.)

var. *album* Quél.

*Album*, white.

Differs from the type in the milk white pileus. Woods. Sept.—Oct. Uncommon. (v.v.)
var. rufescens (Pers.) Fr. Bolt. Hist. Fung. t. 88, as Hydnum repandum.

Fragile, Rufescens, becoming reddish.

Differs from the type in being rufescant, in the smaller size of all its parts, the non-decurrent spines and the slightly larger spores, 8–10 μ. Woods. Aug.—Nov. Common. (v.v.)


Fuligineus, sooty; album, white.

P. 5–15 cm., whitish, tinged rosy, or somewhat fuscose towards the margin, convex, then expanded and depressed, often finally infundibuliform, repand, wavy, rather silky, smooth, disc often with darker scales, or spots; margin at first involute. St. 4–5 × 1–1.5 cm., whitish rosy, or concorlous and slightly fuscose at the base, central, or excentric, subequal, or attenuated at the base, subsquamoso, or glabrous. Spines white, becoming rosy reddish, slightly fuscus at the base, 6–8 mm. long, decurrent, subulate, or compressed, crowded. Flesh white, rosy when broken, thick, firm. Spores “white, verrucose, subreticulate, globose, 3–5 μ.” Boud. Smell strong, unpleasant, “of liquorice” Quél. Taste somewhat pleasant. Coniferous woods, and adjoining pastures. Sept.—Oct. Rare.

2136. H. fragile Fr. Fragile, brittle.

P. 4–30 cm., pallid, soon cinereous, or brick rufescent, convex, then plane and depressed, pubescent at first, becoming smooth, often zoned towards the margin, and minutely squamoso, or wrinkled; margin undulate, lobed. St. 4–8 × 1.5–10 cm., pallid, becoming rufescent or cinereous, often incrassato at the base, unequal, smooth. Spines whitish, then grey, 4–8 mm. long, scarcely decurrent, subulate, slender, fragile. Flesh grey, or reddish, soft, thick, firm, sometimes zoned. Spores white, sub-angularly globose, 3–4 μ, 1-guttulate. Pine woods, and moors. Sept.—Nov. Rare, but occasionally abundant. (v.v.)

2137. H. molle Fr. Fr. Icon. t. 2, upper figs. Molle, soft.

P. 6–11 cm., white, becoming greyish or tinged with chocolate, convex, then umbilicate, or irregularly depressed, often wavy, covered with a dense tomentose coat. St. 4–5 × 2 cm., white, then grey, equal, conical, glabrous. Spines white, then grey, 6–8 mm. long, decurrent, acuminate, thin, crowded. Flesh white, becoming yellowish when broken, soft, thick. Spores white, “globose, with a basal apiculus, 7 μ.” Massee. Taste pleasant. Edible. Coniferous woods. Sept.—Oct. Uncommon.

**Spores coloured.


Imbricatum, covered with tiles.

P. 7–50 cm., umber, convex, then plane, often subumbilicate, and finally infundibuliform, floccose, tessulato-scaly. St. 2.5–7.5 × 2.5–
5 cm., whitish, or concolorous, firm, smooth. Spines cinereous white, 10–12 mm. long, decurrent, subulate, thin. Flesh pale, then buffish or reddish, thick, firm, sometimes zoned. Spores reddish brown, verrucose, oval or globose, 5–6 × 5μ, 1-guttulate. Taste bitter. Edible. Coniferous woods. Sept.—Nov. Not uncommon. (v.v.)

2139. H. squamosum (Schaeff.) Fr. Schaeff. Icon. t. 273.

Squamosum, scaly.


2140. H. scabrosam Fr.

Scabrosus, rough.

P. 3–4 cm., umber ferruginous, turbinate, then plane, very convex beneath, tomentose, then rough with fasciculate flocci, which form minute crowded scales. St. 2·5 × 2·5 cm., cinereous, blackish at the base, attenuated downwards, round, or compressed, dotted with the rudimentary decurrent spines. Spines fuscosus ferruginous, apex whitish, 8 mm. long, decurrent, subulate, equal, crowded. Flesh white, becoming blackish at the base of the stem, very thick, firm. Spores reddish brown, verrucose, globose, 4–5μ. Pine woods. Sept. Rare. (v.v.)


Laevigatum, made smooth.

P. 5–13 cm., greyish umber, at first often tinged with fuscosus purple, somewhat irregular, convex, then plane, or depressed, smooth, then breaking up into minute squamules; margin incurved, pubescent. St. 4–6 × 2–3 cm., greyish, or lilac colour, often excentric, subequal, somewhat glabrous. Spines umber fuscosus, apex whitish, 1–2·5 cm. long, decurrent, large. Flesh whitish grey, pale lilac purple when young and broken, thick, compact. Spores “somewhat fuscosus, angularly globose, tuberculose, 6–7 × 4–5μ” Bres. Taste somewhat bitter. Smell strong, unpleasant, “d’immortelle sauvage when dried” Quél. Edible. Pine woods. Aug.—Nov. Rare.

2142. H. acre Quél. Quél. Soc. bot. (1877), no. 36, t. 6, fig. 1.

Acre, sharp.

P. 10–12 cm., light yellow, then olivaceous, or bistre, plane, shaggy, velvety. St. 3 × 2 cm., cream olivaceous, oval, often branched, villose. Spines white, then brown, apex light yellow, decurrent, thin. Flesh light yellow, watery. Spores light yellow, spinulose, 6μ. Taste very pungent, bitter and peppery. Poisonous. Pine, and chestnut woods, and sandy places. Rare.

P. 5–20 cm., brown, infundibuliform, lobed, unequal, smooth. St. 5–7.5 × 2.5 cm., white, then reddish or brownish, constricted at the base, unequal, smooth. Spines white, then bay or brown, decurrent. Flesh white, fleshy, fibrous, firm. Pine woods. Sept. Rare.

*H. fusipes* Pers. = **H. infundibulum** (Swartz) Fr.

B. P. corky, or coriaceous, tough.

*Spores white.

2144. **H. cinereum** (Bull.) Fr. *Cinereum*, ash colour.

P. 5–9 cm., white, becoming greyish and tinged with lilac or chocolate, convex, umbilicate, repand, at length often infundibuliform, minutely tomentose, or pubescent; margin thin. St. 2–3 × 5 cm., white, then grey, attenuated at the base, often branched, firm, glabrous. Spines white, then grey, 1–2 mm. long, decurrent, thin. Flesh white, becoming ferruginous, corky, thin. Spores white, “6 μ, granular” Quél. Coniferous woods. Sept.—Oct. Rare. (v.v.)

2145. **H. nigrum** Fr. Fr. Icon. t. 5, lower figs. *Nigrum*, black.

P. 2–10 cm., whitish, soon becoming azure-blue-black with the margin whitish, club-shaped, then turbinate, at length flattened, plano-depressed, tubercular, tomentose, sometimes zoned. St. 2–3 × 5–1.5 cm., black, equal, often rooting at the base, unequal, thickened at the tomentose base. Spines white, then grey, 2 mm. long, subulate, thin. Flesh black, corky rigid. Spores white, minutely verrucose, sub-globose, 4 μ. Often connate. Coniferous woods. Sept.—Nov. Not uncommon. (v.v.)

2146. **H. graveolens** (Delast.) Fr. Fr. Icon. t. 6, upper figs. *Graveolens*, strong smelling.

P. 2–5 cm., bistre becoming black, then cinereous with the margin whitish, hemispherical, sinuate, often depressed at the centre, thin, soft, rugose, silky. St. 1.5–3 cm. × 1–3 mm., fuscous black, thickened at the apex, tough, equal, smooth. Spines white, then grey, 5–1 mm. long, decurrent, thin. Flesh concolorous, or paler, coriaceous, rigid, thin. Spores white, echinulate, globose, 3–4 μ, 1-guttulate. Smell strong of Fenugreek, or tincture of Belladonna. Often connate. Coniferous woods. Sept.—Nov. Uncommon. (v.v.)

2147. **H. melaleucum** Fr. Schaeff. Icon. t. 272, as *Hydnum pullum* Schaeff. μέλας, black; λευκός, white.

P. 1.5–3 cm., greyish violet, or bistre, then black with the margin white,
plane, irregular, striate, rigid, with little elevations at the disc, silky. St. 1.5–3 cm. × 2–3 mm., black, enlarged at the apex, smooth. Spines white, then flesh colour, 5–1 mm. long, slender, thin. Flesh violaceous, or black, coriaceous, thin, firm, sometimes zoned. Spores white, globose, 2.5–3 μ. Caespitose. Pine woods. Sept.—Oct. Rare. (v.v.)

2148. **H. cyathiforme** (Schaeff.) Fr. Schaeff. Icon. t. 139.

κύαθος, a cup; forma, shape.

P. 2.5–6 cm., pale cinereous, or lilac, with the margin white, plane, then cup-shaped, or infundibuliform, sometimes zoned, silky, disc subtomentose. St. 2–3 cm. × 5–8 mm., pale cinereous, often violet, equal, smooth. Spines white, 0.5–1 mm. long, very slender. Flesh white, becoming greyish or ferruginous, coriaceous, thin. Spores white, echinulate, globose, 3 μ, 1-guttulate. Often connate. Woods. Aug.—Nov. Uncommon. (v.v.)

**Spores coloured.**

2149. **H. compactum** (Pers.) Fr. Compactum, strongly built.

P. 2.5–15 cm., white, soon becoming olivaceous cinereous or fuscous, plane, flat, irregularly shaped, sometimes almost sessile, undulated, tuberculose, densely covered with whitish down when young; margin becoming bluish, lobed, waved, thick. St. 2–3 × 2–3.5 cm., tawny inclined to fuscous, irregularly shaped. Spines fuscous, apex pallid, 2–7 mm. long, decurrent, subulate. Flesh zoned with azure blue, intervals between the zones whitish, somewhat blood red in the stem, corky, compact, firm, very thick. Spores light reddish brown, minutely verrucose, angularly globose, 4–5 μ, 1-guttulate. Often connate. Coniferous woods, and moors. Aug.—Nov. Uncommon. (v.v.)


Aurantiacum, golden.

P. 2.5–15 cm., whitish, soon orange yellow with a white margin, turbinato-dilated, with small elevations, at first covered with white down. St. 2–5 × 1–3 cm., orange, obconic, or equal. Spines whitish, becoming orange, and at length fuscous, 2–4 mm. long, decurrent, subulate. Flesh tawny orange, zoned, corky, compact, thick. Spores yellowish, verrucose, angularly globose, 4–6 × 4–5 μ, multi-guttulate. Taste pleasant. Woods. Sept.—Nov. Uncommon. (v.v.)

2151. **H. ferrugineum** Fr. (= Hydnum floriforme (Schaeff.) Quél.) Bres. Fung. Trid. t. 143.

Ferrugineum, of the colour of iron rust.

P. 2.5–10 cm., white, and exuding blood red drops, then variegated with blood red zones, and finally entirely reddish brown or ferruginous, with the margin white, obconic, hemispherical, then expanded and depressed or cyathiform, at first covered with white down, rugose. St.
4-8 x 1.5-2.5 cm., fuscous ferruginous, often becoming blackish, unequal, compressed, or sulcate, attenuated, or incrassated at the base, slightly tomentose, becoming smooth. Spines white, soon fuscous ferruginous, 3-5 mm. long, decurrent, subulate, equal. Flesh ferruginous, becoming blackish with age especially in the stem, zoned, spongy corycky, thick. Spores fuscous, minutely verrucose, angularly globose, 3-4μ. Smell slightly pleasant. Coniferous woods, and moors. Aug.—Oct. Uncommon. (v.v.)

2152. **H. scrobiculatum** Fr. Fr. Icon. t. 5, upper figs.

Scrobiculatum, pitted.

P. 2.5-10 cm., ferruginous, becoming paler, plane, depressed and cyathiform, or rarely infundibuliform, pubescent, disc slightly pitted and scaly. St. 1-4 x 1-2.5 cm., concolorous, or darker, equal, often rooting, smooth. Spines concolorous, apex flesh colour, becoming fuscous, 2-5 mm. long, subdecurrent, thin, fragile. Flesh ferruginous, becoming paler, zoned, corycky coriaceous, thick. Spores pale reddish brown, angularly globose, 4μ. Often confluent. Coniferous woods, and moors. Aug.—Nov. Uncommon. (v.v.)

2153. **H. zonatum** (Batsch) Fr. Rolland, Champ. t. 99, no. 218.

Zonatum, zoned.

P. 2.5-5 cm., ferruginous, becoming paler when dry, plane, then depressed and cyathiform, zoned, radiato-rugose, silky, becoming smooth; margin thin. St. 2-5 cm. x 4-6 mm., concolorous, or paler, thickened at the base, equal, floccose. Spines pallid, apex grey and glistening, then ferruginous, 1-3 mm. long, thin. Flesh concolorous, coriaceous, fibrous, thin. Spores pale reddish brown, echinulate, globose, 3-4μ, 1-guttulate. Coniferous, and frondose woods. Aug.—Nov. Not uncommon. (v.v.)

2154. **H. Queletii** Fr. Quel. Jur. et Vosg. i, t. 20, fig. 2.

Lucien Quelet, the eminent mycologist.

P. 2-3 cm., bright chestnut, becoming dark fuscous, plane, then umbilicate, silky, disc with thin, crowded, radiating tufts and wrinkles; margin white. St. 1-2 cm. x 2-3 mm., concolorous, equal, silky, base floccose. Spines grey, then bay brown, 1-2 mm. long, decurrent, thin. Flesh concolorous, or reddish, paler at the apex of the p., corycky membranaceous, thin. Spores yellowish, minutely verrucose, globose, 3-4μ. Often confluent. Frondose woods. Sept.—Oct. Uncommon. (v.v.)

II. St. lateral.


Auriscalpium, ear-pick.

P. 1-2 cm., pallid, or flesh colour, then date brown and blackish, dimidiate, reniform, rarely hemispherical, hairy; margin sometimes
lobed. St. 3–8 cm. × 1–4 mm., ochraceous, then concolorous, vertical, lateral, rarely central, hairy, rooted. Spines yellowish, or flesh colour, then cinereous and brown, 1–3 mm. long, coriaceous, thin, crowded. Spores white, minutely echinulate, globose, 4–5 μ. Cones of conifers. May—Feb. Common. (v.v.)

III. Very much branched, or tuberculiform, and immarginate.

2156. **H. coraloides** (Scop.) Fr. Rolland, Champ. t. 100, no. 221.

κοράλλιον, coral; εἰδος, like.

P. 10–40 cm., shining white, at length yellowish, very much branched, entirely broken up into attenuated, intricate branches, arising from a thick trunk; primary branches, 12–20 mm. thick, ultimate ones, 1–2 mm. thick, pruinose. Spines white, becoming yellowish, 6–10 mm. long, fasciculate, subulate, entire, unilateral. Flesh white, fleshy fibrous. Spores white, globose, 4 μ, with a large central gutta. Edible. Decayed fir, beech, ash, birch, and oak trunks. Oct.—Nov. Rare. (v.v.)

2157. **H. erinaceus** (Bull.) Fr. Rolland, Champ. t. 100, no. 220.

Erinaceus, a hedgehog.

P. 5–30 cm., white, then yellowish, spathulate, or epaulet-shape, pendulous, tuberculiform, immarginate, torn into fibrils above. St. sometimes rudimentary. Spines white, 3–6 cm. long, pendulous, straight, equal, simple, crowded, pruinose. Flesh white, unchangeable, thick, lacunose, tough, very soft, elastic. Spores white, subglobose, 6–7 μ, with a large central gutta. Taste acid, then sweet. Edible. Beech, oak, hornbeam, and alder trunks. Sept.—Dec. Rare. (v.v.)


Caput, head; Medusae, of a Medusa.

P. 7–10 cm., white, then fuliginous cinereous, globose, tuberculiform, substipitate, covered all over with spines. Spines on upper surface distorted, the lower ones, 10–20 mm. long, straight. Flesh white, fibrillose, soft. Trunks. Rare.

2159. **H. setosum** (Pers.) Bres. (= Hydnum Schiedermayeri Heufl.; Dryodon luteocarneum (Sccr.) Quél.) Kalchbr. Icon. t. 38, fig. 4, as Hydnum Schiedermayeri Heufl.

Setosum, bristly.

P. 15–30 cm., sulphur, then flesh colour, becoming rufescent on exposure to the sun, broadly effused, immarginate, tuberculiform, stalactite-like, pruinose. Spines sulphur flesh colour, apex white fimbriate, incised, 3–5 mm. long, subulate, often fasciculate, compressed, channelled, intermixed with shorter conical spines, crowded. Flesh white, sulphur near the exterior, cheesy, juicy, firm, lacunose, sometimes bearing spines in the inside. Spores white, pale ochraceous, sub-
globose, 4-5 × 3.5-4 μ, 1-guttulate. Mycelium citron yellow. Taste unpleasant, acid. Old apple trunks. Aug.—Oct. Rare. (v.v.)

2160. **H. squalinum** Fr. Ray, Syn. t. 1, fig. 5.

*Squalinum*, pertaining to a shark.

P. 2-8 cm., *pale wood colour*, suborbicular, then confluent, adnate, waxy, pruinose, villose, becoming smooth; margin white, villose, thin. Spines *yellowish amber*, becoming *fuscous*, base *brownish*, 2-3 mm. long, acute, subdivided, or entire, stout, compressed, connate, translucent. Flesh *white*, *coriaceous*, *firm*, thick. Spores "yellowish, echinulate, oval, 4 μ" Quél. Dead beech trunks. Sept.—Oct. Rare.

IV. P. sessile, dimidiate, marginate, often effuso-reflexed.

2161. **H. cirrhatum** (Pers.) Fr. Fr. Sverig. ätl. Svamp. t. 71, fig. 1.

*Cirrhatum*, curled.

P. 5-10 cm., *pallid*, *varying white*, *light yellowish*, or *rufescent*, effused, then reflexed, dimidiate, shell-shaped, often imbricate, *bristling above with sterile spines or scattered, flexuose fibres*; margin *pink*, incurved, *fimbriate*. Spines *cream colour*, 10-15 mm. long, subulate, tough, elastic, equal, thin. Flesh *white*, *then pinkish cream colour*, *corky soft*, thick. Spores "subelliptical, 3.5-4 × 2.75-3 μ, often 1-guttulate, becoming blue with iodine" Bourd. & Galz. Taste and smell pleasant. Edible. Oak, beech, birch, and fir trunks. Aug.—Sept. Uncommon.

2162. **H. diversidens** Fr. Fr. Sverig. ätl. Svamp. t. 71, fig. 2.

*Diversus*, different; *dens*, tooth.

P. 5-13 cm., *white*, *then yellowish*, or *flesh colour*, dimidiate, shell-shaped, often very irregularly shaped, here and there lobed, sessile, or *substipitate*, often imbricate, *densely beset above with erect, variously shaped, incised teeth*; margin *membranaceous*, lobed, *clothed with club-shaped spines*. Spines *white*, 6-12 mm. long, subulate, entire, regular, pubescent. Flesh *white*, *soft*, moist. Spores *white*, "oval globose, 3-4 μ, with a large central gutta" Quél. Taste pleasant. Edible. Beech, birch, hornbeam, and oak stumps. Oct. Rare.


2164. **H. multiplex** Fr. Fr. Icon. t. 6, lower figs.

*Multiplex*, with many folds.

P. 8-10 cm., *date brown*, becoming *fuscous*, reniform, spathulate, wedge-shaped, densely imbricate, connate in very numerous flabelliform, connate pilei, *radiately striate, velvety*, produced behind into a
common, fusiform stem, 12 mm. and more long; margin at first becoming white, then concolorous, acute. Spines whitish cinereous, or lead colour, then date brown, short, slender, very crowded. Flesh becoming fuscous, coriaceous, thin, pliant. Rare.

H. fusco-atrum Fr. = Acia fusco-atra (Fr.) Pat.
H. membranaceum Fr. = Acia membranacea (Fr. non Bull.) Bourd. & Galz.

H. membranaceum Bull. = Radulum molare Fr.
H. Weinmannii Fr. = Acia fusco-atra (Fr.) Pat. sec. Bres.
H. crinale Fr. = Caldesiella crinalis (Fr.) Bourd. & Galz.
H. ferruginosum Fr. = Caldesiella crinalis (Fr.) Bourd. & Galz.
H. variecolor Fr. = var. of Sistotrema sulphureum Quél. sec. Bourd. & Galz.

H. aureum Fr. = Odontia aurea (Fr.) Quél.
H. denticulatum (Pers.) Fr. = Acia denticulata (Pers.) Bourd. & Galz.
H. alutaceum Fr. = Odontia arguta (Fr.) Quél. var. alutacea (Fr.) Bourd. & Galz.

H. sulphureum Schwein. = Odontia sulphurea (Schwein.) Rea.
H. sordidum Weinm. = Merulius pinastri (Fr.) Burt.
H. pinastri Fr. = Merulius pinastri (Fr.) Burt.
H. spathulatum (Schwein.) Fr. = Odontia spathulata (Schwein.) Rea.
H. udum Fr. = Acia uda (Fr.) Bourd. & Galz.
H. Hollii (Schmidt) Fr. = Odontia Hollii (Schmidt) Rea.

H. nodulosum Fr. = Acia stenodon (Pers.) Bourd. & Galz. var. nodulosa (Fr.) Bourd. & Galz.
H. niveum (Pers.) Fr. = Grandinia farinacea (Pers.) Bourd. & Galz.
H. farinaceum (Pers.) Fr. = Grandinia farinacea (Pers.) Bourd. & Galz.

H. argutum Fr. = Odontia arguta (Fr.) Quél.
H. stipatum Fr. = Odontia stipata (Fr.) Quél.
H. plumosum Duby = Odontia plumosa (Duby) Rea.
Mycoleptodon Pat. (= Hydnum (Linn.) Fr. p.p.).

(μύκης, fungus; λεπτός, thin; δόδων, tooth.)

Receptacle membranaceous-coriaceous, thin, firm, resupinate, or reflexed. Spines simple, firm, cylindrical, pointed, hispid at the apex; none, or reduced in size at the margin. Spores white, ovoid, oblong, smooth; basidia with 2–4-sterigmata. Cystidia present, abundant at the apex of the spines. Growing on wood, more rarely on humus.


R. 2·5–7·5 cm., white, or pale ochraceous, rounded, then confluent, effused, or effuso-reflexed and dimidiate, tomentose, sometimes narrowly grooved, zoned; margin white, membranaceous, subfimbriate, pubescent. Spines ochraceous flesh colour, subulate, very small, hispid at the apex, shorter at the margin. Flesh whitish, thin, coriaceous. Spores white, “ovoidal oblong, 3–4 × 2–2·5 μ, often 1-guttulate. Cystidia claviform, or fusiform, 24–100 × 5–10 μ, thick walled, or incrusted” Bourd. & Galz. Dead branches. Jan.—Dec. Common. (v.v.)

2166. M. fimbriatum (Pers.) Bourd. & Galz. (= Odontia fimbriata (Pers.) Fr.) Fr. Icon. t. 196, fig. 1, as Odontia fimbriata (Pers.)

Fimbriatum, fringed.

R. 2–20 cm., fawn colour, cinnamon, or pale buff, often tinged with lilac, effused, separable, veined, or traversed by root-like ribs; margin fibrilloso-fringed. Spines rufescent, minute, blunt, in the form of granules, crowned with hyaline hairs. Flesh membranaceous-coriaceous, thin. Spores white, “ovoid, subelliptical, sometimes slightly depressed, 3·5–4·5 × 1·75–3 μ. Cystidia claviform, or fusiform, 7–9 μ in diam., thick walled, rugose, or incrusted, often obtuse and slightly bent” Bourd. & Galz. Dead wood, and humus. Jan.—Dec. Not uncommon. (v.v.)

Radulum Fr.

(Radula, a rasp.)

Receptacle resupinate, effused, waxy, or membranaceous waxy. Tubercles or spines, thick, deformed, obtuse, simple, or branched, irregularly scattered, or confluent and tooth-like. Spores white, or coloured, elliptical, subglobose, or cylindric oblong, smooth. Cystidia none, cystidioles (sterile basidia) sometimes present. Growing on wood.


R. 2-5-15 cm., white, then yellowish, orbicular, confluent; margin white, byssoid, membranaceus. Tubercles concolorous, or dingy flesh colour, 2–6 mm. long, cylindrical, scattered, or fasciculate. Flesh whitish, or yellowish, waxy fleshy, thin, 2–4 mm. thick. Spores white, cylindric oblong, slightly curved, 8–12 × 3.5μ. Dead bark of birch, cherry, willow, aspen, hornbeam, pine, and fir. Jan.—Dec. Common. (v.v.)

var. *junquillinum* Quél. *Junquillinum*, bright yellow.

Differs from the type in its bright yellow colour. Pine. March. Uncommon. (v.v.)

2168. **R. quercinum** Fr. (= *Radulum fagineum* (Pers.) Fr. sec. Bourd. & Galz.)

Quercinum, pertaining to oak.

R. 5–30 cm., white, then pallid or tan colour, somewhat round, then broadly confluent, adnate, often throwing back the bark; margin white, villose, floccose. Tubercles concolorous, 4–6 mm. long, cylindrical, obtuse, pointed, or toothed, scattered, or fasciculate, often villose at the apex. Flesh whitish, or yellowish, crustaceous waxy, thin, 2–4 mm. thick. Spores white, oblong subcylindric, very slightly depressed on one side, 5–7–8.5 × 2.5–4μ, guttulate” Bourd. & Galz. Fallen branches, especially oak, also worked wood. Jan.—Dec. Common. (v.v.)


*Molare*, a molar tooth.

R. 5–10 cm., pale, yellowish, or tan colour, orbicular, confluent, widely effused, adnate, firm, cracked when dry; margin byssoid, or radiately fibrillose. Tubercles concolorous, 2–3 mm. long, deformed, cylindrical or conical, scattered, or confluent and connate, smooth, or fimbriate. Flesh whitish, waxy, thin. Spores white, “elliptical, subglobose, 7.5–9–13 × 5–7–8μ.” Bourd. & Galz. Fallen oak, and birch branches. Jan.—Dec. Not uncommon. (v.v.)

2170. **R. mucidum** (Pers.) Bourd. & Galz. nec *Hydnum mucidum* Fr. Mucidum, mucid.

R. 5–10 cm., yellow, effused, separable, more or less nodular, glabrous, or pubescent; margin fibrillose. Tubercles concolorous, short, scattered, subulate, elongate when growing on an upright surface. Flesh yellowish, soft, thin. Spores ferruginous in the mass, very pale yellow under the microscope, elliptical to subglobose, with a lateral apiculus, 4–5 × 3.5–4μ, 1-guttulate; basidia clavate, 7μ in diam. with 4-sterigmata. Hyphae thin walled, frequently septate, with clamp connections, 4–7μ in diam. Inside a hollow stump, and growing over living stems of ivy. Nov. Rare. (v.v.)


R. 5–15 cm., white, effused, shining. Tubercles white, 4–6 mm. long, fuscicate (fascicles 6 mm. across), very irregular, coralloid, divided downwards. Flesh very thin, pelliculous. Spores white, "subglobose, apiculate, 5 μ" Masse. Lichen covered oak branches. Sept. Rare.


R. 5–20 cm., ochre white, widely effused, adnate. Tubercles pale ochraceous, 2–4 mm. long, scattered, cylindrical, fimbriate at the apex, deciduous, brittle. Flesh snow white, very thin, upper portion waxy. Spores white, "cylindrical, slightly curved, 6–7 x 3–3.5 μ" Masse. Decorticated wood. Aug. Rare.


*R. botrytes* Fr. = *Corticium comedens* (Nees) Fr. sec. Quél.

*R. aterrimum* Fr. = *Corticium nigrescens* (Schrad.) Fr. sec. Quél.; *Eutypa hydnoidea* (Fr.) von Hoehn.

*Acia* Karst. (= *Hydnum* (Linn.) Fr. p.p.).

(άκη, a point.)

Receptacle resupinate, effused, waxy, inseparable. Spines subulate, generally entire, distinct, or connate at the base. Flesh dense. Spores white, elliptical, oblong elliptical, or oblong subelliptical, smooth; basidia with 2–4-sterigmata, with or without sterile basidia (cystidioles). Cystidia none. Growing on wood.


R. 5–13 cm., bright sulphur colour, lemon yellow, flesh colour, or olivaceous, becoming watery yellowish, widely effused, adnate, smooth; margin lemon yellow, pruinose, or fibrillose. Spines concolorous, or yellowish flesh colour, becoming tawny, 1–2 mm. long, subulate, thin.
entire, or toothed. Flesh yellowish, white next the matrix, waxy, soft, subgelatinous. Spores white, "elliptical, scarcely depressed on the side, 4-6-5 × 2–3-5 μ; basidium 9–15–20 × 3–4.5 μ. Hyphae thin walled, 1.5–3.5 μ in diam., emerging as a sterile bundle at the apex of the spines, somewhat broader, 4-5–6 μ in diam. and rough with prismatic crystals" Bourd. & Galz. Smell pleasant, often of anise. Dead branches. Sept.—April. Not uncommon. (v.v.)

2175. **A. denticulata** (Pers.) Bourd. & Galz. (= *Hydnum denticulatum* (Pers.) Fr.)

R. 3–6 cm., light yellow ochaceous, then fawn colour, longitudinally effused, pruinose; margin narrow, somewhat radiating. Spines bright yellow, then tawny, 2–3 mm. long, subulate, toothed and ciliate in the upper half, crowded. Flesh waxy, membranaceous, thin. Spores white, "oblong elliptical, slightly depressed on the side, 5–6 × 2 μ; basidia 12–15 × 3–4 μ, accompanied by fusiform, sterile basidia, often crowned by a resinous or oily globule. Hyphae thick walled, 2–3 μ in diam., forming bundles which divide and give rise to sterile emergences along the spines and at their apex" Bourd. & Galz. Smell pleasant, of anise when fresh. Rotten wood, especially alder. June—April. Uncommon. (v.v.)

2176. **A. stenodon** (Pers.) Bourd. & Galz.

στενός, narrow; ὀδών, a tooth.

R. 7.5–10 cm., yellowish, effused, adnate; margin white, narrow, byssoid, radially fibrillose, or pubescent. Spines whitish hyaline, then ochaceous, and finally tawny, 1–3 mm. long, thin, crowded, or connate at the base, entire, or fimbriate and ciliate, sometimes branched. Flesh waxy, fleshy, thin. Spores white, "oblong elliptical, depressed on the side, 3–4.5–(6.5) × 1.5–2.75 μ, often 2-guttulate; basidia 9–14–28 × 3–4(–7) μ. Hyphae thin walled, 2–3 μ in diam., prolonged into a sterile point, and enlarged at the apex, 4–6 μ in diam." Bourd. & Galz. Fallen branches. Jan.—Dec. Type not yet recorded for Britain. var. **nodulosa** (Fr.) Bourd. & Galz. (= *Hydnum nodulosum* Fr.)

Nodulosa, nodulose.

Differs from the type in its nodulose, or tuberculose habit, and its pendant, connate, often compressed, and channelled, 2–5 mm. long spines. Fir, oak, ash stumps, and fallen branches. Oct. Rare. (v.v.)


R. 5–15 cm., glaucous, then ferruginous fuscos, widely effused, very adnate, flocculoso-pruinose; margin white, or greyish, similar or fimbriate. Spines greyish glaucous, or fawn colour, becoming brownish black, apex grey for a long time, 1–2 mm. long, conico-subulate, acute, entire. Flesh crustaceous, waxy, thin. Spores "faintly coloured, sub-
elliptical, scarcely depressed on the side, 4.5-6 x 2-3 μ; basidia 12-24 x 3.5-4.5 μ, accompanied at the apex of the spines, with fusiform sterile basidia, slightly projecting. Hyphae thin walled, or slightly thickened, 3-4 μ in diam., with rare clamp connections” Bourd. & Galz. Fallen branches of ash. Nov.—March. Uncommon. (v.v.)

2178. A. membranacea (Fr.) Bourd. & Galz. (= Hydnum membranaceum Fr. non Bull.) Membranacea, membranaceous.

R. 3-7 cm., tawny ferruginous, becoming livid and finally brown, effused, very adnate, smooth; margin similar, attenuate. Spines concolorous, 1-2 mm. long, subulate, thin, crowded, acute. Flesh waxy membranaceous, thin. Spores white, “oblong subcylindrical, scarcely depressed on the side, 4.5-5 x 2-2.75 μ; basidia 9-24 x 3-5 μ, accompanied by subulate sterile basidia, slightly projecting. Hyphae thin walled, 2.5-4 μ in diam.” Bourd. & Galz. Fallen branches of elm, and oak. Sept.—Jan. Uncommon. (v.v.)

Grandinia (Fr.) Pat. (= Hydnum (Linn.) Fr. p.p.)

(Grando, hail.)

Receptacle resupinate, effused, membranaceous, or crustaceous. Tubercles or spines hemispherical, obtuse, or subulate and entire. Spores white, or yellowish, ovoid, elliptical, globose, subglobose, obovate, or oblong; smooth, punctate, verrucose, or echinulate; basidia with 2-8 sterigmata accompanied, or not, with sterile basidia (cystidioles). Cystidia none. Growing on wood.

*Spores subglobose.
†Spores echinulate.

2179. G. farinacea (Pers.) Bourd. & Galz. (= Hydnum farinaceum (Pers.) Fr.; Hydnum niveum (Pers.) Fr.) Farinacea, mealy.

R. 2-13 cm., snow white, then cream, or tan, widely effused, indeterminate, closely adnate, mealy; margin byssoid, minutely fibrillose, or pruinose. Spines white, 1-2 mm. long, generally crowded, subulate, rarely dentate, sometimes confluent and crested, or granular, very soft, fragile. Flesh white, thin, floccose, or membranaceous, containing oxalate crystals. Spores white, minutely echinulate, ovoid, or globose, 3-4 μ; basidia 6-12-21 x 3-5 μ, with 2-4 sterigmata, 3-4.5 μ long. Hyphae very thin walled, with clamp connections and swollen at the septa. Dead wood, branches, sticks, and leaves. Jan.—Dec. Common. (v.v.)

††Spores smooth, rarely punctate, or rough.

2180. G. helvetica (Pers.) Fr. Helvetica, Swiss.

R. 2-5 cm., pale yellowish to deep ochraceous when fresh, drying alutaceous, or sometimes with a faint greyish tinge, effused, separable,

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margin reticulately fibrillose. Tubercles yellowish, irregular, sub-globose, soon collapsing, small, pulverulent, crowded. Flesh yellowish, pelliculose, or membranaceous, waxy, thin. Spores yellowish, sub-globose, or obovate, pointed at the base, 3-5-6 × 3-4 µ, l-guttulate; basidia cylindrical, or clavate, 20-35 × 6-9 µ, with 4 slightly curved sterigmata, 3-7 × 1 µ. Basal hyphae yellowish, 4-8 µ in diam., with occasional clamp connections, often united to form long branching strands. Fallen branches. May—Jan. Not uncommon. (v.v.)

R. 2-5 cm., chalk white, or cream colour, then glaucous, becoming yellowish, tan, or apple green when dried, effused, adnate, dry, friable; margin subisimilar, or pruinose pubescent. Granules concolorous, hemispherical, rarely subcylindrical, scattered, or rather crowded. Flesh yellowish, somewhat waxy, then floccose. Spores white, “smooth, rarely rough with a few scattered warts, 3-5-5-5 × 3-5 µ; basidia 9-12-21 × 4-5-6-8 µ, with 2-4-sterigmata, 3-5 µ long. Hyphae thin walled, 3-7 µ in diam., with very rare clamp connections” Bourd. & Galz. Dead wood, and branches. Jan.—Dec. Uncommon. (v.v.)

**Spores oblong, or elliptical.**

2182. G. granulosa Fr. **Granulosa, granular.**

R. 2-5 cm., pure white, becoming yellowish with age, effused, very adnate, indeterminate, pruinose, waxy, then dry and chalky; margin pruinose, or minutely fibrillose. Granules concolorous, minute at first, then wart-like, or forming short spines, crowded. Flesh concolorous, loose, sparse, containing numerous crystals of calcium oxalate. Spores white, elliptical, flattened on one side, 4 × 2 µ; basidia clavate, 15 × 4 µ, with 4-6-8 curved sterigmata, 2-3 µ long. Hyphae indistinct, soon collapsing, 4 µ in diam., septate, with clamp connections. Birch bark. Nov.—March. Not uncommon. (v.v.)

2184. G. mucida Fr. (Near Corticium ochraceum Fr. sec. Bres. ex Bourd. & Galz.) Fr. Icon. t. 195, fig. 3. **Mucida, mucid.**
R. 2-10 cm., pale yellowish, effused, subinnate, corrugated when


G. papillosa Fr. = Odontia papillosa (Fr.) Bres.

G. crustosa (Pers.) Fr. = Odontia crustosa (Pers.) Quél.

Odontia (Pers.) Pat. (=Hydnum (Linn.) Fr. p.p.).

(όδοντα, a tooth.)

Receptacle resupinate, effused, membranaceous, crustaceous, or pruinose, rarely waxy, gelatinous or subcartilaginous. Spines conical, multifid, penicillate, or ciliate. Spores white, elliptical, globose, subglobose, pip-shaped, oboval, or cylindrical; smooth, rough, muricate, or echinulate; basidia with 2-4-sterigmata. Cystidia present. Growing on wood.

*Waxy membranaceous, gelatinous, or subcartilaginous.


Sudans, sweating.

R. 3-10 cm., whitish cream, or pallid, effused, scarcely separable, very smooth; margin similar, byssoid, or mealy. Spines concolorous, granular, cup-shaped, conical, or truncate, short, scattered, bearing at the apex a viscid, resinous, diaphanous, amber yellow globule, rarely terminated by a bundle of cystidia. Flesh yellowish, waxy membranaceous. Spores white, "cylindrical, slightly curved, 5-6-8 × 1-1.75μ; basidia 15-24 × 3-4μ, with 2-4 straight sterigmata, 2-3μ long. Cystidia tubular, 0-3-septate, 60-150 × 3.5-5μ, emerging in tufts. Hyphae either thick or thin walled, 1-3μ in diam., coherent." Bourd. & Galz. Dead conifer branches, and wood. Jan.—Dec. Uncommon. (v.v.)

2186. O. Hollii (Schmidt) Rea. (= Hydnum Hollii (Schmidt) Fr.)

F. Holl.

R. 10-90 cm., fuscous lilac, orbicular, then confluent and very widely effused, adnate; margin white. Spines concolorous, 2-4 mm. long, deformed, fasciculate, incised. Flesh concolorous, waxy membranaceous, floccose, thin. Decorticated wood. Oct. Rare.

2187. O. anomala (B. & Br.) Rea. (= Hydnum anomalum B. & Br.)


αινώμαλος, uneven.

R. 4-6 cm., pallid light yellow, effused. Spines concolorous, granular,
then stipitate and obtusely divided upwards, tough. Flesh concolorous, gelatinous, thin. Spores “globose, shortly pedicellate” Massee. Inside of very rotten oak tree. March. Rare.

2188. O. aurea (Fr.) Quél. (= Hydnum aureum Fr.) Aurea, golden.

R. 5–13 cm., golden, at first nodular, then confluent and irregularly effused, adnate, mealy; margin white, becoming violet when dry, radiately strigose. Spines concolorous, apex white, 2 mm. long, setaceous, subulate, equal, entire, crowded. Flesh concolorous, subcartilagineous, thin. Spores white, “muriculate, subglobose, 4–5 μ” Massee. Mycelium penetrating the wood, and forming a yellow flesh colour circumscribing zone. Dead branches. Dec. Rare.

**Membranaceous, flocose, or mealy.

2189. O. stipata (Fr.) Quél. (= Hydnum stipatum Fr.) Fr. Icon. t. 194, fig. 2, as Hydnum stipatum Fr. Stipata, crowded.

R. 3–8 cm., white, then isabelline, or light yellowish, very widely effused, flocculoso-furfuraceous; margin similar, sterile, sometimes swollen and tomentose, rarely membranaceous and silky. Spines white, then concolorous, granular, becoming subulate and pointed, minutely toothed, thin, crowded, soft. Flesh concolorous, floccose, thin. Spores white, “oblong, 3–4·6·5 × 2·5–3–4 μ; basidia 9–18 × 3–4–6 μ, with 2–4 straight sterrigmata, 3 μ long. Cystidia firm, 2–4 μ in diam., emerging in tufts. Hyphae thin walled, 1·5–3·5 μ in diam., with clamp connections, intermixed with yellowish, firm, thick walled hyphae which become coloured with eosin” Bourd. & Galz. Stumps and fallen branches of deciduous trees. Jan.—Dec. Not uncommon. (v.v.)


R. 5–20 cm., white, then yellowish, effused, slightly adnate, floccose; margin narrow, byssoid, pubescent. Spines concolorous, 1–2 mm. long, subulate, with one or many very thin points, more or less bristly on the sides, sometimes with an orange fringe at the apex. Flesh concolorous, floccose, membranaceous, loose. Spores white, “oboval, or subglobose, obliquely attenuated, or apiculate at the base, 4–7 × 3·5–4·5 μ, often 1-guttulate; basidia 15–24–30 × 4–6 μ. Cystidia cylindrical, or narrowly clavate, 60–600 × 4·5–7 μ, generally fasciculate (often poorly differentiated, with thin walls, 1–2-septate), thick walled at the base, with a narrow channel insensibly enlarged upwards where the walls become thinner. Hyphae thin walled, or scarcely thickened, 2·5–4 μ in diam., with clamp connections, and coloured by eosin” Bourd. & Galz. Wood, and branches of conifers. July—Jan. Uncommon. (v.v.)
2191. **O. limonicolor** (B. & Br.) Quél. (= *Hydnum limonicolor* B. & Br.) Bres. Fung. Trid. t. 11, fig. 2, as *Hydnum Bresadolae* Quél.

*Limonicolor*, lemon colour.


2192. **O. plumosa** (Duby) Rea. (= *Hydnum plumosum* Duby.)

*Plumosa*, feathery.

R. 4–5 cm., snow white, resupinate, tomentose. Spines white, 2 mm. or more long, slender, minutely feathered near the apex, usually crowded. Flesh white, floccose, very delicate. Spores white, “globose, 4–5 μ” Massee. Dead wood, and bark, etc. Rare.


R. 3–8 cm., white, effused, mealy beneath; margin byssoid, or pulvverulent. Spines white, 2–3 mm. long, cylindrical, obtuse, or truncate, sometimes compressed, more or less confluent at the base, pulvverulent at the apex, somewhat crowded. Flesh concolorous, floccose, very thin. Spores “white, subglobose, apiculate, 3–4 μ” Massee. Dead wood, leaves, and mosses. March. Rare.


*Bi-color*, two-coloured.

R. 5–20 cm., white, or whitish, becoming glaucous, then tan colour, widely effused, subtomentose, soft, pruinose, waxy, often cracked at the base of the spines; margin indeterminate, or whitish pruinose. Spines concolorous, apex often brownish red, small, granular, minutely villose, obtuse. Flesh concolorous, floccose, soft. Spores white, “oblong, scarcely depressed on the side, 4.5–7 × 2.75–4 μ; basidia 10–24 × 3–5 μ, with 2–4-sterigmata, 4–5 μ long. Cystidia with a globose head, 8–15 μ in diam., thin walled, contents becoming yellowish, and often crowned by radiate twin crystals. Hyphae of the subiculum 2–3 μ in diam., in the axis of the spines amber coloured, fasciculate, agglutinated together by a resinous substance, and ending at the apex of the spines in an oil coloured tuft” Bourd. & Galz. Firs, and brambles. Oct.—March. Not uncommon. (v.v.)

2195. **O. papillosa** (Fr.) Bres. (= *Grandinia papillosa* Fr.)

*Papillosa*, having nipples.

R. 2.5–5 cm., milk white, or yellowish, effused, separating when entire, very much cracked; margin white, very thin, pubescent, or
pruinose. Spines *concolorous*, granular, subhemispherical, equal, becoming subulate, thin, small, very crowded. Flesh *concolorous*, membranaceous, floccose, firm. Spores white, "oblong, subcylindrical, depressed on the side, 4.5–6 × 2–2.75 μ; basidia 10–20 × 3–4.5 μ, with 2–4 sterigmata, 3–4.5 μ long, accompanied by subulate, sterile basidia, sometimes capped with oxalate, and with numerous smooth, or rough paraphysis-like hyphae forming a tuft at the apex of the spines. Hyphae with walls slightly thickened, firm, with clamp connections; subhymenial hyphae dense, 3–4.5 μ in diam." Bourd. & Galz. Fallen oak, beech, and fir branches. July—Nov. Rare.

2196. *O. arguta* (Fr.) Quél. (= *Hydnum argutum* Fr.; ? *Radulhum tomentosum* Fr. sec. Bourd. & Galz.)  

Arguta, sharp.

R. 3–6 cm., white, then yellowish, effused, tomentose, or minutely pubescent, slightly adnate, finally minutely cracked; margin similar, or flocose. Spines white, then ochraceous, 1–2 mm. long, granular, pubescent, then cylindrical, or subulate, sometimes connate at the base, apex penicillate. Flesh *concolorous*, floccose, firm, thin. Spores white, "oboval, 4–6 × 3–5 μ, often 1-guttulate; basidia 10–15–18 × 3–4–6 μ. Cystidia fusiform, or capitate, crowned, or not, by an oil globule, 7–9 μ in diam. Hyphae thin walled, or slightly thickened, 2–4 μ in diam., with clamp connections" Bourd. & Galz. Trunks, stumps, and fallen branches. Sept.—Dec. Not uncommon. (v.v.)

var. *alutacea* (Fr.) Bourd. & Galz. (= *Hydnum alutaceum* Fr.)  

Alutacea, tanned leather.


2197. *O. spathulata* (Schwein.) Rea. (= *Hydnum spathulatum* (Schwein.) Fr.)  

spathulata, a broad blade.

R. 2.5–5 cm., whitish, becoming yellow, effused, separable, adpressedly villose beneath; margin involute, fimbriate. Spines brick red, or orange, 2–4 mm. long, spathulate, oblique, sometimes flattened, acicular. Flesh *concolorous*, membranaceous, thin. Spores "white, broadly elliptical, apiculate, 8 × 5 μ" Massee. Dead Robinia wood. Jan.—Dec. Rare.


Multiformis, many shaped.

R. 5–10 cm., ochrey white, effused, inseparable, becoming cracked when dry; margin indeterminate, thin. Spines pallid, 2–4 mm. long, very acute, becoming fimbriate, crowded. Flesh *concolorous*, floccose, thin. Spores white, "subglobose, or very broadly pip-shaped, obliquely apiculate, 9 × 6–7 μ" Massee. Dead wood. Rare.
2199. *O. mollusca* (Fr.) Rea. (= *Hydnum molluscum* Fr.)

*Mollusca*, soft.


2200. *O. sulphurea* (Schwein.) Rea. (= *Hydnum sulphureum* Schwein.)

*Sulphurea*, *sulphur yellow*.


***Waxy crustaceous, very adnate.***


*Crustosa*, having a crust.

R. 5–15 cm., *whitish cream colour*, *then yellowish*, or *tan colour*, effused, adnate, finally cracked and minutely areolate; margin *white*, distinct, *narrow*, pruinose, or *minutely pubescent*. Spines *concolorous*, granular, short, pointed, or obtuse, scattered, or somewhat crowded. Flesh *concolorous*, *crustaceous*, thin. Spores white, "oblong, subcylindrical, depressed on the side, 4.5–6.8 × 2.4 μ; basidia 12–21–30 × 3.4–6 μ, accompanied by numerous fusiform, or subulate cystidioles, 3.4–6 μ in diam., sometimes branched, slightly projecting. Hyphae thin walled, 1.5–4 μ in diam., with rather rare clamp connections" Bourd. & Galz. Fallen branches. Jan.—Dec. Uncommon. (v.v.)


*Cristulata*, crested.

R. 5–14 cm., *pale*, or *rosy flesh colour*, widely effused, adnate, mealy; margin *white*, narrowly byssoid, pubescent, or mealy. Spines *concolorous*, or *reddish brown*, short, crowded, or confluent and crested; apex penicillate, pointed. Flesh *white*, somewhat waxy, then *crustaceous*, thin. Spores white, "cylindrical, slightly depressed on the side, 8–10 × 3.5–4 μ; basidia 25–32 × 4.5–7 μ, contents granular. Cystidia fasciculate, cylindrical, 4–5 μ in diam., 1–2-septate, with, or without clamp connections. Hyphae thin walled, 3–6 μ in diam., with clamp connections" Bourd. & Galz. Birch branches. Feb. Rare.


*Mellea*, *honey colour*.

2204. O. sepulta (B. & Br.) Rea. (= Hydnum sepultum B. & Br.)

Sepulta, buried.


2205. O. alliacea Weinm.

Alliacea, of garlic.

R. 3–10 cm., white, translucent, becoming pale, or cinereous, broadly effused, incrusting; margin silky. Spines concolorous, 1–2 mm. long, with some shorter ones, incised, villose. Flesh concolorous, crustaceous, membranaceous, thin. Spores white, elliptical, 3–4 × 2μ; basidia with 2-sterigmata. Smell faint, of garlic. Lichens on trees, and dead branches. Sept.—Oct. Uncommon. (v.v.)

2206. O. Pruni Lasch.

Pruni, of plums.


Kneiffia Fr.

(Friederich Gotthard Kneiff, a German mycologist.)

Receptacle subgelatinous, effused. Spines or granules, scattered, minute, sterile. Spores white, elliptical, smooth. Growing on wood.


R. 10 cm., yellowish, then cream colour, broadly effused. Spines concolorous, granular, minute, scattered, subgelatinous, fringed at the apex. Flesh concolorous, subgelatinous, thin. Spores white, “broadly elliptical, apiculate, 4 × 2.5μ” Massee. Fir stumps. April. Rare.

K. setigera Fr. = Peniophora setigera (Fr.) Bres.

Hydnopsis (Schroet.) Rea.

(ὅδνος, the genus Hydnum; ὅψις, like.)

Receptacle floccose, resupinate, effused. Spines subulate, acute. Spores coloured, elliptical, smooth. Growing on dead leaves, and on the ground.


Farinacea, mealy.

R. 2.5–6 mm., white, effused, adnate. Spines white, then wood colour, and finally umber, 1 mm. long, subulate, acute, thin, sub-distant. Flesh white, floccose, thin. Spores fuscous, elliptical, 6–7 × 3–4μ, 1–3-guttulate. Dead fallen beech leaves, and on the ground. May. Uncommon. (v.v.)
Caldesiella Sacc. (=Hydnum (Linn.) Fr.).

(L. Caldesi, an Italian botanist.)

Receptacle floccose, soft, resupinate. Spines conical, soft, villose, fimbriate at the apex. Spores coloured, globose, verrucose, or echinulate; basidia clavate, with 2–4-sterigmata. Growing on wood.


2210. C. italic a Sacc. Italia, Italian.

R. 2–10 cm., fuliginous, widely effused, incrusting, resupinate. Spines concolorous, becoming olivaceous with the snuff-coloured spores, 1–1·5 mm. long, 5–1 mm. thick, cylindrical, obtuse, often compressed, crowded, pruinose. Flesh concolorous, floccose, thick. Spores snuff-coloured in the mass, olivaceous-hyaline under the microscope, obtusely verrucose, angularly globose, 8–9 x 8 /μ; basidia clavate with 2–4-sterigmata. Basal hyphae concolorous, thick walled, 6–8 /μ in diam., septate, with clamp connections. Birch stumps. Oct. Uncommon. (v.v.)


R. 5–25 cm., white, then indigo blue, soon greenish, and at length yellowish, broadly effused, tomentose; margin white, membranaceous, thin. Spines indigo blue, then greenish, 1–2 mm. long, cylindrical, irregular, obtusely divided at the apex, often crowned with white hairs. Flesh concolorous, floccose, thin. Spores indigo blue, verrucose, globose, 4–5 /μ. Rotten wood. Sept.—Oct. Uncommon. (v.v.)

Phylacteria (Pers.) Pat. (=THELEPHORA (Ehrl.) Fr. p.p.).

(φυλακτήριον, an amulet.)

Receptacle fibrous, or coriaceous, pileate, stipitate, sessile, or resupinate, entire, or laciniate, destitute of a pellicle. Stem central, lateral, or none, confluent with the pileus. Flesh coloured. Hymenium inferior or amphigenous, smooth, faintly ribbed, or papillose. Spores coloured, elliptical, globose, subglobose, or angular; verrucose, or
Phylacteria; basidia with 2–4-sterigmata. Cystidia none. Growing on the ground, or on wood.

I. Erect with usually a central st.

*P. divided into very narrow, branching, flattened, or cylindrical divisions.

2212. P. palmata (Scop.) Pat. (= Thelephora palmata (Scop.) Fr.)
Palmata, having the shape of a hand.

R. 2–6 cm. high, 1–3 cm. broad, fuscous purple, apex whitish, fimbriate, very much divided into palmate, flattened, subfastigate, even, flattened branches, dilated upwards. St. 1–1.5 cm. × 1–2 mm., concolorous, simple, or branched. Hymenium amphigenous. Flesh concolorous, coriaceous, soft. Spores fuscous purple in the mass, pale umber under the microscope, echinulate, globose, 8–9 μ. Smell very foetid. Woods, especially of conifers. Aug.—Nov. Uncommon. (v.v.)

2213. P. anthocephala (Bull.) Pat. (= Thelephora anthocephala (Bull.) Fr.)
Berk. Outl. Brit. Fung. t. 17, fig. 4, as Thelephora anthocephala.

R. 2–5 cm. high, 1–3 cm. broad, somewhat ferruginous, becoming fuscous, apex whitish, fimbriate, divided down to the stem into flaps which are dilated upwards, or into irregular branched erect branches, pubescent. St. 1.5–1.5 cm. × 1–2 mm., concolorous, simple, equal, villose. Hymenium even. Flesh concolorous, coriaceous, soft. Spores purplish in the mass, pale umber under the microscope, echinulate, globose, or broadly elliptical, 6–8 × 6 μ, 1–2-guttulate. Woods. Aug.—Nov. Not uncommon. (v.v.)

2214. P. clavularis (Fr.) Big. & Guill. (= Thelephora clavularis Fr.)
Fr. Icon. t. 196, fig. 3, as Thelephora clavularis Fr.

Clavularis, a little nail.

R. 2.5–4 cm. high, 1–3 cm. broad, rufous fuscous, apex whitish, acute, divided down to the st. into round, attenuate, even, delicately pruinose branches. St. 5–1.5 cm. × 1–3 mm., concolorous, base somewhat tuberous. Flesh concolorous, coriaceous, soft. Spores reddish purple in the mass, echinulate, subglobose, 6–7 × 6 μ. Woods. Sept.—Oct. Uncommon. (v.v.)

**P. more or less infundibuliform, cup-shaped, or flabelliform, often splitting into lobes, or divisions.

2215. P. caryophyllea (Schaeff.) Pat. (= Thelephora caryophyllea (Schaeff.) Fr.)
Schaeff. Icon. t. 325, as Helvella caryophyllea Schaeff.

Káρφον, a nut; φύλλον, a leaf.

R. 1.5–4 cm. high, 1.5–5 cm. broad, fuscous purple, becoming wood brown when dried, infundibuliform, cup-shaped; margin lobed, or
incised, often broken up into wedge-shaped, imbricate branches, or segments, fibrillosely torn, often radiately rugose, or striate, obsoletely zoned when moist. St. \(5-1 \text{ cm.} \times 2-3 \text{ mm., concolorous, simple, or branched, equal, villose. Hymenium inferior, even. Flesh concolorous, or paler, subcoriaceous. Spores purple in the mass, pale umber under the microscope, verrucose, globose, } 6-7 \mu. \) Woods, especially under conifers. Aug.—Nov. Uncommon. (v.v.)

II. Dimidiate, horizontal, subsessile, or effuso-reflexed.

2216. **P. intybacea** (Pers.) Pat. (= *Thelephora intybacea* (Pers.) Fr.)

Bull. Champ. Fr. t. 278, as *Thelephora intybacea*.

\(\epsilon\nu\tau\beta\sigma\nu,\) chicory.

R. 2–4 cm., whitish, then rufous ferruginous, at length fuliginous; margin whitish fimbriate at first, then concolorous, dimidiate, confluent, imbricate, fibrous, the fibrils often agglutinated into adpressed, adnate squamules; margin dilated. St. short, sublateral, often confluent. Hymenium concolorous, inferior, papillose. Flesh firm, fibrillosely scaly, 1 mm. thick. Spores deep ochraceous, verrucosely echinulate, subglobose, or elliptical, \(7-9 \times 6-7 \mu,\) with a large central gutta. Caespitose. Pine wood, and bare soil. Sept.—Nov. Uncommon. (v.v.)

2217. **P. terrestris** (Ehrh.) Big. & Guill. (= *Thelephora terrestris* (Ehrh.) Fr.; *Thelephora lacinata* (Pers.) Fr.) Rolland, Champ. t. 101, no. 224.

*Terrestris,* pertaining to the earth.

R. 3–5 cm., ferruginous fuscous, or fuscous, often becoming black with age, dimidiate, sessile, or effuso-reflexed, laterally confluent, often imbricate, fibrillosely scaly, strigose; margin fimbriate, laciniate. Hymenium fuscous, or pale fawn, inferior, papillose. Flesh concolorous, coriaceous, fibrillosely scaly, soft, 1 mm. thick. Spores fuscous, verrucose, angularly globose, \(8-9 \times 6-8 \mu.\) Woods, and heaths. July—Dec. Common. (v.v.)

P. *biennis* (Fr.) Big. & Guill. = *Hypochorus umbrinus* (Fr.) Quél.

2218. **P. atra** (Weinm.) Rea. (= *Thelephora atra* Weinm.)

*Attra,* black.

P. 5–8 cm., black, becoming fuliginous, imbricate, arising from a tuberous base, deformed, somewhat lobed, sessile, attenuated at the base; margin at first white, fimbriate. Hymenium black, white pruinose, smooth, setulose. Caespitose. Dead logs. Rare.


*Mollissima,* very soft.

R. 2–4 cm., whitish, becoming brownish, broadly effused, continuous, or effuso-reflexed, forming flaps, subtomentose. Hymenium

III. Resupinate, and incrusting.

2220. **P. spiculosa** (Fr.) Bourd. & Maire. (**=Thelephora spiculosa** (Fr.) Burt.) Pers. Syn. Fung. t. 3, fig. 16, as *Merisma penicillatum*. Spiculosa, having little sharp points.

R. 2–15 cm., fuscous purple, whitish at the apex of the spicules, effused, incrusting; margin ramoso-spiculose, tips penicillate. Hymenium concolorous, even or slightly rugose. Flesh floccose, 1 mm. thick. Spores brownish purple, warted, subglobose, 7–8μ. Running over twigs, and dead leaves. Aug.—Nov. Not uncommon. (v.v.)

**Hypochnus** (Fr.) Karst. (**=Tomentella** (Pers.) Pat.).

(ὑπό, under; χυός, fine down.)

Receptacle floccose, or felt-like, resupinate, effused. Hymenium smooth, or papillose. Flesh coloured, soft, loose. Spores coloured, rough, verrucose, or echinulate; globose, subglobose, elliptical, ovoid, or angular; basidia sometimes in scattered clusters, with 2–4-sterigmata. Growing on wood, mosses, or on the ground.

2221. **H. ferrugineus** (Pers.) Fr. **Ferrugineus**, iron rust colour.


2222. **H. umbrinus** (Fr.) Quél. (**=Thelephora biennis** Fr.) **Umbrinus**, umber.

R. 3–10 cm., brown, with more or less of a vinaceous tint (varying from drab to fuscous and “Chaetura-drab” of Ridgway), effused, soft, separable; subiculum *warm sepia*, villose. Hymenium concolorous, membranaceous, compact. Flesh concolorous, dense. Spores fuscous, or dark brown, aculate, or coarsely verrucose, globose, or subglobose, 6–8μ, or 6–8 × 5–7μ; basidia brownish, clavate, with 4-sterigmata. Hyphae brown, thick walled, 4–5μ in diam., septate, without clamp connections. Dead wood. Oct.—Feb. Uncommon. (v.v.)

2223. **H. fuscus** (Pers.) Fr. (**=Corticium fuscum** (Pers.) Fr.) **Fuscus**, dark.

R. 2–10 cm., subfuscous, cinnamon, or brown, somewhat vinaceous

2224. **H. subfuscus** Karst.  
*Subfuscus*, somewhat dark.  

2225. **H. granulosus** (Peck) Burt. (= *Grandinia tabacina* Cke. & Ell.)  
Burt, Theleph. of North Am. vi, Hypochnus, text-fig. p. 219.  
*Granulosus*, granular.  
R. 2–4 × 1–2 cm., sepia, effused, thin, membranaceous, granular, separable; margin somewhat radiate, concolorous. Spores concolorous with the hyphae, aculate, angular-subglobose, the body about 6μ in diam. Flesh concolorous or paler, loose. Hyphae yellowish under the microscope, loosely interwoven, 2.5–4μ in diam., thin walled, occasionally with clamp connections, forming near the substratum some rope-like mycelial strands up to 15μ in diam. Pine sticks and rotten bark and wood of frondose trees. Aug.—Sept. Uncommon. (v.v.)

2226. **H. puniceus** (A. & S.) Sacc. (= *Corticium* (*Hypochnus*) puniceum (A. & S.) Fr.)  
*Puniceus*, reddish.  
R. 1–3 cm., dull red, vaguely effused, mould-like; margin similar. Hymenium concolorous, minutely granular, loose and pulverulent under a lens. Flesh pale, fibrillose, loose, very thin. Spores dull reddish, with short spines, subglobose, 8–9.5μ, 7.5–8μ without the spines; basidia clavate, 40–50 × 8μ, with 2–4 stout curved sterigmata, 5–8 × 2.5–3μ. Subhymenial hyphae hyaline, or pale coloured, 3.5–5μ, wavy, much branched, with clamp connections. Decorticated pine-wood. July—Sept. Uncommon. (v.v.)

2227. **H. isabellinus** Fr. (= *Corticium isabellinum* Fr.) Fr. Obs. Myc. ii, t. 6, fig. 3.  
*Isabellinus*, dirty yellowish.  
R. 5–10 cm., pale “Isabella colour” of Ridgway, or deep olive buff to dark olive buff, effused, adnate, inseparable, tomentose; margin concolorous, thinner. Hymenium concolorous, loose, pulverulent. Flesh concolorous, loose, thin. Spores isabelline, echinulate, globose, 7–9μ
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without the spines. Hyphae concolorous, thick walled, branched at right angles, 8–14 µ in diam., without clamp connections. Rotten wood, and bark. Sept. Rare. (v.v.)

2228. H. cyaneus Wakef.

R. 1–3 cm., deep dull violaceous blue, through "Etta blue" to glaucous green, becoming dull greyish green or yellow in parts when dried, effused, easily separable, tomentose; margin concolorous, arachnoid. Hymenium concolorous, floccose. Flesh concolorous, paler, thin. Spores dull bluish, minutely and sparsely aculeate, elliptical, depressed on one side, 5–8 × 4 µ; basidia hyaline, elongate-clavate, 30–40 × 7 µ, with 2–4-sterigmata. Basal hyphae slightly tinged bluish, 1–3 µ in diam., here and there incrusted, without clamp connections. Potassium hydrate solution takes away the colour of the spores but turns the other parts greenish when fresh; when dried, the hyphae and spores become a dull violet colour. Wet rotten coniferous logs. Oct. Rare.

2229. H. cinerascens Karst.

Cinerascens, becoming ash colour.


2230. H. caesius (Pers.) Wakef. (=Thelephora caesia (Pers.) Fr.) Pers. Obs. 1, t. 3, fig. 6, as Corticium caesium. Caesius, bluish grey.

R. 3–10 cm., cinereous-bluish-grey, or brownish bistre, effused, sub-orbicular, determinate, tomentose. Hymenium concolorous, becoming paler, even, minutely pubescent. Flesh brownish, soft, thin. Spores hyaline, then lilac bistre, and finally brownish, spinulose, subglobose, 7–8 µ. Wood, twigs, mosses, and on the ground. Aug.—Nov. Not uncommon. (v.v.)

2231. H. botryoides (Schwein.) Burt.

Βότρυος, a bunch of grapes; εἴδος, like.

2232. **H. crustaceus** (Schum.) Karst. (= Thelephora crustacea (Schum.) Fr.; Phylacteria spiculosa (Fr.) Bourd. & Maire sec. von Hoehn. & Litsch.) Fl. Dan. t. 1851, fig. 2.  *Crustaceus*, having a bark.


2233. **H. zygodesmoides** (Ellis) Burt.

ζυγοδεσμων, a yoke-band; εἶδος, like.


2234. **H. echinosporus** (Ellis) Burt. (= Corticium echinosporum Ellis; *Hypochnus mollis* Fr. var. *pellicula* Fr.; *Hypochnus pellicula* Bres.)

εχινόσπορος, hedge-hog; σπορά, seed.

R. 2–4 cm., *sulphur yellow*, or *rose pink*, indefinitely effused, very delicate, membranaceous, separable; margin *whitish*, or *concolorous*, very thin, indefinite, occasionally with very fine, white hyphal strands spreading over the subiculum. Hymenium *pale clear sulphur yellow*, becoming *spotted with brown when old*, or *dull rose pink*, occasionally with a very faint lilac tinge, and with darker reddish, or brownish stains, forming a fine pulverulent pellicle. Flesh *concolorous*, arachnoid, soft, thin, loose. Spores hyaline, or pale straw colour, contents sometimes golden yellow, or rosy, echinulate, subglobose, or in lateral view broadly elliptical, 5–7 × 4–6 μ; basidia cylindrical to clavate, 20–30 × 6–8 μ, with 2–4-sterigmata, slightly curved, 3–5.5 × 1–1.5 μ. Basal hyphae hyaline, or very faintly coloured, 2.5–5 μ in diam., branched, septate. Rotten wood. Oct. Rare.


*R. B. B.*

R. 3–8 cm., "light vinaceous fawn" and "cinnamon drab" of Ridgway, *with a paler "drab-grey" margin*, becoming like *H. fuscus*, but paler with a *greyish bloom*, greyish white to dirty buff when quite young, effused, pelliculose, or membranaceous, easily separable; margin somewhat radiating, *grey*. Hymenium *pale greyish vinaceous*,

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var. lavandulaceus Pears.  
Lavandulaceus, lavender colour coloured.

Differs from the type only in the greyish lavender colour of the hymenium without a trace of pink. Ground in woods under Castanea sativa. Sept. Uncommon. (v.v.)

2236. H. fumosus Fr. (= Corticium fumosum Fr.; Corticium sulphureum (Pers.) Bres.; Phlebia vaga Fr.; Coniophora sulfurea (Pers.) Quél.) Fr. Icon. t. 198, fig. 3, as Corticium fumosum Fr.

Fumosus, smoky.

R. 3–10 cm., pale, yellow, tawny, cinnamon, grey, drab, brownish or fuscous, effused, membranaceous, arachnoid, separable, more or less overrun with intricate, branching, anastomosing threads; margin bright yellow, becoming whitish, byssoid, fibrillose. Hymenium concolorous, granular, or reticulately veined. Flesh pale, or slightly cinereous, membranaceous, thin. Spores white, or brownish, minutely echinulate, ovoid, or globose, 3–7 × 3–5 μ. Hyphae longitudinally interwoven, occasionally with clamp connections, thin walled, hyaline, or slightly smoky, 2.5–3.5 μ in diam. Dead wood, branches, and twigs. Jan.—Dec. Common. (v.v.)


σφαιρα, a ball; σπορά, seed.

R. 1–2 cm., chalk white or snow white, becoming yellowish in the centre, effused, arachnoid, and porous under a lens; margin similar or fibrillose. Hymenium concolorous, mealy, or granular. Flesh concolorous, thin, floccose. Spores hyaline, coarsely and minutely warted, globose, or angularly-globose, 3–6 × 2.5–4 μ (mostly 4.5 × 4 μ), 1-guttulate; basidia clavate or pyriform, 8–15 × 4–6 μ, with 2–4-sterigmata 2.5–5 μ long. Hyphae hyaline, 2–4 μ in diam., thin walled, with clamp connections, basal hyphae often forming rhizoidal strands, and inclosing acicular, or fusiform crystals of oxalate of lime, 10–25 μ long. Beech logs and on bare soil. Oct. Rare. (v.v.)


R. 1–3 cm., dirty whitish to yellowish, effused, irregular; margin
similar. Hymenium concolorous, very loose, pulverulent. Spores hyaline, rough with short conical warts, subglobose, broadly elliptical or oval and flattened on one side, attenuated at the base, 2-3.5 μ in diam., or 2-3.5 × 2-2.5 μ, usually 1-guttulate; basidia clavate, 8-16 × 4-6 μ, with 2-4 thin, pointed sterigmata 1.5-3 μ long. Hyphae hyaline, 1-3 μ in diam., thin walled, septate-nodulose, rarely distinct (no clamp connections observed). Pine stick. Sept. Rare.

**Hypochnella** Schroet.

(Hypochnella, diminutive of Hypochnus.)

Same characters as *Hypochnus* but differing in the smooth, elliptical, violet spores. Growing on wood.


R. 2-10 cm., rich lilac colour, becoming darker and duller when dry, irregularly effused. Hymenium concolorous, smooth. Flesh bluish, very thin, floccose, loose. Spores deep violet, elliptical, with a lateral basal apiculus, 7-9 × 3-4 μ; basidia hyaline, or faintly coloured, cylindric-clavate, 20-25 × 8-9 μ; paraphyses obtuse, 10-12 × 6-7 μ, often with a few crystals on the external walls. Subhymenial hyphae very faintly coloured, often slightly incrusted with small rounded crystals; basal hyphae pale lilac, 6-9 μ in diam. Underside of fallen branches. Sept.—Oct. Uncommon. (v.v.)

**Jaapia** Bres.

(Octo Jaap.)

Resupinate, effused, immarginate, flocculose-pulverulent, with the habit of some Corticia or of a pale *Hypochnus*. Spores straw coloured, subelliptical, hyaline-appendiculate.


R. 1 cm., clay coloured, irregularly effused, flocculose, sometimes with scattered granules. Hymenium concolorous, loose, then more continuous. Flesh concolorous, very thin, floccose. Spores straw coloured, fusiform, slightly curved, 22-25 × 7-8 μ, consisting of a central oblong-elliptical portion, 14-18 × 7-8 μ (mostly 15 × 7 μ), containing faintly coloured, granular protoplasm, divided off by a wall from a clear conical portion at either end. Basidia clavate, up to 60 μ long by 8-10 μ wide, with 2-4 curved sterigmata, 8 μ long. Cystidia hyaline, cylindrical, obtuse, 100-160 × 7-8 μ, occasionally with a single septum. Basal hyphae flexuous, frequently septate, with clamp connections, 4-6 μ in diam. Fallen sticks. Oct. Rare. (v.v.)
Aldridgea Massee.
(Miss Emily Aldridge.)

Receptacle subgelatinous, becoming cartilaginous when dry, resupinate, effused. Hymenium smooth, even. Spores coloured, elliptical, smooth; basidia with 4-sterigmata. Growing on wood.


R. 5–13 cm., pallid, broadly effused; margin determinate. Hymenium purple brown, smooth, even. Flesh subgelatinous, then cartilaginous, or rigid and collapsed when dry. Spores “olive, broadly elliptical, obliquely apiculate, 10 x 6–7 μ” Massee. Sawdust. Rare.

[Ptychogaster Corda.]

(πτύξε, a fold; γαστήρ, belly.)

Receptacle fleshy, or somewhat corky, round, or cushion-shaped, producing conidia and chlamydomspores. Cystidia present, or absent. Growing on wood, or incrusting plants.


R. 2–15 cm., white, becoming brownish, globose, obconic, or pulvinate, soft, shaggy, or filamentous; internally white, becoming brownish, formed of many concentric layers. Conidia colourless, long, oval. Chlamydomspores “brownish, elliptic, or oblong, 6 μ long” Henn. Dead wood and branches. Aug.—Feb. Common. (v.v.)

6. Thelephoraceae.

Hymenium spread over a smooth, rugose, or ribbed surface, either resting upon an intermediate layer of hyphae running longitudinally between it and the mycelium, or seated directly upon the mycelium.

1. Hymenium separated from the mycelium by an intermediate layer of hyphae.

Sparassis Fr.

(σπαράσσω, I tear in pieces.)

Receptacle fleshy, erect, much branched; branches flattened in a lamellar, or plate-like manner, more or less confluent. Hymenium smooth, inferior. Spores white, or yellowish, ovoid, elliptical, globose, or subglobose; smooth; basidia with 2–4-sterigmata. Cystidia none. Mycelium cord-like, often attached to the roots of trees. Growing on the ground.

2243. S. crispa (Wulf.) Fr. Rolland, Champ. t. 102, no. 229. Crispa, curled.

R. 10–60 cm., whitish, or pale ochraceous, very much branched, re-
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sembling a cauliflower; branches 2.5–5 cm., broad, intricate, ribbon-like, apex tinged yellowish, crisped, and slightly zoned. St. whitish, becoming blackish with age, stout, rooting. Flesh whitish, or yellowish, fleshy, brittle. Spores pale ochraceous in the mass, hyaline under the microscope, subglobose, or elliptical, 6–7 μ in diam., or 6 × 4 μ, 1–2-guttulate; basidia with 2–4-sterigmata. Smell very pleasant, of anise. Taste agreeable. Edible. Coniferous woods. Aug.—Nov. Not uncommon. (v.v.)


Laminosa, having plates.

R. 10–60 cm., yellowish straw colour, very much branched; branches laminar, patent, more lax, and less dense than those of S. crispa. St. whitish, becoming discoloured with age, stout, rooting. Flesh yellowish, fleshy, brittle. Spores pale ochraceous in the mass, hyaline under the microscope, globose, 8 μ, with granular contents. Smell pleasant. Taste agreeable. Edible. Mixed woods, especially near oaks. Sept.—Nov. Not uncommon. (v.v.)

Stereo (Pers.) Massee (= Thelephora (Ehrh.) Fr. pp.).

(σχερεόν, firm.)

Receptacle coriaceous, pileate, stipitate, or sessile, infundibuliform, dimidiate, resupinate, or effuso-reflexed. Stem central, lateral, or none. Hymenium inferior, with an intermediate layer, smooth, rarely rugulose, or ribbed, sometimes setulose, pubescent, or velvety. Flesh pale. Spores white, oval, elliptical, globose, subglobose, cylindrical, oblong, or oblong elliptic; smooth, or granular; basidia with 2–4-sterigmata. Cystidia hyaline, rarely coloured in nos. 2261 and 2262, present, or absent. Annual, or perennial. Growing on wood, or on the ground.

I. R. infundibuliform. St. central.


James Sowerby, the well-known botanical illustrator.

R. 1–2.5 cm., snow white, becoming yellow, or pale yellow, infundibuliform, flabelliform, or spathulate, uneven; margin incised, often crenate. St. 1–2.5 cm. × 2–3 mm., concolorous, gradually expanding into the p., often confluent, smooth, or wrinkled. Hymenium concolorous, smooth, or rugulose. Flesh yellowish, fleshy coriaceous, thin. Spores white, oval, 3 × 2 μ. Under pine bark, and on the ground. Sept.—Nov. Uncommon. (v.v.)
2246. S. pallidum (Pers.) Cooke. (= Thelephora pallida (Pers.) Fr.) Pers. Icon. et Desc. t. 1, t. 1, fig. 3, as Craterella pallida.

Pallidum, pale.

R. 1–5 cm., pallid, then cream, or buff, infundibuliform, strigously squamulose. St. 2–6 × 5–1 cm., concolorous, expanding upwards into the p., often confluent, smooth, base villose. Hymenium pallid, rugulose, with slight, very obtuse, radial folds, more or less setulose with hyaline hairs under a lens. Flesh concolorous, coriaceous-spongy, rather thick. Spores white, elliptical, often flattened on one side, 5–8 × 3–5 μ. Cystidia white, cylindrical, smooth, 6–8 μ in diam., projecting 10–50 μ above the hymenium. Often caespitose. Woods. July—Nov. Rare. (v.v.)


Multus, many; ζώνη, a belt.

R. 9–20 cm., bright rufous flesh colour, or rich brown, margin white at first, deeply infundibuliform, variously cut and lobed, zoned with darker bands; margin lobed, crenulate. St. 5–9 × 1–3 cm., concolorous, gradually expanding into the p., often confluent, smooth. Hymenium paler than the p., or somewhat cinereous, slightly ribbed, smooth. Flesh concolorous, or paler, coriaceous, tough, thin. Spores white, broadly elliptical, 7 × 4–5 μ, with a large central gutta. Caespitose. Woods. Sept.—Dec. Uncommon. (v.v.)

2248. S. undulatum (Fr.) Massee¹. (= Thelephora undulata Fr.)

Undulatum, waved.

R. 1–3 cm., whitish, then tan, depressed, plano-infundibuliform, minutely fibrillose; margin entire, undulate. St. 1–3 × 5–1 cm., whitish, equal, villose. Hymenium pale tan, ribbed, setulose under a lens. Flesh concolorous, subcoriaceous, firm. Spores white, “broadly pip-shaped, 10 × 6 μ” Massee. On the ground. Oct. Rare.


Tuberosum, tuberous.

R. 1–2 cm., grey, or with a slight brownish tinge, infundibuliform, broken up into narrow, compressed segments almost to the base of the st., segments acute, or obtuse at the apex. St. 5–2:5 cm. × 2–4 mm., concolorous, subcylindrical, obscurely furrowed or lacunose, base bulbous. Hymenium concolorous, inferior, smooth. Flesh subcoriaceous, thin. Spores white, “elliptical, 7–8 × 5 μ” Massee. Bare soil. Sept.—Nov. Rare.

¹ “The record in England is an error of determination” sec. Lloyd, Synopsis Stipitate Stereums, p. 20.
II. R. dimidiate, sessile, or resupinate and effuso-reflexed, marginate.

*Hymenium bleeding when touched.

2250. S. spadiceum Fr. (= Stereum gausapatum Fr.; Stereum crustulatum Quél.; Stereum quercinum Potter.) Rolland, Champ. t. 102, no. 227. Spadiceum, date brown.

R. 5–10 cm., greyish, brownish, or subferruginous, margin often white at first, effuso-reflexed, or subdimidiate, often imbricated, confluent, villose or hirsute; margin obtuse, often lobed. Hymenium fuscous, or bistre, bleeding when fresh if cut or bruised, becoming snuff brown or more or less darker and discoloured with age, smooth, or wrinkled. Flesh whitish in the middle stratum, coriaceous, soft. Spores white, elliptical, 7–8 × 4–5 μ. Cystidia none. Lacticiferous hyphae, red, "coloured, 75–120 × 5 μ, very numerous" Burt. Stumps, and fallen branches, especially oak, and ash. Jan.—Dec. Common. (v.v.)

2251. S. rugosum (Pers.) Fr. Rugosum, wrinkled.


R. 1–8 cm., pallid, white at the thin, acute margin, effused, often circular, becoming confluent, then reflexed, adpressedly villose, or silky, substriate. Hymenium cinereous, then fuscous, bleeding when wounded, even, smooth, becoming cracked when dry. Flesh whitish, coriaceous, thin, "intermediate layer bordered on the upper side by a narrow, dense golden zone, and composed of densely arranged hyaline hyphae, 3 μ in diam." Burt. Spores white, cylindrical, slightly curved, 8–9 × 3–4 μ. Cystidia none. Lacticiferous hyphae red, "coloured, 3–4 μ, usually numerous" Burt. Dead stumps, and branches, especially of conifers. Jan.—Dec. Common. (v.v.)
**Hymenium yellow, or grey.**


*Hirsutum*, hairy.

R. 2–10 cm., *pallid, yellowish, or greyish, margin yellow, widely effused, then reflexed, sometimes entirely resupinate, strigosely hairy, subzoned; margin obtuse. Hymenium *bright ochraceous, pinkish, or tan colour*, sometimes becoming grey, even, smooth. Flesh *yellowish, coriaceous, firm, tough, “intermediate layer bordered next to the hairy covering by a very dense, narrow, golden zone, composed of densely and longitudinally arranged hyaline hyphae, 3–4μ in diam., some of which in the subhymenium are thick walled, up to 5–6μ in diam., and very rarely have golden brown contents as seen between the basidia”* Burt. Spores white, elliptical, incurved, 6–8 × 3–4μ. Cystidia none. Stumps, trunks, logs, posts, and fallen branches. Jan.—Dec. Common. (v.v.)

var. **subcostatum** (Karst.) Massee. (= *Corticium subcostatum* (Karst.) Bourd. & Galz.)

*Subcostatum*, somewhat ribbed.

Differs from the type in its *vaguely costate, or rugose hymenium*. Fallen branches. Sept.—Nov. Uncommon. (v.v.)

var. **luteocitrinum** Sacc. *Luteus*, yellow; *citrinum*, lemon yellow.

Differs from the type in the *golden yellow margin, and dark coloured p.* Stumps. Sept. Uncommon. (v.v.)

2254. **S. ochroleucum** Fr.

*Oχρός, pale; λευκός, white.*

R. 3–5 cm., *whitish cream, then greyish tan colour, orbicular, effuso-reflexed, confluent, then free, often entirely resupinate, villose, or strigose, zoned*. Hymenium *pale ochre*, smooth, cracked when dry. Flesh *pale, floccose, thin, “hyphae about 2.5μ in diam., granule-incrusted and interwoven throughout the thickness of the pileus”* Burt. Spores white, elliptical or subglobose, 4.5–5 × 3μ. Dead wood and bark. Jan.—March. Uncommon. (v.v.)

***Hymenium purple, lilac, or brown.***

2255. **S. purpureum** (Pers.) Fr. (= *Stereum vorticosum* Fr. sec. Burt.)


R. 2–8 cm., *whitish, pallid, or greyish, effuso-reflexed, more or less imbricate, sometimes entirely resupinate, zoned, villosely tomentose; margin entire, sometimes crisped or lobed. Hymenium *lilac, or purplish*, even, smooth. Flesh *whitish, coriaceous-soft, somewhat thick*. Spores white, oblong, or oboval, apiculate at one end, 6–8 × 3–4μ. Hymenial cystidia *none*, subhymenial cystidia vesiculose, 15–30 × 12–25μ. Dead branches, and felled trunks, especially birch, beech, elm, and poplar. Jan.—Dec. Common. (v.v.)
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var. atro-marginatum W. G. Sm. Sow. Eng. Fung. t. 412, fig. 1, as Auricularia elegans Sow. Ater, black; marginatum, bordered.

Differs from the type in the narrow, black zone near the white margin of the p. Dead branches. Sept.—Nov. Uncommon. (v.v.)

2256. S. rugosiusculum Berk. & Curt. (= Stereum purpureum (Pers.) auct. pl.)

Rugosiusculum, somewhat wrinkled.

R. 2–6 cm., cartridge-buff to cinnamon buff when dry, more or less broadly reflexed, rarely resupinate, tomentose, spongy, sometimes with projecting hairs collapsed together into a plane or wrinkled surface; margin entire. Hymenium vinaceous-buff to fawn colour when dry, even. Flesh whitish, coriaceous-soft, fairly thick. Spores white, elliptical, incurved, 5–7 × 3–4 μ. Hymenial cystidia cylindrical, thin walled, 4 μ in diam., subhymenial cystidia vesiculose, 15–30 × 10–20 μ. Logs and stumps of frondose trees. Jan.—Dec. Common. (v.v.)

2257. S. conchatum Fr.

κόγχη, a mussel shell.

R. 4–30 mm., dirty yellowish, effuso-reflexed, then shell-shaped, subimbricate, rugose, glabrous, obscurely zoned, somewhat crisped. Hymenium fuscous, smooth. Flesh coriaceous, thin. Fir. Rare.

2258. S. bicolor (Pers.) Fr. (= Stereum fuscum (Schrad.) Quél.) Fr. Icon. t. 197, fig. 2.

Bicolor, two coloured.

R. 1–5 cm., snuff-brown to bistre when dry, sometimes resupinate, generally becoming conchate-reflexed, often imbricate, villose, becoming glabrous, somewhat concentrically sulcate. Hymenium white, then cream colour to pallid mouse grey when dry, even, smooth. Flesh submembranaceous, soft, spongy, “composed of longitudinally and loosely interwoven hyphae, 3 μ in diam., coloured towards the upper surface, hyaline towards the hymenium. Spores hyaline, 3–4.5 × 2–3 μ. Gloecystidia hyaline, flexuose, 20–60 × 5–7 μ” Burt. Rotting frondose limbs and sometimes on pine. April—Dec. Rare.

III. Effused, resupinate, margin scarcely, or not at all free.

*Hymenium stratose.

2259. S. frustulosum (Pers.) Fr.

Frustulosum, full of pieces.

R. 2–5 mm., date-brown-blackish, resupinate, tuberculose, crowded as if confluent, and then broken up into frustules, sometimes growing outward from the place of attachment and narrowly reflexed, or with a free margin all round, concentrically sulcate, glabrous. Hymenium pinkish buff to whitish, convex, pruinose, stratose. Flesh woody, thick. Spores “hyaline, oboval, 5–6 × 3–3.5 μ. Paraphyses bottle-brush, or aculeate, numerous” Burt. Oak logs and stumps. Rare.
2260. **S. stratom S. & Br.**

R. 5–10 cm., bright ochraceous white, becoming yellowish, effused, smooth, here and there wrinkled. Flesh pallid, stratose, strata at length broken up. Rare.

**Hymenium pubescent, velvety.

2261. **S. Chailletii (Pers.) Fr.**

R. 2–15 cm., somewhat fawn colour, or brownish, broadly effused, resupinate the first year, then becoming stratose, and at length pileate, pilei sometimes well developed, tomentose, more or less concentrically sulcate; margin entire. Hymenium pale ferruginous, or fawn colour, pubescent, velvety. Flesh pallid, coriaceous, fairly thick, “composed of somewhat longitudinally and not densely interwoven hyphae, 3–4.5μ in diam., some of which are hyaline, thin walled, and with deeply staining protoplasm, and many thick walled, stiff, giving their colour to the fructification and curving into the hymenium where they terminate in cystidia.” Burt. Spores “hyaline, elliptical, in-equilateral, 6–7.5 × 3–4μ. Cystidia yellowish, rough, fusiform, cylindrical, 50–120 × 4–5μ, or in old stratose plants, 45–60 × 5–7μ” Bres. Felled fir trunk. Oct.—Dec. Rare. (v.v.)

*S. disciforme* (DC.) Fr. = **Aleurodiscus disciformis** (DC.) Pat.

***Hymenium pruinose.

2262. **S. abietinum (Pers.) Fr.**

R. 2–8 cm., burnt umber, resupinate, effused, rarely reflexed, tomentose, obscurely zonate, tuberculate or uneven. Hymenium light drab to cinereous or glaucous, pruinose. Flesh coloured, coriaceous-spongy, thick, “intermediate layer composed of longitudinally arranged, interwoven, coloured hyphae, 3–3.5μ in diam., bordered on its outer side by a darker, denser zone which connects with the tomentose covering; hymenial layer becoming zonate and containing numerous, coloured, cystidia. Spores hyaline, flattened on one side, 9–13 × 4–5μ. Cystidia coloured, cylindric, obtuse, even, rough walled or more or less incrusted, 90–150 × 6–8μ, protruding up to 60μ” Burt. Pine and Abies trunks and logs. Rare.

2263. **S. Pini Fr.**

R. 1–4 mm., fuscous, then Benzo-brown, resupinate, adnate, at first orbicular, then confluent, and again broken up into bullate tubercles, smooth beneath; margin fimbriate, lobed. Hymenium purple flesh colour, becoming fuscous, pruinose. Flesh coriaceous-cartilaginous, rigid, thin at the margin, “intermediate layer bordered on each side by a narrow, coloured zone, and composed of longitudinally arranged,
densely interwoven, hyaline hyphae with walls gelatinously modified, the subhymenium olivaceous-coloured. Spores hyaline, curved, 5–6 × 2–2.5μ. Cystidia hyaline, incrusted, 24 × 8μ, sometimes very sparse. Gloeocystidia hyaline, fusoid, or irregular, 30–40 × 10–15μ, sparse."


S. rufum Fr. (= Stereum rufomarginatum (Pers.) Quél.; British records of this plant = Eichleriella spinulosa (Berk. & Curt.) Burt, sec. Wakef.) Burt, The Thelephoraceae of North America, xi, Stereum, p. 121, text-fig. 11. Rufum, red.


S. acerinum (Pers.) Fr. = Aleurodiscus acerinus (Pers.) von Hoehn. & Litsch.

Hymenochaete Lév. (＝Stereum (Pers.) Massee p.p.).

(υμήν, a membrane; χαίη, long flowing hair.)

Receptacle coriaceous, firm, sessile, effused-reflexed, or resupinate. Hymenium inferior, with an intermediate layer, setulose, or velvety, even, rarely granular. Spores white, or coloured, elliptical, oval, sub-globose, oblong, fusoid, or cylindrical ellipsoid; smooth. Cystidia or setae present, coloured. Perennial. Growing on wood.

I. Sessile, effused, free and reflexed.

2265. H. rubiginosa (Dicks.) Lév. (＝Stereum rubiginosum (Schrad.) Fr.) Sow. Brit. Fung. t. 26, as Auricularia ferruginea.

Rubiginosa, rusty.

2266. **H. tabacina** (Sow.) Lév. (= *Stereum tabacinum* (Sow.) Fr.; *Stereum avellanum* Fr. in part; *Hymenochaete avellana* (Fr.) Cke.) Sow. Brit. Fung. t. 25, as *Auricularia tabacina* Sow.

Tabacina, tobacco colour.

R. 3–30 cm., subferruginous, becoming brown, margin golden, effused, reflexed, often imbricate, sometimes entirely resupinate, silky, at length becoming smooth. Hymenium paler, *snuff brown*, or *sepia*, setulose, often deeply cracked into a series of radial anastomosing cracks when resupinate. Flesh *golden*, *coriaceous*, *flaccid*, thin, intermediate layer composed of “longitudinally arranged, orange-yellow hyphae, 2-5-3μ in diam., bordered on each side by a narrow, dark, dense zone” Burt. Spores white, oblong, often curved, 4–6 × 1.5–2μ. Setae coloured, conico-acuminate, 70–100 × 8–12μ. Stumps, trunks, and logs, especially of frondose trees. Sept.—March. Not uncommon. (v.v.)

II. Resupinate.

A. Hymenium simple.

†Setae acuminate.

*Spores white.

2268. **H. nigrescens** Cke.  

_Nigrescens_, becoming black.

R. 2.5–5 cm., *fuscous*, becoming *black*, peltate, subcircular, solitary, or gregarious, sometimes confluent, adnate; margin sometimes free and slightly reflexed, smooth and *greyish beneath*. Hymenium *brown*, then *blackish*, or *blackish umber*, setulose, often cracked. Flesh rigid. Spores “white, elliptical, 10 × 5μ. Setae *blackish*, conical, 80–140 × 10–12μ” Massee. Dry wood. May.

2269. **H. Stevensonii** B. & Br. (= *Stereum rufs-hispidum* Stev.)

Rev. John Stevenson, the eminent Scotch mycologist.

2270. **H. leonina** Berk. & Curt.

\( \lambda \varepsilon \omega \nu \), a lion.

R. 2–10 cm., orange ferruginous, drying tawny olive to "Brussels-brown," entirely resupinate, widely effused, separable; margin tomentose. Hymenium *concolorous*, setulose, unequal. Flesh *concolorous*, coriaceous, loose, "composed of a compact setigerous layer 50–75\( \mu \) thick, with setae starting at different levels within it, and of a broad supporting hyphal layer, 100–600\( \mu \) thick, composed of loosely interwoven, rather longitudinally arranged hyphae, 3\( \mu \) in diam., stiff, coloured like the fructification; in fully developed, thick fructifications the hyphal layer is divided, parallel with the substratum, by a narrow, dark zone" Burt. Spores white, elliptical, "5–6 \( \times \) 3–3.5\( \mu \). Setae conical, tapering from the base to the apex, 60–80 \( \times \) 7–9\( \mu \), emerging up to 50\( \mu \)" Burt. Dead wood and holly. Rare.

2271. **H. fuliginosa** (Pers.) Lév. (? = *Hymenochaete fuliginosa* (Pers.) Bres.)

*Fuliginosa*, sooty.

R. 4–5 cm., obscure smoky brown, effused, closely adnate; margin yellowish rust, often very much broken up into patches, and almost indeterminate. Hymenium *umber with rust, or purple tinge*, densely or sparsely setulose, appearing almost smooth under a lens, sometimes minutely cracked, and brighter in colour. Flesh coriaceous, compact. Spores white, "subglobose, 5 \( \times \) 4\( \mu \). Setae brown, often clear purple by transmitted light, 30–50 \( \times \) 6–8\( \mu \)" Masse. Wood, and decorticated branches. Sept. Uncommon. (v.v.)


J. B. Mougeot, part author of "Stirpes cryptogamicae Vogesorhenaean."

R. 5–20 mm., rusty brown, reddish brown at the margin, effusoreflexed, closely adnate, minutely tomentose; margin silky. Hymenium *deep red*, tubercular, or granular, pruinously pubescent, setulose. Flesh *concolorous, or paler*, waxy, then rigid. Spores white, cylindrically ellipsoid, or oblong, 5–7 \( \times \) 2\( \mu \). Setae red, apex hyaline and white, gradually attenuated upwards, 30–60 \( \times \) 5–8\( \mu \). Dead branches of *Picea excelsa*. Aug.—Sept. Rare. (v.v.)


*Corrugata*, wrinkled.

R. 5–20 cm., pallid cinnamon, widely effused, closely adnate, when dry, cracked, into small polygonal areas, about 1–3 to a mm., sometimes grumous; margin thin, sometimes paler. Hymenium *cinnamon brown to bistre and "Rood’s brown,” sometimes weathering to mouse grey, setulose*. Flesh *concolorous, or paler*, firm, "composed of densely interwoven hyphae, 3\( \mu \) in diam., coloured like the fructification" Burt. Spores white, allantoid, 4.5–7 \( \times \) 1.5–2\( \mu \). Setae brown, cylin-
Hymenochaete. Cladoderris

Not uncommon. (v.v.)

**Spores coloured.

2274. H. croceo-ferruginea Massee. Linn. Soc. Bot. Jour. 27, t. v,
figs. 9, a, b, c.

Croceus, saffron yellow; ferruginea, iron rust colour.

R. 5–8 cm., orange ferruginous to brownish, broadly effused, closely
dnate; margin byssoid or indeterminate. Hymenium concolorous,
very minutely setulose, cracked when dry. Flesh crustaceous, very
thin. Spores "olive, subglobose, 7 × 6μ. Setae cylindrical, base very
much swollen, 70–100 × 30–35μ" Massee. Dead stems of Rosa
canina. Rare.

††Setae subclavate, sometimes rough.

2275. H. crassa (Lév.) Berk. Lév. Voy. Bonite, t. 139, fig. 1 B, as
Thelephora crassa Lév.

Crassa, thick.

R. 2.5–11 cm., pale rufous, resupinate, effused, minutely velvety;
margin thickened, at length free. Hymenium rufous, unequal, setu-
lose. Flesh coriaceous, soft, spongy. Spores white, "cylindric-
ellipsoid, 7–8 × 4μ. Setae subclavate, often rough at the apex, 70–130 ×
7–14μ" Massee. Trunks. Rare.

H. abietina (Pers.) Massee = Stereum abietinum (Pers.) Fr.

B. Hymenium stratose.

2276. H. cinnamomea (Pers.) Bres. (= Corticium cinnamomeum
(Pers.) Fr.)

Cinnamomea, cinnamon colour.

R. 3–7 cm., cinnamon brown, or auburn, resupinate, widely effused,
adnate, velvety; margin paler, floccose. Hymenium cinnamon-brown,
drying antique brown to "Brussels-brown," setulose, stratose. Flesh con-
colorous, thick, loose, "stratose, ranging up to 6 strata, each com-
pounded of a setigerous layer 30–45μ broad, and of a hyphal layer of
equal or greater breadth, with hyphae coloured like the fructifica-
tion, loosely interwoven, 3μ in diam." Burt. Spores white, cylind-
ric-ellipsoid, curved, 5–6 × 2–2.5μ. Setae mahogany colour, apex
paler, tapering upwards into an acute point, 70–100 × 5–6μ. "Basidia
clavate, 10–12 × 3–5μ, with 4-sterigmata, intermingled with long,
cylindrical, blunt, paraphyses, brown below, more or less hyaline
above, 4μ in diam." Wakef. Bark, decaying wood and fallen branches

Cladoderris Pers.

(κλάδος, a branch; δέρπις, a leathern covering.)

Receptacle coriaceous, pileate, sessile, or produced behind into a
stem-like base. Hymenium inferior, with fan-like folds, or radiating,
woody, branched ribs, or veins. Spores white, elliptic oblong, smooth.
Cystidia present. Growing on wood.

Minima, least.


2. Hymenium seated directly on the mycelium.

**Epithele** Pat.

(ἐπίθελον, upon; θηλί, a nipple.)

Receptacle waxy, or floccose, resupinate, effused. Hymenium smooth, interspersed with scattered, sterile protuberances, caused by the breaking through of fasciculate mycelial hyphae. Spores white, fusiform, smooth; basidia with 2–4-sterigmata. Cystidia none. Growing on dead leaves, herbaceous stems, and wood.


Typha, the Mace-reed.

R. 1–4 cm., white, becoming yellowish, or dull buff, longitudinally effused, originating as byssoid spots, then confluent, minutely tomentose under a lens. Hymenium concolorous, smooth, then papillate, and often cracked. Flesh whitish, waxy, floccose, very thin. Spores white, fusiform, 20–25 × 7–8 μ, 2–3-guttulate. Dead dry leaves of Typha, and Carex. Oct.—Nov. Uncommon. (v.v.)

**Aleurodiscus** Rabenh.

(ἄλευρος, flour, starch; δίσκος, a round plate.)

Receptacle waxy floccose, or crustaceous, becoming coriaceous; resupinate, saucer-shaped with a free margin, or effused and adnate. Hymenium smooth, pulverulent, often containing much granular, or crystalline matter. Spores white, large, ovoid, elliptical, or sub-globose; smooth, or echinulate; basidia large with 4 stout sterigmata, intermixed with torulose, moniliform, or racemose paraphyses, or sterile basidia. Growing on wood.

I. Discoid, cup-shaped, pezizaeform.

*Spores smooth.

2279. **A. disciformis** (DC.) Pat. (= **Stereum disciforme** (DC.) Fr.)

δίσκος, a quoit; forma, shape.

R. 1–2·5 cm., white, or tan colour, resupinate, disciform; margin white, free, narrow. Hymenium white, becoming greyish, rigid, uneven, pulverulent. Flesh concolorous, subcoriaceous, hard, firm. Spores white, “ovoid, or subglobose, 16–22 × 12–16 μ, membrane coloured

**Spores rough.**

2280. A. amorphus (Pers.) Rabenh. (= Corticium amorphum (Pers.) Fr.)

R. 3–15 mm., white, becoming pallid, cup-shaped, then flattened, scattered, or confluent, externally white tomentose, and hairs incrusted with calcium oxalate; margin free, incurved. Hymenium orange, or buff pink, becoming paler, especially at the margin and sublivaceous when dried, even, continuous, pulverulent. Flesh pale, subcoriaceous, pliant, dense. Spores white, minutely echinulate, spines hyaline, sub-globose, 20–30 x 17–25 µ, the membrane colours blue with iodine; "basidia 100–150 x 15–24 µ, with 2–4 subulate, curved sterigmata, 20–30 x 4–5 µ. Paraphyses or sterile basidia torulose, 4–10 µ in diam. Hyphae rather thick walled, 3–6 µ in diam., basal hyphae slightly coloured, often incrusted with calcium oxalate" Bourd. & Galz. Silver fir, and larch. Aug.—Jan. Uncommon. (v.v.)

II. Resupinate, effused, margin never reflexed.

2281. A. acerinus (Pers.) von Hoehn. & Litsch. (= Stereum acerinum (Pers.) Fr.) Acerinus, pertaining to maples.

R. 3–10 mm., white, irregularly effused, scattered, resupinate, crustaceous, adnate; margin abrupt. Hymenium white, mealy, then smooth, and finally cracked. Flesh white, chalky, containing numerous crystals of calcium oxalate, compact, thin. Spores white, "ovoid, elliptical, 10–15 x 6–11 µ, scarcely coloured by iodine; basidia 36–50–60 x 6–9–14 µ, with 2–4-sterigmata, 6–7 µ long. Paraphyses or sterile basidia torulose, 4–10 µ in diam. Hyphae rather thick walled, 3–6 µ in diam., basal hyphae slightly coloured, often incrusted with calcium oxalate" Bourd. & Galz. Maple, and sycamore. Dec. Rare.

Corticium (Pers.).

(Cortex, bark.)

Receptacle waxy, crustaceous, or floccose, resupinate, effused. Hymenium smooth, or tubercular, waxy, continuous, often cracked. Spores white, very rarely coloured, ovate, elliptical, globose, oboval, pip-shaped, pyriform, boat-shaped, almond-shaped, subtriangular, cylindrical, cylindric ellipsoid, oblong, or sausage-shaped; smooth, rarely granular; basidia with 2–4–6–8-sterigmata, forming a homogeneous hymenium, sometimes accompanied with sterile basidia (cystidioles). Cystidia none. Growing on wood, more rarely on leaves, or on the ground.
1. Hymenium homogeneous, regular, consisting only of basidia. Hyphae distinct, or indistinct, with or without clamp connections at the septa, but never having abnormally large clamp connections, or becoming tuberosely swollen at the septa.


R. 2-15 cm., beautiful azure blue, somewhat round, broadly effused, adnate, at first tomentose; margin whitish, or azure blue, byssoid. Hymenium concolorous, paler when dry, papillose. Flesh bluish under the hymenium, waxy, floccose, loose. Spores white, ovate-elliptical, 7-9 x 4-6 μ; "basidia 30-48 x 6-7.5 μ, with 2-4-sterigmata. Hyphae thin-, or slightly thick-walled, 3-4.5 μ in diam., with clamp connections, loose, blue in the subhymenial layer" Bourd. & Galz. Dead wood, branches, sticks, and twigs, in woods, and hedgerows. Jan.—Dec. Common. (v.v.)


R. 2-20 cm., white, cream colour, flesh colour, or tan, effused, entirely adnate, or forming distinct, reflexed, strigose pileoli; margin white, silky, radiating, or becoming obtuse, reflexed. Hymenium cream colour, then pinkish ochre, or livid to brownish when old; pale buff with a pinkish tinge or lilac tinge when dry, smooth, waxy, more or less undulate, sometimes coarsely tuberculate, and rarely Radulum-like, usually much cracked in an areolate manner when dry. Flesh pale, floccose, loose. Spores white, pyriform, or pip-shaped, usually slightly incurved at the base, 9-12 x 6-7.5 μ, often slightly punctate; "basidia 25-40-90 x 5-5-9 μ, with 2-4-sterigmata. Hyphae thin walled, hyaline, 2-3-6 μ in diam., with clamp connections, parallel at the base, then ascending in a loose trama." Bourd. & Galz. Trunks, trunks, and fallen branches. Jan.—Dec. Common. (v.v.)

2284. C. roseum (Pers.) Fr. (= Corticium roseolum Mass. sec. Wakef. in litt.) Roseum, rose-coloured.

R. 2-12 cm., rose colour, effused, adnate; margin white, byssoid, fringed. Hymenium rose pink, becoming pallid, or pale ochraceous with a pink tinge when dry, pruinose, at length rosily cracked. Flesh pale, floccose, loose. Spores "white, sometimes tinged rosy, oboval, 8-12-16-5 x 6-9-10 μ; basidia at first bladder-shaped, sunk in the simple, or branched paraphysoid hyphae, then normal, 28-45 x 6-10 μ, with 2-4 curved sterigmata, 6-8 μ long. Hyphae with

R. B. B. 43
slightly thickened walls, 2–4.5 μ in diam.” Bourd. & Galz. Dead wood, and fallen branches. Oct.—April. Not uncommon. (v.v.)


R. 2–5 cm., white, then cream colour, or pale alutaceous, effused, separable, smooth, or slightly rough; margin pubescent, floccose, rarely fibrillose. Hymenium **concolorous**, smooth, or rough, pulvulent under a lens. Flesh membranaceous, fairly thick, floccose. Spores white, broadly elliptical, or ovate, somewhat irregular, 9–12 × 6–8 μ, 1-guttulate; basidia cylindrical, 21–34–45 × 4–6–9 μ, with 2–4-sterigmata, 6–8 μ long. Hyphae rather thick walled, 4–6 μ in diam., branched, frequently septate, with clamp connections. Trunks of living pollarded willows. Oct.—Jan. Uncommon. (v.v.)

2286. **C. vellereum** Ellis & Cragin. (= **Corticium chlamydosporium** Burt; **Corticium Bresadolae** Bourd.)  

R. 2–10 cm., white, cream, or tinged buff pink, widely effused, adnate; margin white, silky, radiating. Hymenium waxy-white, cream, or tinged buff pink, not changing when dried, smooth, pulvulent. Flesh **concolorous**, or pale, waxy, floccose, loose, thick. Spores white, subglobose, or broadly elliptical, apiculate at the base, 5–6 × 5 μ, or 5–9 × 5–7.5 μ, 1-guttulate; basidia 18–30–54 × 5–7.5 μ, with 2–4 curved sterigmata, 3–5 μ long. Basal hyphae very loosely interwoven, sparingly branched, thin walled, 2–7 μ in diam., with clamp connections. On bark, and felled elm trunks. Nov.—Feb. Not uncommon. (v.v.)

2. Receptacle fleshy-membranaceous, then rigid and fragile, thick, often reflexed, and Stereum-like. Hymenium tuberculose and radically crested.

2287. **C. subcostatum** (Karst.) Bourd. & Galz. (= **Stereum subcostatum** Karst.; **Radulum pendulum** Fr. sec. Bourd. & Galz.) Quél. Ass. Fr. (1882), t. xi, fig. 16, as **Stereum album** Quél.

Sub, somewhat; **costatum**, ribbed.

R. 3–12 cm., cream, or cream chamois colour, resupinate, or reflected, villose, or strigose on the outside; margin torn, fibrillose, or ciliate. Hymenium concolorous, becoming chamois, pinkish, or reddish when dried, tubercular in the centre, radially rugose, and wrinkled towards the margin, finally deeply cracked. Flesh **white**, fleshy membranaceous, then firm, fibrillose, brittle. Spores white, “oblong subcylindric, slightly depressed on the side, 5–6–8.5 × 2.75–4 μ, contents homogeneous; basidia 12–25–45 × 3–4–7 μ, with 2–4 straight sterigmata, 4–4.5 μ long. Hyphae thin walled, 2–4 μ in diam., with clamp connections” Bourd. & Galz. Dead branches of alder, birch, and pine. Oct.—Jan. Uncommon. (v.v.)

2288. **C. lacteum** Fr. *Lacteum, milk white.*

R. 5–15 cm., milk white, effused, pruinose, laxly fibrillosé beneath; margin fibrillosé. Hymenium deeper coloured, waxy, often rugulose, or reticulately veined like a *Merulius* when moist. Flesh whitish, membranaceous, waxy, thin. Spores white, "oboval, 4·5–7 × 2·5–6 μ, 1–2-guttulate, or contents granular; basidia 20–36 × 4–6 μ, with 2–4 straight sterigmata, 5–6 μ long. Hyphae thin walled, subhymenial, 2·5–3 μ in diam. and the basal 5–8 μ in diam., with rather infrequent clamp connections" Bourd. & Galz. Trunks and fallen branches. Oct.—Feb. Uncommon. (v.v.)

2289. **C. Wakefieldiae** Bres.

Miss E. M. Wakefield, the well-known Kew mycologist.

R. 2–6 cm., whitish, then isabelline, broadly effused; margin pallid, pruinose, subfimbriate. Hymenium concolorous, smooth, at length widely cracked. Flesh membranaceous, soft. Mycelium white, pruinose. Spores hyaline, 6–8 × 5–6 μ; basidia collapsed forming an indistinct layer. Hyphae very distinct, 4–7–9 μ in diam., septate with clamp connections. Ground and wood. Rare.


4. Receptacle pelliculose, or arachnoid, slightly adnate to the substratum. Trama loose, consisting of thin walled, distinct hyphae, 2–6 μ in diam. Basidia with 2–4-sterigmata.

2291. **C. Galzinii** Bourd. *A. Galzin.*

R. 3–10 cm., whitish, with a more or less glaucescent, or yellowish green tint, effused, forming a delicate pellicle, loosely adherent to the substratum, smooth, or porous; margin byssoid. Hymenium concolorous, loose, and pulverulent under a lens. Flesh whitish, membranaceous, arachnoid. Spores white, obovate, or narrowly cylindric, pointed at the base, 2–4 × 1·5–1·5 μ; basidia borne in dense tufts, "candelabra" fashion, 7–9–14 × 3–4 μ, with 2–4 straight sterigmata, 3–4 μ long. Basal hyphae thin walled, 2–5 μ in diam., loosely interwoven, septate,

2292. **C. arachnoideum** Berk. (= *Corticium centrifugum* (Lév.) Bres.) 

R. 2–18 cm., white, greenish white, or greyish, effused, subadnate, arachnoid, more rarely continuous; margin delicately byssoid or arachnoid. Hymenium *concolorous*, loose, rarely continuous. Flesh *concolorous*, floccose, very thin. Spores white, oblong, obliquely apiculate at the base, $5–7 \times 3–4 \mu$, “often cohering in 2–4; basidia clavate, 9–15–27 \times 3–4–7 \mu$, with 2–4-sterigmata, 4–6 \mu long. Basal hyphae regular, thin- or slightly thick-walled, clamp connections sparse, 3–8 \mu in diam.; subhymenial hyphae 2–3·5 \mu in diam.” Bourd. & Galz. Stumps, logs, and fallen branches. Oct.—March. Not uncommon. (v.v.)

2293. **C. coprophilum** Wakef.


2294. **C. microsporum** (Karst.) Bourd. & Galz.

R. 3–6 cm., milk white, or cream colour, irregularly effused, pelliclose; margin white, pruinose, or fibrilllose. Hymenium *cream*, with sometimes a faint pinkish tinge, often imperfect, or cracked. Flesh *white*, delicate, very thin, fragile. Spores white, subglobose, 2 \mu, or $3 \times 2 \mu$, often with a small oil drop; basidia 12–15(–18) \times 3–4(–5) \mu, with 2–4 straight sterigmata, 3–4 \mu long. Basal hyphae 3–5 \mu, with clamp connections, sometimes incrusted with crystals. Stumps and branches. Sept.—Oct. Uncommon.

2295. **C. croceum** (Kunze) Bres. (= *Sporotrichum croceum* Kunze & Schmidt; *Corticium sulphureum* Fr.)

R. 1–4 cm., white, becoming yellowish, effused, arachnoid, then submembranaceous, separable when fresh, adnate when dry; margin *white* or lemon yellow, arachnoid, *running out into the bright yellow or saffron coloured*, branched strands of the rhizomorphoid mycelium. Hymenium *concolorous*, pruinose or mealy. Flesh *concolorous*, arachnoid, thin. Spores white, “subglobose or ovoid, 2·75–3·5 \times 2·5–3·5 \mu$; basidia 12–17 \times 3–4·5 \mu. Hyphae thin walled, 2–3 \mu in diam., often verrucose or rough with small crystals” Bourd. & Galz. Fallen sticks, etc. Oct.—Jan. “Not uncommon” Berk.

_Ater_, black; _virens_, green.

R. 2–6 cm., _blue, greenish blue, or dark greenish_, irregularly effused, floccoso-fibrillose, or arachnoid, seated on a _concolorous_, profuse, mycelium. _Hymenium paler, or tinged with yellow_, submembranaceous. Flesh _concolorous_, arachnoid, thin. Spores _greenish, or bluish_, subglobose, 3-5–4 μ in diam.; _basidia clavate, 18–20 × 5–6 μ_, with 2–4-sterigmata, 3–4 μ long. _Hyphae greenish blue_, 2–4 μ in diam., thin walled, without clamp connections. Bark and fallen branches. Sept.—Dec. Uncommon. (v.v.)

5. Receptacle dry, subpelliculose, crustaceous, or pruinose, adnate. Basidia truncate at the apex, with 4–6, or 6–8-sterigmata.


_Niveus_, snow white; _cremeum_, cream colour.

R. 2–5 cm., _greyish white to cream colour_, effused, indeterminate, closely adnate, dry. _Hymenium concolorous_, waxy, slightly granular in places, _very minutely and abundantly cracked when dry_, giving a characteristic appearance under a lens, the cracks being bridged by numerous, fine, byssoid strands of the subiculum. Flesh _concolorous_, byssoid, very thin. Spores white, cylindric-ellipsoid, or slightly incurved and boat-shaped, 6–7 × 3–4 μ, occasional spores up to 10 × 5 μ; _basidia 12–18(-30) × 4–5–7 μ_, truncate above, with 4–6–8 straight sterigmata, 4–5 μ long. Basal _hyphae thin walled, 4–5 μ in diam., indistinct, branched, septe, with clamp connections_. Rotten wood. Nov.—Jan. Uncommon. (v.v.)


_Sambuci_, of elder.

R. 2–18 cm., _pure snow white, or chalk white_, becoming _yellowish when dried_, effused, subinnate, _incrusting_, _chalky_, collapsing and more or less powdery when dry. _Hymenium concolorous_, granular, pruinose. Flesh _white_, crustaceous, very thin. Spores white, broadly elliptical, appearing almost globose under a low magnification, with a small lateral apiculus, 3–6 × 3–5 μ, often 1-guttulate; _basidia 15–22 × 3-5–5-5 μ_, accompanied by fusoid sterile _basidia_ (cystidioles) often expanded into a knob at the apex, and incrusted with tiny crystals. _Hyphae thin walled, 2–3-5(-4-5) μ in diam., loosely interwoven, with clamp connections, and sometimes with scattered minute crystals adhering to the outer walls_. Stumps, rotten branches, logs and old herbaceous stems. Jan.—Dec. Common. (v.v.)

R. 2-5 cm., chalk white, or becoming slightly tinged with cream colour, irregularly effused, chalky, pulverulent; margin arachnoid, fugacious. Hymenium concolorous, granular, or mealy under a lens. Flesh white, crustaceous, thin, loose, fragile. Spores white, subtriangular, angles rounded viewed laterally, in profile more or less elliptical, flattened on the inner side, and swollen towards the base on the outer side, 4-5-6 μ; basidia 16-25 × 4-6 μ, with 2-4 straight sterigmata, 2-3-5 μ long. Basal hyphae thin walled, 2-5-4 μ in diam., with clamp connections, and sometimes slightly incrusted with minute crystals. Pine bark and on the ground. Sept.—Nov. Rare.


*Hyphae without clamp connections.


R. 5-15 cm., pale olive buff to cream colour, effused, arachnoid, thin, perforate membrane more or less separable. Hymenium concolorous, smooth. Flesh brownish, or hyaline, arachnoid, filamentous, loose. Spores white, "elliptic oblong, or navicular, flattened on one side, 8-14 × 4-6 μ; basidia not forming a compact hymenium, 10-20 × 7-5-11 μ, with 4-6-sterigmata, 6-10 μ long, more or less swollen towards the basidium. Basal hyphae slightly brownish, hyaline elsewhere, 6-10 μ in diam., branches smaller, not incrusted, septate, without clamp connections" Burt. Bark, wood, herbaceous plants, and bare soil. Jan.—Dec. Not uncommon. (v.v.)


R. 3-10 cm., whitish to dirty buff, irregularly effused, thin, pulverulent, with the habit of C. vagum. Hymenium concolorous, loose. Flesh hyaline, or yellowish, filamentous, loose. Spores yellowish, somewhat lemon-shaped, apiculate at either end, flattened on the inner side, 15-17 × 7-9 μ (mostly 15 × 8 μ). Basidia oblong, or clavate, 20-30 × 12-13 μ, with 2-4 curved sterigmata, 8 μ long. Basal hyphae hyaline, or yellowish, septate, without clamp connections, branched at right angles, loosely interwoven. Rotten wood. Feb. Uncommon. (v.v.)
**Hyphae with stout clamp connections at the septa.

2302. C. subcoronatum von Hoehn. & Litsch.

Sub, somewhat; coronatum, crowned.

R. 3–10 cm., white, then cream colour, ochraceous, or pale greenish, tinged with brown when bruised, effused, arachnoid, or slightly membranaceous, loosely adnate; margin similar, or minutely reticulated. Hymenium concolorous, loose. Flesh pale, or yellowish, arachnoid, filamentous, loose. Spores white, "almond-shaped, or subnavicular, rarely fusiform, 5–9 × 2.5–4.5 μ; basidia 12–18–30 × 5–9 μ, with 4–6-sterigmata, 3–5 μ long. Hyphae thin walled, 4–14 μ in diam., with numerous, stout clamp connections" Bourd. & Galz. Rotten wood, and fallen branches. Sept.—March. Not uncommon. (v.v.)


2303. C. aurora Berk.

Aurora, the dawn.

R. 3–5 cm., rose colour, becoming pallid, effused, adnate, indeterminate, waxy, then subpruinose. Hymenium concolorous, waxy, smooth. Flesh spongy, very thin. Spores white, "subclavate, attenuated at the base, generally slightly curved, 12–16 × 3–4.5 μ, 2–3-guttulate; basidia 24–36 × 12–16 μ, with 4 straight sterigmata, 4 μ long" Bourd. & Galz. Dead leaves of Carex, and stems of Juncus. Feb. Rare.


A. A. Pearson, the well-known British mycologist.

R. 2–10 cm., greyish, adnate, hiding in the crevices of rotten wood. Hymenium concolorous, soon furfuraceous and granular, always beautifully reticulated with white crustaceous lines when dry, consisting of basidia and equally long sterile hyphae. Flesh very thin, 20–50 μ thick. Spores hyaline, narrowly clavate, laterally depressed, or subarcuate, 4.5–6 × 1.5–2(–2.5) μ; basidia obovate, 9–15 × 5–6 μ, with 2–4-sterigmata, up to 6 μ long and at length curved. Hyphae hyaline, closely interwoven, rarely distinct, 2–2.5 μ in diam., thin walled, clamp connections sparse. Cracks of a rotten pine trunk. Sept.—Oct. Rare.


2305. C. confluentus Fr. (?= Radulum molare Fr. sec. Bourd. & Galz.)

Confluentus, running together.

R. 1–8 cm., whitish, effused, indeterminate, agglutinated; margin white, mealy. Hymenium hyaline, white when dry, smooth. Flesh whitish, submembranaceous, thin, loose. Spores white, broadly elliptical, or subglobose, 8–10 × 8–9 μ, with a large central gutta, or contents granular or cloudy; "basidia 20–50–80 × 6–12 μ, with 2–4-
sterigmata, 5–9 µ long. Hyphae thin walled, 2–3.5 µ in diam., with scattered clamp connections; superior hyphae dense, flexuose, coherent and collapsing” Bourd. & Galz. Stumps, and fallen branches. Jan.—Dec. Common. (v.v.)

2306. **C. lividum** (Pers.) Fr. (= *Grandinia ocellata* Fr. sec. Bres.)

*Lividum*, black and blue.

R. 2–13 cm., bluish grey, hyaline grey, then tinged reddish, or bluish, widely effused, agglutinated; margin similar, or white fimbriate and fugacious. Hymenium *concolorous*, subviscid when moist, pruinose, smooth, tubercular, or radiately wrinkled. Flesh paler, subgelatinous, then horny, dense. Spores white, oblong ellipsoidal, 3.5–5 × 2–3 µ, or “elongate oblong, depressed on one side, 4–5 × 1.5–1.75 µ; basidia 15–25–34 × 3–4.5 µ, with 2–4 straight sterigmata, 3 µ long. Basal hyphae thick walled, gelatinous, 3–5 µ in diam., clamp connections rare; superior hyphae 2–3 µ in diam., rarely distinct” Bourd. & Galz. Dead birch, and elm. Oct.—June. Uncommon. (v.v.)

2307. **C. seriale** Fr.

*Seriale*, in series.

R. 5–10 cm., pale tan, isabelline, or greenish, becoming ochraceous, tawny, brick red, chocolate, greenish cinereous, or bluish vinous, more rarely livid brown when dry, longitudinally effused, agglutinated, often in series, waxy, rarely shining when dry; margin white, narrow, pubescent. Hymenium *concolorous*, smooth, or papillose, pruinose, very much cracked when dry. Flesh waxy, rigid, dense. Spores white, “narrowly oblong, depressed on the side, 4–7 × 2.5–3 µ; basidia 15–21 × 3–4.5 µ, without cystidioles, or 12–27–40 × 3–4.5 µ, with 2–4 straight sterigmata, 5–7 µ long, and accompanied with numerous fusiform, or subulate cystidioles, 3–4.5 µ in diam., and projecting 10–35 µ. Hyphae more or less agglutinated, with walls thin or slightly thickened, 2–5 µ in diam., with clamp connections” Bourd. & Galz. Pine wood. Rare.


*οξρός*, pale.

R. 3–10 cm., pale, or cream colour, then ochraceous, broadly effused, very adnate, waxy; margin white, pruinose, soon similar. Hymenium *concolorous*, papillose or tubercular, very much cracked when dry. Flesh white, waxy, then firm, agglutinated, thick. Spores white, elliptical, apiculate at the base, 5–6 × 3–4 µ; “basidia 30–45 × 4–7 µ, with 2–4 straight sterigmata, 3–4 µ long. Hyphae with thin or slightly thickened walls, 3–3.5 µ in diam., agglutinated, distinct only at the base” Bourd. & Galz. Conifer trunks, and logs. Sept.—Oct. Uncommon. (v.v.)
II. Hymenium homogeneous, regular, consisting of basidia only. Hyphae occasionally septate, with either normal clamp connections, or with clamp connections two to three times larger than the normal, and tuberosely swollen at the septa. Growing in humus and on very decayed wood and rubbish.


Confine, nearly related.

R. 3-10 cm., snow white, becoming yellowish, superficially like *Grandinia farinacea*, widely effused, arachnoid; margin white, byssoid, somewhat radiating, gradually attenuated. Hymenium white, becoming cream colour, or ochraceous, granular, like a *Grandinia*, granules waxy, crowded when fresh, shrinking away from one another, and revealing the white subiculum when dry. Flesh white, fibrillose, loose. Spores white, subglobe, pointed at the base, 3-4 x 2-3 µ, usually 1-guttulate; basidium 9-15 x 3-5 µ, with 2-4 straight, or slightly curved sterigmata, 2-4 µ long. Basal hyphae 2-4 µ in diam., with clamp connections, and often swollen at the septa. Mycelium often forming fine branching cord-like strands beneath the bark. Rotten wood, bark, and twigs. Jan.—Dec. Not uncommon. (v.v.)

III. Hymenium heterogeneous, irregular, consisting of basidia origina-
ting at the base of the trama, and surrounded by sterile, undiffer-
etiated, mycelial branches.


Comedens, eating away.

R. 1-13 cm., flesh colour, or dingy lilac, becoming pale, erumpent, effused, innate, growing under the bark, inseparable, slightly viscid when moist. Hymenium concolorous, smooth, even. Flesh paler, subgelatinous, then rigid, firm. Spores white, sausage-shaped, curved, 15-22 x 6-7 µ, 2-4-guttulate. "Basidia scattered, very long, 9-12 µ in diam., with 2-4 curved sterigmata, 8-10 x 3 µ" Bourd. & Galz. Dead branches, and felled trunks, especially oak. Jan.—Dec. Common. (v.v.)

IV. Doubtful British species insufficiently described.

2311. **C. nigrescens** (Schrad.) Fr. (? = *Radulum aterrimum* Fr. sec. Quél.; *Corticium comedens* (Nees) Fr. discoloured sec. Wakef. in litt.)

Nigrescens, becoming black.

R. 2-7.5 cm., yellowish, erumpent, effused, interrupted, agglutinated, inseparable; margin indeterminate. Hymenium yellowish, becoming blackish, spuriously papillose, waxy, pruinose. Flesh waxy, very thin. Spores white, "cylindric-oblong, obtuse at both ends, curved, 18-20 x 5-6 µ" Massee. Dead oak and beech branches, growing beneath the bark. Rare.
2312. C. populinum (Sommerf.) Fr.

_Populinum_, pertaining to poplars.


_Foetidum_, stinking.


2314. C. flaveolum Massee.

_Flaveolum_, yellowish.

R. 5–7.5 cm., _clear pale primrose yellow_, effused, loosely attached to the matrix; margin determinate. Hymenium _concolorous_, smooth. Flesh membranaceous, thin. Spores white, cylindric-ellipsoid, obtuse at both ends, 7 × 5µ. Trunk of tree fern in a conservatory. Rare.

2315. C. anthochroum (Pers.) Fr. (= _Hypochmus anthochrous_ (Pers.) Quél.)

_ἄνθος_, a flower; _χρως_, colour.


2316. C. molle Fr.

_Molle_, soft.

R. 2–9 cm., _pale, or flesh colour, more or less spotted with red_, effused, subrotund, easily separable, villose underneath; margin naked. Hymenium _concolorous_, waxy, _papillose_, cracked when dry. Flesh membranaceous, floccose, loose, soft, thick. Spores white, “cylindric ellipsoid, obtuse at both ends, 7 × 5µ” Massee. Pine trunks and bark. Rare.

2317. C. strigosum (Pers.) W. G. Sm. var. _filamentosum_ W. G. Sm. (= _Peniophora byssoidae_ (Pers.) von Hoehn. & Litsch. sec. Wakef. in litt.)

_Strigosum_, lean.

R. _web-like, filamentous, string-like, dull yellowish_, externally pul-

_C. echinosporum_ Ellis = _Hypochmus echinosporus_ (Ellis) Burt.
_C. sulphureum_ (Pers.) Bres. = _Hypochmus fumosus_ Fr.
_C. amorphum_ (Pers.) Fr. = _Aleurodiscus amorphus_ (Pers.) Rabenh.
_C. evolvens_ Fr. = _Corticium laeve_ (Pers.) Quél.
_C. Typhae_ (Pers.) Fr. = _Epithele Typhae_ (Pers.) Pat.
C. fastidiosum (Fr.) Bourd. & Galz. = Cristella cristata (Pers.) Pat.
C. salicinum Fr. = Cytidia rutilans (Pers.) Quél.
C. citrinum (Pers.) Fr. = Corticium (Gloeocystidium) radiosum (Fr.) Rea.
C. flocculentum Fr. = Cytidia flocculenta (Fr.) von Hoehn. & Litsch.
C. scutellare Berk. & Curt. “The British specimen so named by Berk. is different from the type” Wakef. in litt.
C. roseolum Massee = Corticium roseum (Pers.) Fr. sec. Wakef. in litt.
C. punctulatum Cke. = Corticium (Gloeocystidium) albostramineum (Bres.) Bourd. & Galz.
C. subalutaceum Karst. = Peniophora subalutacea (Karst.) von Hoehn. & Litsch.
C. (Coniophora) byssoidaeum (Pers.) Fr. = Peniophora byssoidae (Pers.) von Hoehn. & Litsch.
C. sanguineum Fr. = Peniophora sanguinea (Fr.) Bres.
C. velutinum (DC.) Fr. = Peniophora velutina (DC.) Cke.
C. puberum Fr. = Peniophora pubera (Fr.) Sacc.
C. Rouméguri Bres. = Peniophora Molleriana (Bres.) Sacc.
C. giganteum Fr. = Peniophora gigantea (Fr.) Massee.
C. incarnatum (Pers.) Fr. = Peniophora incarnata (Pers.) Cke.
C. nudum Fr. = Peniophora nuda (Fr.) Bres.
C. maculaeforme Fr. = Peniophora nuda (Fr.) Bres. var. maculaeforme (Fr.) von Hoehn. & Litsch.
C. violaceo-lividum (Sommerf.) Fr. = Peniophora violaceo-livida (Sommerf.) Bres. ex Bourd. & Galz.
C. Lycii (Pers.) Cke. = Peniophora caesia (Bres.) Bourd. & Galz.
C. cinereum Fr. = Peniophora cinerea (Fr.) Cke.
C. laevigatum Fr. = Peniophora laevigata (Fr.) Massee.
C. quercinum (Pers.) Fr. = Peniophora quercina (Pers.) Cke.
C. limitatum Fr. = Peniophora limitata (Fr.) Cke.
C. Carlylei Massee = ? C. comedens (Nees) Fr. sec. Wakef. in litt.

Subgen. Gloeocystidium Karst.

(γάιοιος, sticky; κυτητις, bladder.)

Differs from Corticium in possessing gloeocystidia, generally immersed in the tissue, which resemble cystidia, but their walls are never thickened, nor incrusted with crystalline deposits.
*Spores turning blue with iodine.

2318. **C.** (Gloe.) *porosum* Berk. & Curt. (= *Gloeocystidium stramineum* Bres.)

R. 1–8 cm., white, then cream colour, or straw colour, effused, adnate; margin white, narrow, pruinose, or reticulately porous. Hymenium concolorous, smooth. Flesh concolorous, subgelatinous, firm, dense. Spores white, elliptical, 4–7 × 2–4 μ, generally 2-guttulate, the membrane turning deep violet blue with iodine; basidia 12–18–28 × 3–6 μ, with 2–4-sterigmata, 3–4 μ long. Gloeocystidia abundant, tapering to an obtuse, narrow apex, 15–150 × 6–14 μ, sometimes bifurcate, contents granular, yellowish, then resinous. Hyphae coherent, 1–5–3 μ in diam. Fallen branches, and decorticated wood. Jan.—Dec. Not uncommon. *(v.v.)*

**Spores not turning blue with iodine.


R. 3–80 mm., flesh colour, or lilac, erumpent in small cushions, then confluent, and effused, very adnate, pruinose; margin white, or flesh colour, narrow, pruinose. Hymenium concolorous, often reddish when dried, pruinose, soft. Flesh pale, subgrumous, waxy, then hard, and firm. Spores white, cylindrical, slightly curved, with a lateral apicus, 8–13 × 3–4 μ; basidia 45–55 × 6–8 μ. Gloeocystidia included, forming balloon-like, pear-shaped, or subglobose vesicular swellings, 20–30 μ in diam. Basal hyphae hyaline, rather thick walled, 3–6 μ in diam., with clamp connections. Dead branches, especially poplar. Jan.—Dec. Not uncommon. *(v.v.)*

2320. **C.** (Gloe.) *roseo-cremeum* Bres.

*Roseus*, rose colour; *cremeum*, cream colour.

R. 3–5 cm., pallid pink, or dull reddish when bruised, effused, waxy; margin white, pruinose, or pubescent. Hymenium concolorous, smooth, or minutely porous, minutely atomate under a lens. Flesh pale, waxy membranaceous, soft. Spores white, cylindrical, straight, the inner side flattened, 8–11 × 3–4 μ; basidia 22–45 × 4–7 μ, with 2–4-sterigmata, 4–7 μ long. Paraphyses long, slender, blunt at the apex, 2–3 μ in diam. Gloeocystidia, when present, completely immersed in the tissue, cylindrical, wavy, 30–90 × 5–9 μ, contents pale yellowish. Basal hyphae thin walled, 2–5–7 μ in diam., with occasional clamp connections. Rotten wood. Oct.—Dec. Uncommon. *(v.v.)*

2321. **C.** (Gloe.) *praetermissum* (Karst.) Bres. (= *Peniophora praetermissa* Karst.; *Corticium tenue* Pat.) *Praetermissum*, passed over.

R. 1–6 cm., pure white, then yellowish, or greenish, widely effused, adnate, smooth; margin very thin, indeterminate, somewhat porous
under a lens. Hymenium concolorous, becoming cream colour with age, or when dried. Flesh pale, waxy, soft, loose. Spores white, elliptical to cylindric ellipsoid, slightly curved, or flattened on the one side, 7–12 × 3.5–6.5 μ; basidia 18–38 × 6–11 μ, with 2–4 rather straight sterigmata, 4.5 × 1 μ. Gloeocystidia cylindricl, subfusiform, or ventricose, 21–150 × 4.5–21 μ, contents hyaline, or pale yellowish. Basal hyphae loosely interwoven, much branched, 2.5–7 μ in diam., with clamp connections. Bark, and fallen branches. Jan.—Dec. Common. (v.v.)


Lactescens, turning to milk.

R. 1–20 cm., whitish, or flesh colour, widely effused, agglutinated, adnate; margin white, narrow, byssoid, pubescent. Hymenium white, then cream, tan, flesh colour, or greenish, and finally brownish pink, smooth, pruinose, cracked when dry. Flesh pale, waxy, fibrilllose, rather thick, giving out a watery, milk white juice when wounded. Spores white, broadly elliptical, obtuse at both ends, with a lateral apiculus, 5–9 × 4–6 μ, contents densely granular; basidia 20–40 × 5–8 μ. Gloeocystidia cylindrical, sometimes swollen at the base, 80–600 × 4–9 μ, contents oily, and granular. Basal hyphae coherent, 1 μ in diam., other hyphae 1–3 μ in diam. Smell like that of Lactarius quietus. Dead oak, ash, and willow trunks, and branches. Sept.—Feb. Not uncommon. (v.v.)

2323. C. (Gloeo.) radiosum (Fr.) Rea. (= Gloeocystidium alutaceum (Schrad.) Bourd. & Galz.; Corticium citrinum (Pers.) Fr. sec. Bres.)

Radiosum, radiant.

R. 3–10 cm., milk white, becoming yellowish, widely effused, closely adnate, waxy; margin white, broad, fibrilllose, silky, radiating. Hymenium milk white, or bright yellow when fresh, becoming cream, tan, or dingy ochraceous, very smooth. Flesh white, waxy, fibrilllose, thin. Spores white, "subglobose, shortly apiculate at the base, 4–7 × 4–6 μ, sometimes rough; basidia 35–60 × 5–9 μ, with 2–4 straight sterigmata, 4–6 μ long. Gloeocystidia very thin-walled and hyaline, oboval, fusiform, or prolonged into a neck, often constricted in the middle, 60–150 × 8–27 μ, contents hyaline, not granular. Hyphae thin walled, 2–3 μ in diam., soon collapsing" Bourd. & Galz. Rotten wood. Oct.—Feb. Uncommon.


Albus, white; stramineum, straw colour.

R. 3–6 cm., whitish, then deep cream or pale straw colour, widely effused, separable; margin similar, indeterminate, subreticular, or


R. 3–5 cm., pure white, then cream, effused, easily separable as a delicate pellicle; margin indeterminate, gradually thinning out to a cobweb-like film. Hymenium concolorous, pulverulent. Flesh very thin, fragile. Spores white, narrowly elliptical, with an oblique basal apiculus, 4:5–6–8 × 2–3–5 μ; basidia cylindric-clavate, wavy, 3:5–4 μ in diam., when mature elongated and projecting from the hymenium, apex truncate, stergmata 4–8, in British specimens usually 4, rather long. Gloeocystidia rare, sometimes wanting, cylindric, obtuse, very thin walled, 45–50 × 5–6 μ, contents more or less yellowish. Basal hyphae frequently septate, with clamp connections, 4–5 μ in diam. Bark, and rotten wood, often spreading on to the surrounding soil. Sept.—Jan. Uncommon.


Cristella Pat. (=Thelephora (Ehrh.) Fr. p.p.)
(Cristella, a little crest.)

Receptacle waxy, firm, effused, incrusting. Hymenium smooth, or tubercular. Spores white, ovoid, or oboval, echinulate; basidia clavate, with 2–4 stergmata. Cystidia none. Growing on the ground, on wood, mosses, or dead herbaceous stems.

2326. C. cristata (Pers.) Pat. (=Thelephora fastidiosa (Pers.) Fr.; Corticium fastidiosum (Fr.) Bourd. & Galz.) Pat. Essai tax. des Hymén. fig. 28. Cristata, crested.

R. 5–30 cm., white, chalky in appearance, then becoming yellowish, widely effused, incrusting, shapeless, or forming irregular, flattened, confluent, lobed, or subulate branches, fringed, or laciniate at the apex. Hymenium concolorous, papillose, granular, or reticulately veined. Flesh white, fibrillosely floccose, thin. Spores white, echinulate, ovoid, or obovate, 5–9 × 3–5 μ; basidia clavate, 20–25 × 5–6 μ, with 2–4 slightly bent stergmata, 4–6 μ long. Hyphae very thin walled, 1:5–
4.5μ in diam., sparingly septate, with clamp connections, and sometimes swollen up to 6–12μ in diam., often incrusted with crystals. Smell unpleasant, or slight, of garlic when quite fresh. On the ground, and running over sticks, dead leaves, twigs and herbaceous stems. Jan.—Dec. Uncommon. (v.v.)

**Peniophora Cke.**

(πνίον, a shuttle; φέρω, I bear.)

Receptacle waxy, coriaceous, cartilaginous, membranaceous, submembranaceous, floccose, or filamentous; resupinate, effused. Hymenium waxy, floccose, or pulverulent; smooth, rarely tubercular. Spores white, rarely pink, or yellowish, elliptical, subelliptical, globose, subglobose, oboval, clavate, subcylindrical, fusiform, oblong, needle-shaped, or sausage-shaped; smooth; basidia with 2–4-sterigmata, sometimes accompanied by cystidioles. Cystidia hyaline, rarely coloured, fusiform, oboval, elliptical, subglobose, subulate, conical, acicular, filiform, cylindrical, clavate or capitate, sometimes septate, and with clamp connections, smooth, or incrusted with crystalline granules, generally thick walled, sometimes thin walled and then projecting, not immersed in the tissue. Growing on wood, more rarely on leaves, or on the ground.

1. Cystidia cylindrical, or conical, thick walled, not incrusted externally with crystalline deposits, often divided at the base into several roots. In *Peniophora Aegerita* and its allies the walls of the cystidia are more or less rugose, the central canal is narrow and not enlarged at the apex, and the trama is poor or indistinct. In *Peniophora glebulosa* and its allies the cystidia are very thick walled, vitreous, with a capillary canal always more or less abruptly dilated at the apex and with thinner walls.


*Aegerita*, a genus of fungi, with which this species is always associated.

R. 1–5 cm., white to alutaceous, effused, adnate. Hymenium concolorous, finely bristling with the cystidia under a lens, and porous. Flesh white, submembranaceous, very thin. Spores white, broadly elliptical, or subglobose, 6–9 × 5–6μ, 1-guttulate; basidia clavate, 24–30 × 7–8μ, with 2–4 straight sterigmata, 4–6μ long. Cystidia arising from the basal hyphae, cylindrical, or slightly swollen below, apex blunt, 42–100 × 6–12μ, thick walled, rugose throughout their length. Hyphae thin walled, 3–4.5μ in diam., soon collapsing. Rotten sticks, and fallen branches, generally in association with *Aegerita candida* Pers. Sept.—April. Uncommon. (v.v.)

Glebulosa, full of little clods.

R. 2-5 cm., cream colour, dirty white, or greyish, effused, closely adnate; margin mealy, or similar. Hymenium *concolorous*, pubescent with the cystidia, cracked into small irregular areas when dry. Flesh pale, membranaceous, floccose, rather thick, dense. Spores white, narrowly cylindrical, curved, 7-9.5 × 1.5-2 μ; basidia 5-15 × 3-4 μ, with 4-sterigmata, about 4 μ long. Cystidia cylindrical to conical, 70-160 × 6-12 μ, obtuse, or pointed, sometimes subventricose at the base, often forked below, some sunken, and some projecting 90 μ above the hymenium, springing from the basal hyphae, thick walled, smooth, or slightly incrusted in the upper portion. Hyphae thin walled, 1-3 μ in diam., very closely interwoven and scarcely distinct. Wood, and bark. Jan.—Dec. Not uncommon. (v.v.)


Subulata, awl-shaped.

Differs from the type in the hymenium not cracking into small irregular areas when dry, and in the more acute, or subulate cystidia. On wood. Nov.—Jan. Uncommon. (v.v.)


Accedens, approaching.

R. 1-2 cm., whitish, or greyish, irregularly effused, spot-like, filmy. Hymenium *concolorous*, becoming cracked when dry, setulose, glistening with the cystidia under a lens. Flesh very thin, scarcely perceptible. Spores white, elliptical, with a lateral apiculus, 4-5 × 3-3.5 μ, often 1-guttulate; basidia 9-15 × 4-4.5 μ, with 2-4-sterigmata, 3-3.5 μ long. Cystidia filiform, or linear, 50-60 × 4 μ, dilated at the apex into a globose head, 10-11 μ in diam., thick walled. Hyphae indistinct, 1.5-2 μ in diam. Rotten wood. Nov.—Dec. Rare. (v.v.)

2330. *P. subalutacea* (Karst.) von Hoehn. & Litsch. (= *Corticium subalutaceum* Karst.) Sub, somewhat; alutacea, tanned leather.

R. 2-5 cm., dirty white, or greyish, with a slight ochraceous tinge, widely effused, adnate; margin very narrow, pruinose, or similar. Hymenium *concolorous*, loose, rather rough under a lens, with slight, irregularly scattered thickenings of the tissue (hardly granules). Spores white, narrowly cylindrical, slightly curved, 5-9 × 1.5-2.5 μ; basidia 10-24 × 3-5 μ, with 2-4 straight sterigmata, 4-5 μ long. Cystidia cylindrical, slightly attenuated at the base, 95-150 × 5-7 μ, projecting 60 μ or more above the hymenium, smooth, thin walled and thinner at the rounded apex, often 1-2-septate. Basal hyphae much branched, wavy, rather rigid, thick walled, 2-3 μ in diam., with clamp connections. Wood, and fallen branches of conifers. Sept.—Oct. Uncommon.
2. Trama always distinct. Cystidia long, arising from the basal hyphae and more or less similar, narrowly clavate, fusiform, or swollen into a ball at the apex or at the septa, often septate with, or without, clamp connections. The membranes are readily stained by a weak alkaline solution of cosin. Spores subglobose, oboval, or fusiform.


R. 1–6 cm., pallid, yellowish cream colour, or clay, regularly effused, or interrupted, *Hypochnus*-like; margin similar, rarely pruinose. Hymenium concolorous, pubescent, often granular, unequal. Flesh pale, filamentous, very thin. Spores white, oval, or subglobose, apiculate at the base, 4–6 × 3–4 μ, often with a large central gutta; basidia 12–21 × 4 μ, with 2–4-sterigmata, 3–4 μ long. Cystidia cylindrical, 40–120 × 4–6 μ, 1–4-septate, often constricted at the septa, or swollen, often incrusted. Hyphae thin walled, 2–4 μ in diam., with scattered clamp connections. Rotten wood, dead branches, and fallen leaves. Oct.—March. Common. (v.v.)


*Detritica*, worn down.


σφαῖρα, a ball; σπορᾶ, seed.

R. 1–5 cm., chalk white, broadly effused, firmly attached to the substratum, 15–30 mm. thick. Hymenium concolorous, smooth, or papillate, waxy when fresh, not cracked when dry; margin indeterminate. Flesh concolorous, membranaceous, thin. Spores hyaline, globose, apiculate, 4–7 μ, smooth, 1-guttulate; basidia clavate, 25–35 × 6–8 μ, with 4 long, subulate sterigmata. Cystidia abundant, cylindrical, apex usually narrowed, 35–85 × 5–8 μ, thin walled, projecting 10–40 μ above the hymenium. Hyphae 4–5 μ in diam., smooth,
thin walled, subnodulose, often anastomosing, with frequent clamp connections. Naked ground and fallen stick, probably alder. Nov. Rare.

2331. **P. byssoides** (Pers.) von Hoehn. & Litsch. (= *Corticium* (Coniophora) byssoidesum (Pers.) Fr.; *Coniophorella byssoides* (Pers.) Bres.; *Corticium lacunosum* B. & Br.; *Peniophora tomentella* Bres.)

R. 1–6 cm., ochre yellow, drying cream colour, to “Naples yellow,” widely effused, dry, arachnoid, separable; margin whitish, byssoid. Hymenium concolorous, even, tomentose, or pulverulent. Flesh yellowish, floccose, loose. Spores yellowish, sometimes nearly hyaline under the microscope, broadly elliptical, or pip-shaped, 4–4.5 × 2.5–3.5 μ; basidia 12–25 × 4.5–5 μ, with 2–4-sterigmata, 2.5–3 μ long. Cystidia yellowish, cylindrical, or narrowly fusiform, tapering, sharp pointed, 60–90 × 3–6 μ, projecting 20–75 μ above the hymenium, thin walled, or slightly thickened, 1–4-septate, generally with clamp connections. Hyphae yellowish, thin walled, 2–5–4 μ in diam., very loosely interwoven, with clamp connections. Rotten wood, fallen twigs, and leaves, especially in conifer woods. Sept.—April. Not uncommon. (v.v.)

2335. **P. longisspora** (Pat.) von Hoehn. & Litsch. (= *Hypochnus longisporus* Pat.)

R. 2–5 cm., whitish yellow, widely effused, thin, pubescent, then consisting of a membrane incompletely felted, scarcely adnate. Spores white, “fusiform, or acicular, straight, or slightly flexuose, 12–18 × 1–3 μ, multi-guttulate; basidia 12–24 × 4–5 μ. Cystidia needle-shaped, sometimes bulbous at the base, 60–75 × 2.5–6 μ, fairly thick walled, rough with crystals, projecting 30–45 μ. Hyphae rigid, 2.5–4 μ in diam., walls slightly thickened, often verrucose, with clamp connections.” Bourd. & Galz. Rotten, moist wood in cool places. Spring—Winter. Rare.

3. Receptacle pelliculose, or membranaceous; subiculum soft, more or less thick, fibrillose, and forming long, branched, rhizomorphoid strands.

2336. **P. sanguinea** (Fr.) Bres. (= *Corticium sanguineum* Fr.) Fr. Icon. t. 198, fig. 2, as *Corticium sanguineum* Fr. and Trans. Brit. Myc. Soc. iv, t. 3, figs. 18–20. Sanguinea, blood coloured.

R. 2–30 cm., blood red, effused, loosely adnate, arachnoid beneath; margin blood red, byssoid, or fibrillose, running out, and connected with the spreading strands of the blood red, rhizomorphoid mycelium. Hymenium creamy white, or tinged with pink, rarely red, smooth, becoming slightly cracked when dry. Flesh concolorous, membranaceous, floccose, loose, containing a red juice. Spores white, sub-elliptical, often with a curved apiculus, 5–6 × 2–4 μ; basidia 16–40 × 4–7 μ. Cystidia sparse, cylindrical-fusiform, pointed, 40–60 × 4–7 μ,


Leprosa, rough.

R. 1–3 cm., white, then ochraceous, irregularly effused, crustaceous; margin white, indeterminate, occasionally prolonged into white rhizomorphic strands. Hymenium pinkish ochraceous, somewhat cracked when dry, rough with cystidia under a lens. Flesh somewhat thick, fragile. Spores white, elliptical, 4–6 × 2.5–3μ. Basidia inconspicuous, about 4μ in diam. Cystidia very rough, cylindrical to subfusiform, frequently occurring in clusters, so as to give an Odontia-like appearance, occasionally branched near the apex, 60–90 × 8–14μ. Basal hyphae 3–4(–7)μ, often strongly incrusted with crystals, clamp connections rare. Dead bark. April. Rare.

4. Réceptacle membranaceous, fairly thick, easily separable when fresh. Cystidia often little differentiated from the cystidioles (sterile basidia) of Corticium, or scattered and unequally distributed.

2338. P. cremea Bres. Bres. Fung. Trid. ii, t. 73, fig. 2, as Corticium (Peniophora) cremeum Bres. 

Cremea, cream colour.

R. 2–6 cm., white, cream to ochraceous, broadly effused, separable; margin white, arachnoid, then similar. Hymenium concolorous, smooth, or here and there slightly tubercular, velvety, widely cracked when dry. Flesh white, membranaceous, soft, thin. Spores white, oblong, or cylindric ellipsoid, slightly curved, 4–8 × 2–4μ; basidia 20–50 or more × 7μ, with 2–4-sterigmata, 3–4μ long. Cystidia cylindrical, or slightly elongated fusiform, tapering very gradually from the base to the blunt apex, 70–120 × 5–9μ, very thin walled, smooth, or slightly incrusted at the apex with easily detached crystals, usually projecting up to 60μ; sometimes thicker walled, embedded cystidia are present, shorter than the projecting ones, fusiform, much incrusted, 40–60 × 9–10μ. Subhymenial hyphae loosely interwoven, much branched, rather rigid, thick walled, constricted at the septa so as to appear somewhat jointed, with no clamp connections, 5–6μ in diam. Bark, and fallen branches. Jan.—Dec. Common. (v.v.)


Diffsers from the type in its thicker subiculum, more sharply differentiated from the hymenium, and containing numerous, short, rough, thick walled cystidia. Bark. Jan.—Dec. Not uncommon. (v.v.)

44—2
2339. *P. laevis* (Fr.) Burt.  
*Laevis*, smooth.  
R. 1–3 cm., *white, then cream coloured*, broadly effused, not closely adnate; margin radially fibrillose. Hymenium *concolorous*, more or less cracked when dry. Flesh *concolorous*, membranaceous, thin. Spores hyaline, elliptical oblong, 4·5–6 × 2·5–3·5 μ, 1-guttulate; basidia very variable, 20–36 × 3–6 μ (most frequently 35 × 4·5 μ), with 2–4-sterigmata, 4–6 μ long. Cystidia fusoid, 40–90 × 4–7 μ, without incrustation, × 6–11 μ with incrustation, walls thin or slightly thickened. Hyphae regular with few, or no, clamp connections, thin walled; subhymenial hyphae 3–4 μ in diam.; basal hyphae up to 7–8 μ in diam. Birch bark. Nov. Rare.

*Velutina*, velvety.  
R. 3–15 cm., *white, or whitish*, broadly effused, adnate; margin white, or flesh colour, running out into long, branching strands. Hymenium *concolorous*, becoming flesh colour, or reddish when dried, *minutely velvety*. Flesh *concolorous*, soft, loose, fairly thick. Spores white, oblong, elliptical, apicolate at the base, 4–8 × 2·5–5 μ; basidia "20–32–50 × 4–7 μ. Cystidia fusiform, 30–140 × 6–9 μ, generally thick walled, smooth, or incrusted with oxalate crystals (18 μ in diam.), immersed in the tissue, or projecting. Basal hyphae more or less thick walled, 4–10 μ in diam., with few clamp connections; subhymenial hyphae thin walled, 3–4 μ in diam., soon collapsing” Bourd. & Galz. Wood, and fallen branches. Jan.—Dec. Common. (*v.v.*)

2341. *P. setigera* (Fr.) Bres. (= *Kneiffia setigera* Fr.) Pat. Essai tax. des Hymén. fig. 45, as *Corticium setigerum* (Fr.) Karst.  
*Setigera*, having bristles.  

5. Receptacle waxy, very adnate, pubescent, hispid, or guttulate under a lens. Cystidia abundant, strongly incrusted with crystalline granules.
2342. **P. pubera** (Fr.) Sacc. (= *Corticium puberum* Fr.) Bres. Fung. Trid. ii, t. 145, fig. 1, as *Corticium puberum* Fr. **Pubera**, grown up.


2343. **P. Molleriana** (Bres.) Sacc. (= *Corticium Roumeguérii* Bres.) Bres. Fung. Trid. ii, t. 144, fig. 1, as *Corticium Roumeguérii* Bres. A. F. Moller.

R. 1–6 cm., cream to bright biscuit colour, broadly effused, closely adnate; margin white, abrupt, or narrow, and pruinose. *Hymenium concolorous*, smooth, dry, opaque, almost farinaceous, cracked when dry. Flesh *whitish*, waxy, soft, then rigid, *porcelain-like*, brittle. Spores white, elliptical, 3–5.5 × 2–2.5 μ; basidia clavate, 12–20–30 × 4–5 μ, with 2–4 straight sterigmata, 2–4 × .5 μ. Cystidia very abundant, mostly immersed in the tissue, fusiform, or conical, apex acute, 60–70 × 10 μ, thick walled, much incrusted in the upper portion. Hyphae closely agglutinated, scarcely distinct, 2–2.5 μ in diam. Fallen logs. May. Rare. (v.v.)


.voteν, the genus *Hydnium*; εἰδώς, like.

R. 5–13 cm., whitish, or greyish, broadly effused, subinnate, indeterminate, closely adnate, waxy, hyaline. *Hymenium grey, often becoming somewhat cream coloured, setulose, and finally cracked*. Flesh thin, filamentous. Spores white, broadly elliptical, or subcylindrical, more or less depressed on one side, 4–5 × 1.5–2 μ. Basidia clavate, 8–14 × 3–4 μ, with 4 straight sterigmata, 4–5 μ long. Cystidia hyaline, subconical, or fusiform, *aggregated in clusters*, 60–120 × 10–12 μ, thick walled, strongly incrusted. Basal hyphae indistinct. Bark, and fallen branches. Sept.—June. Common. (v.v.)

2345. **P. gigantea** (Fr.) Massee. (= *Corticium giganteum* Fr.; *Peniophora Crosslandii* Massee sec. Wakef. in litt.) Fr. Icon. t. 197, fig. 3, as *Corticium giganteum* Fr. γαγας, a giant.

R. 3–30 cm., hyaline white, very broadly effused, swelling when moist, *cartilaginous when dry*; margin white, fibrillose, radiating,
finally becoming free. Hymenium concolorous, often tinged brownish or lilac when old, smooth, minutely velvety. Flesh whitish, waxy, then horny and parchment-like, thick, tough. Spores white, oblong, subcylindrical, attenuated at the base, 5-8 × 2.5-4 μ, "basidia 12-18-30 × 4-5 μ. Cystidia fusiform, subulate, often contracted, 40-100 × 9-16 μ, very thick walled, apex often incrusted. Hyphae very thick walled, 4-7 μ in diam., with few clamp connections, subhymenial hyphae thin walled, 2.5-3 μ in diam." Bourd. & Galz. Stumps, fallen branches, and needles of pines, rarely of other conifers. Jan.—Dec. Common. (v.v.)

6. Receptacle at first waxy, becoming hard and rigid, closely adnate, sometimes contracting when dry and becoming free at the margin, or splitting and becoming inrolled along the cracks; varying in colour from orange or brick red, to cinereous grey or brownish bistre, passing through rose colour, purple, violaceous livid, etc. The cystidia often commence as gloecystidia with granular contents which concentrate in vitreous or amber coloured masses, more or less rugose and split up, along the inside of the walls and incrust either the whole of the cystidium, or else only the upper portion,—in the latter case the cystidium appears as if stipitate: the membrane of the cystidium is often torn and reabsorbed: other cystidia oboval in the basal hyphae, narrowly fusiform in the trama, have thick, smooth walls from the commencement.


R. 1-4 cm., orange, or vermilion, becoming paler or somewhat tan colour, effused, forming small round patches, then confluent; margin white, broad, radiating. Hymenium concolorous, smooth, pruinose. Flesh pale, waxy, firm, dense. Spores white, or slightly tinged with pink in the mass, broadly elliptical, 14-18 × 9-11 μ; basidia 55-90 × 12-15 μ. Cystidia fusiform, 30-85 × 7-10 μ, thick walled, incrusted. Hyphae irregular, dense, thin walled, 3-6 μ. Fallen branches, especially alder. Sept.—Feb. Not uncommon. (v.v.)

2347. P. incarnata (Pers.) Cke. (= Corticum incarnatum (Pers.) Fr.)

Incarnata, flesh colour.

R. 3-13 cm., reddish, or orange, effused, agglutinated, adnate; margin white, narrow, byssoid, radiating, fugacious, often wanting. Hymenium concolorous, pruinose, sometimes undulato-papillose, and becoming cracked. Flesh slightly coloured, waxy, then rigid, firm. Spores white, subcylindrical, laterally depressed, 7-12 × 4-5 μ, 3-4-guttulate; basidia 20-40 × 5-7 μ. Cystidia fusiform, or cylindrical, 25-60 × 6-15 μ, thick walled, incrusted. Hyphae thin walled, 3-5 μ in diam., basal hyphae coloured. Dead wood, and branches. Jan.—Dec. Common. (v.v.)
var. hydnoidea (Pers.) Bourd. & Galz. (= Radulum laetum Fr.)

Differs from the type in its Radulum-like hymenium, and sub-corticulous habit. Dead wood, and branches of hornbeam, more rarely on alder. Oct.—March. Not uncommon. (v.v.)


R. 5-6 cm., hyaline livid, then rose colour or pale lilac, effused, confluent, adnate; margin similar, or narrow, pruinose. Hymenium concolorous, becoming paler, pruinose, cracked when dry. Flesh brownish, waxy, then rigid, firm. Spores white, "cylindrical, incurved, 7-12 × 3-5μ; basidia 15-27 × 4-7μ. Cystidia hyaline, the basal ones oboval, or elliptical, 15-45 × (6-)15-19μ, the others more elongate, 45-50 × 6-8μ, thin walled, contents granular, incrusting the walls, rugose, cracked. Hyphae little distinct, 3-5μ in diam." Bourd. & Galz. Dead wood, and branches. Nov.—April. Not uncommon. (v.v.)

var. maculaeformis (Fr.) von Hoehn. & Litsch. (= Corticium maculaeforme Fr.) Macula, a spot; forma, shape.

Differs from the type in commencing as very small spots, 1-2 mm. broad, which become confluent and effused, and in the lilac pruino on the reddish violet hymenium. Dead wood. Uncommon.

2349. P. violaceo-lividus (Sommerf.) Bres. ex Bourd. & Galz. (= Corticium violaceo-lividum (Sommerf.) Fr.)

Violaceus, violet; lividum, black and blue.

R. 2-12 cm., violaceous livid, then cinereous lilac, resupinate, round, tubercular, closely adnate. Hymenium concolorous, becoming paler, minutely pruinose, then cracked. Flesh discoloured, waxy, then rigid, fairly thick. Spores white, "cylindrical, slightly incurved, 9-12 × 3-4.5μ; basidia 20-26 × 6-8μ. Cystidia ovoid, or broadly fusiform, 24-45 × 12-21μ, thin walled, contents vitrified. Hyphae little distinct, 2-4μ in diam." Bourd. & Galz. Dead wood, and plum trees. Jan.—April. Uncommon. (v.v.)


R. 1-4 cm., bluish grey, greyish lilac, bluish cinereous, becoming paler or hoary, broadly effused, closely adnate; margin similar. Hymenium concolorous, delicately pruinose, at length cracked. Flesh paler, subgrumous, thin. Spores white, sausage-shaped, or cylindrical and incurved, 8-11 × 3-4.5μ; "basidia 25-32 × 4-6μ. Cystidia basal ones obovate, or globose, 5-18-32 × 3-14-24μ, hyaline, soon vitrified; the others cylindrical, or fusiform, and produced into a
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2351. P. cinereà (Fr.) Cke. (= Corticum cinereum Fr.) Grevillea, viii, t. 123, no. 8.

Cinerea, colour of ashes.


2352. P. laevigata (Fr.) Massee. (= Corticum laevigatum Fr.)

Laevigata, made smooth.


Quercina, pertaining to oak.

R. 1–18 cm., flesh colour, or orange, then lilac, or greyish, and finally slate colour, effused, then cup-shaped and free, smooth and becoming black beneath; margin free, revolute. Flesh pale, or brownish, coriaceous, thick, firm. Spores white, sausage-shaped, or cylindrical, often bent, 10–12 × 3–4μ; basidia 30–40 × 5–7μ. Cystidia clavate, or fusiform, 50–70 × 5–12μ, thick walled, smooth, or rugose. Basal hyphae brown, walls more or less thickened, 3–4μ in diam. Fallen branches, especially oak. Jan.—Dec. Common. (v.v.)

2354. P. limitata (Fr.) Cke. (= Corticum limitatum Fr.) Grevillea, viii, t. 123, no. 7.

Limitata, marked-off.

7. Doubtful British species insufficiently described.

2355. **P. phyllophila** Massee. *φύλλον, a leaf; φύλος, loving.*

R. 2–11 cm., *pallid, or cream colour, broadly effused; margin fibrilllose, often indeterminate. Hymenium *concolorous,* continuous. Flesh membranaceous. Spores white, elliptical, 12 × 6 μ. Cystidia fusoid or cylindrical with the apex sometimes thickened, 60–80 × 20–30 μ above the level of the hymenium. Dead leaves. Rare.

2356. **P. ochracea** (Fr.) Massee. (= *Peniophora nuda* (Fr.) Bres. sec. Wakef. in litt.) *ωξρός, pale.*

R. 3–13 cm., *ochraceous, broadly effused, inseparable; margin white, byssoid, radiating, soon disappearing. Hymenium *concolorous,* sprinkled with golden-glistening atoms, cracked when dry. Flesh soft, waxy. Spores white, “elliptical, 10 × 5 μ. Cystidia fusiform, 40–50 × 20 μ, above the level of the hymenium” Massee. Wood and bark. Rare.

**P. scotica** Massee = *Peniophora velutina* (DC.) Cke. sec. Wakef.


**P. terrestris** Massee = *Peniophora hydnoides* Cke. & Massee sec. Wakef.

**P. Crosslandii** Massee = *Peniophora gigantea* (Fr.) Massee sec. Wakef.


7. **Cyphellaceae.**

Hymenium covering the whole of the interior of cup-shaped, urceolate, or cylindrical receptacles; smooth or veined.

**Cytidia** Quél.

(= *Auriculariopsis* R. Maire).

(κύτος, a hollow vessel.)

Receptacle coriaceous-gelatinous, cup-shaped, sessile, scattered, crowded, or confluent. Hymenium smooth, becoming wrinkled, or veined. Spores white, or slightly coloured, boat-shaped, globose, or cylindrical, smooth; basidia elongate, narrow, cylindrical with 4 thin, short sterigmata. Growing on wood.

2357. **C. flocculenta** (Fr.) von Hoehn. & Litsch. (= *Corticium flocculenta* Fr.; *Cyphella ampla* (Lév.) Fr.; *Auriculariopsis ampla* (Lév.) R. Maire.) *Flocculenta,* woolly.

R. 4–12 mm., cup-shaped, hood-shaped and inverted when dry, *externally pale in colour, and tomentose. Hymenium fawn, or bright brown; margin white, at length wrinkled and veined. Flesh brownish,*

2358. **C. rutilans** (Pers.) Quél. (= *Corticium salicinum* Fr.)

*R. 1–10 cm., blood red, transparent, cup-shaped, then expanded, or confluent, adfixed by the centre, white villose on the outside, and delicately zoned. Hymenium red blood colour, or orange, even, naked, zoned. Flesh gelatinous, then horny, thin. Spores "hyaline, or slightly rosy, globose, 8 μ" Quél. *Salix aurita*, more rarely on poplar. Aug.—Sept. Rare.*

**Cyphella Fr.**

(*κυφελα, the hollow of the ear.*)

Receptacle waxy, membranaceous, or subgelatinous, cup-shaped, or urceolate, stipitate, sessile, or pendulous. Hymenium smooth, rugulose, or veined. Spores white, elliptical, obovate, globose, pruniform, subpyriform, ovate, clavate or pip-shaped, smooth; basidia clavate, with 2–4-sterigmata. Cystidia rarely present. Growing on wood, bark, herbaceous stems, and mosses; scattered, or gregarious.

2359. **C. griseo-pallida** Weinm. **Griseus, grey; pallida, pale.**


2360. **C. fulva** Berk. & Rav. **Fulva, tawny.**

*R. 2 mm., brown tawny, cup-shaped, mouth deflexed, sessile, externally tomentose with long, brown, asperate, thick walled, often curved hairs. Hymenium concolorous, even. Flesh thin, membranaceous. Spores white, "elliptical, 16–17 × 8 μ" Massée. Scattered, or in little clusters. Dead bark. Jan. Rare.*

2361. **C. alboviolascens** (A. & S.) Karst. (= *Cyphella Curreyi* B. & Br.) A. & S. Consp. Fung. t. 8, fig. 4, as *Peziza alboviolascens* A. & S. **Albus, white; violascens, becoming violet.**

*R. 1–5 mm., white, cup-shaped, globose, sessile, or subsessile, often proliferous, densely white villose, hairs rough. Hymenium pallid, or violaceous, smooth. Flesh whitish, thin, firm. Spores white, broadly elliptical, somewhat inequilateral, 14–15 × 10 μ; basidia 60–75 × 6–16 μ. Wood, bark, and twigs. Sept.—June. Not uncommon. (v.v.)
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2362. C. Bloxamii B. & Phill.
Rev. A. Bloxam, the well-known mycologist.


R. 10—12 mm., whitish, conchiform, dimidiate, attached on one side, pendulous, clad with flexuose hairs. Hymenium very pale rose colour, even. Dead wood. Rare.

2364. C. stappea B. & Br. στύπη, tow.

R. 1 mm., brownish, becoming white, erumpent, pezizaeform, sessile, externally coarsely hispid. Hymenium fuscous. Broom. March. Rare.


R. 8 mm. high, 5 mm. across, dirty brown, cupulate, mouth oblique, sessile, scattered, or crowded, clothed near the margin with grey pruina; margin incurved, lacerated. Hymenium discoloured brown, smooth. Flesh paler, subgelatinous. Spores white, globose, 5—6 μ. Elder bark, and wood. Rare.


R. 5—6 mm. high, pale primrose yellow, obliquely campanulate, contracted into an elongated equal stem, glabrous. Hymenium concolorous. Flesh thin. Spores white, subglobose, with a basal apiculus, 10 × 8—9 μ. Elder bark. Rare.

2367. C. lacera (Pers.) Fr. A. & S. Consp. Fung. t. 1, fig. 5, as Peziza membranacea A. & S. Lacera, torn to pieces.

R. 2—6 mm. high, 2—3 mm. broad, whitish, or yellow, cup-shaped, stipitate from the vertex being extended, pendulous, then torn into many clefts, slightly striate above with dense black fibrils, becoming cinereous blackish on the outside, and down the stem. Hymenium whitish, then grey, slightly wrinkled. Flesh membranaceous, thin. Spores white, subglobose, 7 × 6 μ.” Massee, “pruniform, 10—12 μ.” Quél. Dead twigs. Rare.


R. 4—6 mm. high, 5—8 mm. broad, whitish, becoming greyish and finally blackish, campanulate, transparent; margin sinuate. St. 2 mm., concolorous, filiform, flexuose, pubescent and white at the base. Hymenium whitish, pruinose, even, then wrinkled. Flesh whitish, membranaceous, thin. Spores white, broadly elliptical, 6—7 × 5—6 μ., with a large central gutta; basidia 20—30 × 5—7 μ., with 2—4-sterigmata,

var. flavescens Pat. Flavescens, becoming yellow.

Differs from the type in its yellowish, or brownish colour. Dead herbaceous stem. Sept.—Nov. Not uncommon. (v.v.)


R. 4 mm. high, 2 mm. broad, white, or very pale yellow, cup-shaped, erect, or pendent, pubescent; margin somewhat incised. St. concolorous, rather slender, crooked, enlarged upwards. Hymenium concolorous, smooth. Spores white, subpyriform, 7–10 × 4 μ; basidia cylindraceo-clavate, with 2–4-sterigmata. Dead herbaceous stems in water. Feb. Rare.

2370. C. cuticulosa (Dicks.) Berk. Dicks. Pl. Crypt. Brit. t. 9, fig. 11, as Peziza cuticulosa Dicks. Cuticulosa, having a skin.

R. 2–4 mm. high, white, diaphanous, at first oblong or digitaliform, then cup-shaped, elongated into a stem, smooth externally. Spores white, oval, 6–8 × 4.5 μ. Dead grass stems. Oct.—Feb. Rare.

2371. C. pallida Rabenh. Pallida, pale.

R. 5–2 mm., pallid, cup-shaped, orbicular, sessile, sometimes proliferous, at length irregularly lobed, plane, tomentose, or slightly hispid. Hymenium pallid ochraceous, at length wrinkled. Old stems of Clematis vitalba. Nov.—April. Rare.


R. 5–1 mm., white, globose, sessile, gregarious, contracted when dry, externally white villose; hairs subfusiform, subulate, pointed, 4–12 μ in diam., rough. Hymenium white, concave, even. Flesh white, membranaceous, thin. Spores white, ovoid, narrower at the apex, broadest at the base, 10–15 × 6–10 μ; basidia 40–80 × 7–12 μ, with 2–4 straight sterigmata. Stems of herbaceous plants and branches. Oct.—June. Not uncommon. (v.v.)

var. stenospora Bourd. & Galz. στενός, narrow; σπόρα, seed.

Differs from the type in the narrow oblong spores, attenuated a little obliquely at the base, 8–10 × 3–4 μ, the smaller basidia 15–18 × 6–8 μ, and the narrower hairs 3–4 μ in diam. Dead fronds of Lastraea Filix-mas and Athyrium Filix-foemina. Oct.—Nov. Uncommon. (v.v.)

2373. C. dochmiopora B. & Br. δόχμιος, aslant; σπόρα, seed.


R. 1–2 mm., reddish grey, globose, then expanding and becoming campanulate, sessile, minutely pilose. Hymenium *concolorous*, even. Spores white, elliptical, 7 × 5μ. Dead *Carex paniculata*. Rare.


R. 2–4 mm. high, 2 mm. broad, white, cup-shaped, or campanulate, sessile, pitcher-shaped-concave, lobed, externally villose. Hymenium *pallid*, or *cream colour*, even. Spores white, "globose, 7–8μ" Massee, "broadly elliptical, 4 × 2–3μ" Karst. Dead leaves of *Aira caespitosa* and *Carex paniculata*. Feb. Rare.


*Lactea*, milk white.


*Musceus*, moss; *genus*, birth.


2378. *C. catilla* W. G. Sm. Stevenson, British Fung. ii, p. 284, fig. 89.

*Catillus*, a small bowl.

R. 18 mm., grey, expanded, often imbricate; margin crisped, undulate. Hymenium *grey*, *veined*. Flesh submembranaceous. Moss, and dead leaves. Nov. Rare.

Solenia (Hoffm.).

(σοναιπύ, a pipe.)

Receptacle coriaceous, or membranaceous; tubular, cylindrical, cup-shaped, or pyriform, sessile, seated on a superficial, felt-like, then floccose and fugacious mycelium. Hymenium smooth. Spores white,
elliptical, cylindrical, globose, or subglobose; basidia clavate, with 2–4-sterigmata. Growing on wood, gregarious, or fasciculate, rarely solitary.

*White, or whitish.


*Fasciculata*, in small bundles.

R. 2–7 mm. high, white, cylindrical, clavate, gregarious, and usually fasciculate, externally minutely silky and almost smooth. Hymenium white, tubular, smooth. Flesh white, thin, soft. Spores white, subglobose, pointed at the base, 3.5–5 × 3–4 μ, 1-guttulate; basidia 15–20 × 4.5–5 μ, with 2–4 straight sterigmata, 4–4.5 μ long. Hyphae hyaline, 2–2.75 μ in diam., with thin or thick walls, and clamp connections. Rotten wood, and fallen branches; sometimes arising from a white mycelium. Sept.—April. Uncommon. (v.v.)

2380. **S. candida** (Hoffm.) Fr. Hoffm. Deutschl. Fl. ii, t. 8, fig. 1.

*Candida*, shining white.


2381. **S. maxima** Massee.

*Maxima*, largest.

R. 2 mm. high, whitish, or pale buff, subcylindrical, slightly contracted at the base, gregarious and subfasciculate, externally villose with slender, asceptate hyphae rough with minute particles of lime. Hymenium concolorous, tubular, smooth. Flesh white, thin. Spores white, elliptical, minutely and obliquely apiculate, 5 × 3 μ. Rotten wood. May. Rare.

**Coloured.

2382. **S. anomala** (Pers.) Fr. à, not; ὀμαλός, even.


var. **ochracea** (Hoffm.) Berk. Hoffm. Deutschl. Fl. ii, t. 8, fig. 2. χρώμα, pale.

Diffsers from the type in its scattered habit, and smaller size. Rotten wood and bark. Jan.—Dec. Not uncommon. (v.v.)
Poria, the genus Poria; forma, shape.


Porothelium Fr.

(πόρος, a pore; θηλή, a nipple.)

Receptacles cup-shaped, sessile, more or less crowded, distinct, seated on, or immersed in, a membranaceous, or floccose stroma. Hymenium smooth. Spores white, oblong, elliptical, or linear oblong; smooth; basidia with 2–4 sterigmata. Cystidia none. Growing on wood.

P. fimбриatum (Pers.) Fr. Fr. Icon. t. 192, fig. 1, as Porothelium lacerum Fr. Fimbriatum, fringed.

R. 1–10 cm., snow white, effused, membranaceous, firm, separable, minutely tomentose, pruinose, attached to the matrix by a white, cord-like mycelium; margin fringed, silky. Pores white, aggregated in places, papillate, then urceolate, fringed with a pink border, pubescent. Spores white, “oblong, slightly depressed on one side, 4.5–6 × 3–3.5 μ, multi-guttulate; basidia 15–23 × 4.5–6 μ, with 2–4 sterigmata, 2–3 μ long. Hyphae firm, thick walled, 1–2.5 μ in diam., with scattered, small, often oblique clamp connections” Bourd. & Galz. Beech, birch, and hornbeam stumps, and fallen branches. Jan.—Dec. Uncommon. (v.v.)

P. Friesii Mont. Cke. Handb. fig. 69.

Elias Fries, the illustrious mycologist.

R. 2–7.5 cm., white, becoming tan colour, effused, confluent, flocculoso-membranaceous, margin simple. Pores yellowish, papillate at first, immersed, then open and urceolate. Spores hyaline, elliptical, 5 × 3 μ. Pine, and juniper. Sept.—Feb. Uncommon. (v.v.)

P. Vaillantii (Fr.) Quél. = Poria Vaillantii (DC.) Fr.


P. Keithii B. & Br. Rev. Dr James Keith, a Scotch mycologist.

R. 2.5–5 cm., pale umber, closely adnate, inseparable, thin, at first subgelatinous, forming patches; margin very thin, subpulverulent. Pores pallid, scattered, papillate, at length collapsing. Spores linear-oblong, 5 × 2 μ. Dead fir. April. Rare.
Phaeocyphella Pat.

(φαιός, dusky; κυφελλα, the hollow of the ear.)

Receptacle waxy, fleshy, or membranaceous; cup-shaped, or urceolate, sessile, pendulous. Hymenium smooth, rugulose, or wrinkled. Spores coloured, elliptical, or subglobose; smooth, punctate, verrucose, or echinulate; basidia with 2-4-sterigmata. Growing on wood, or on mosses.

2387. **P. ochroleuca** (B. & Br.) Rea. (= Cyphella ochroleuca B. & Br.)

Receptacle 2-3 mm., ochrey white, cup-shaped, sessile, villose above; margin at length split. Hymenium pale ochre, brighter than the receptacle, even. Flesh membranaceous. Spores "very pale ochraceous, elliptical, 6 × 4μ" Massee. Dead bramble stems. July—Oct. Rare.

2388. **P. fraxinicola** (B. & Br.) Rea. (= Cyphella fraxinicola B. & Br.)

R. 25–2 mm., snow-white, orbicular, sessile, scattered, or gregarious, externally shortly villose. Hymenium yellow, becoming fuscos with the spores, proliferous. Spores "pale olive, elliptical, 6 × 4μ" Massee.* Ash bark. Dec.—Feb. Rare.

2389. **P. fuscospora** (Curr. ex Cke.) Rea. (= Cyphella fuscospora Curr. ex Cke.)


2390. **P. galeata** (Schum.) Bres. (= Cyphella galeata (Schum.) Fr.)

Fl. Dan. t. 2027, fig. 1. Galeata, covered with a helmet.

R. 2–5 mm., whitish, or grey when moist, becoming snow white when dry, then rufescent; cup-shaped, then dimidiate, helmet-shaped, sessile, even; margin quite entire. Hymenium at length rufescent, slightly wrinkled. Flesh whitish, membranaceous, soft. Spores tawny, rough or verrucose, subglobose, 8–10μ; basidia 18–30 × 7–9μ, with 4 curved sterigmata, 5–6 × 2–2.5μ. Hyphae very thin walled, 2–5μ, with clamp connections. Mosses. Nov.—Dec. Uncommon. (v.v.)

2391. **P. muscicola** (Fr.) Rea. (= Cyphella muscicola Fr.) Fl. Dan. t. 2083, fig. 2.

R. 2–5 mm., whitish, or cinereous, persistently cup-shaped, sometimes irregular, nodding, externally slightly fibrilloso-striate; margin slightly downy, repand, torn. Hymenium white, then grey, even, then rugulose. Spores pinkish, or pale brown, subglobose, 8–10μ. Mosses. Nov.—May. Uncommon. (v.v.)

II. CLAVARIINEAE.

Receptacle erect, dendroid, coralloid, simple, or branched, never pileate. Hymenium more or less amphigenous.

Clavariaceae.

Same characters as the suborder.
Clavaria (Vaill.) Fr.

(Clava, a club.)

Receptacle fleshy, or subcoriaceous, erect, branched, or simple and clavate, smooth, or longitudinally striate. Hymenium even, amphigenous, absent in the stem-like portion of the simple clubs. Spores white, or ochraceous, rarely reddish ochre or brownish; globose, subglobose, oboval, pip-shaped, pyriform, almond-shaped, reniform, oblong, oblong elliptical, or subfusciform; smooth, punctate, or verrucose; basidia with 2–4-sterigmata. Cystidia none. Putrescent. Growing on the ground, or on wood; solitary, gregarious, caespitose, or caespitoso-connate.

I. Branched.

A. Spores white, slightly coloured in no. 2402; basidia often with 2-sterigmata.

*Growing on the ground.


2393. C. cristata (Holmsk.) Fr. Rolland, Champ. t. 103, no. 230. Cristata, crested.


2394. C. cinerea (Bull.) Fr. Rolland, Champ. t. 103, no. 232. Cinerea, colour of ashes.

R. 2.5–5 cm. high, cinereous, very much branched; trunk whitish, or concolorous, becoming almost black when infected with Rosellinia Clavariae, short, stout, or thin. Branches and branchlets thickened, irregularly shaped, somewhat wrinkled, obtuse, often crested and paler. Flesh white in the trunk, cinereous upwards, somewhat firm.

R. B. B. 45


Differs from the type in the long, slender trunk, and the numerous thin, tapering, acute branches and branchlets. Spores white, subglobose, with a basal apiculus, 9 × 8μ, with a large central gutta. Bare soil in damp woods. Sept.—Nov. Uncommon. (v.v.)

2395. C. gigaspora Cotton. γίγας, giant; σπόρα, seed.

R. 2–3 cm. high, greyish with a tinge of yellow, irregularly branched, sometimes almost palmate; trunk hardly distinct, about 1 cm. long. Branches erect, occasionally forked, often wrinkled, solid, terete, or compressed, much compressed at the acute angles, ultimate branches attenuated, apices blunt. Flesh tough, horny when dry. Spores white, broadly elliptical, slightly oblique, 10–20 × 7–9μ, av. 12–16 × 8μ, guttulate, then granular; basidia 60–70 × 15μ, with 4 short sterigmata, 8–10μ long, contents granular. Hyphae 4–4.5μ in diam., densely packed, forming a firm tough tissue, rather horny when dry. Amongst moss on rocky, heathy slope. Nov. Rare.


R. 5–10 cm. high, violet, very much branched; trunk concolorous, or whitish, thin, equal. Branches round, smooth, or somewhat rugulose, obtuse, often forked at the apex. Flesh tinged violet, becoming whitish, rather brittle. Spores white, elliptical, obtuse at both ends, 6–7 × 3–4μ, with a large central gutta; "basidia rather large, 50–60 × 7–10μ, with 2–4-sterigmata. Hyphae densely interwoven, frequently septate, cells 50–100 × 8–12μ, not pseudoparenchymatous in transverse section. Spores globose, with a minute basal apiculus, 5–7μ in diam." Cotton & Wakef. Edible. Woods, and pastures. Aug.—Nov. Uncommon. (v.v.)

var. lilacina (Fr.) Quél. Schaeff. Icon. t. 172, as Clavaria purpurea. Lilacina, lilac coloured.

Differs from the type in the lilac purple colour becoming brownish when dry, in the firmer texture and in the less numerous, dentate, often twisted branches. Pastures. Rare. (v.v.)

2397. C. rugosa (Bull.) Fr. Rolland, Champ. t. 103, no. 233. Rugosa, wrinkled.

R. 5–10 cm. high, white, simple, or sparingly branched, thickened

var. fuliginea (Pers.) Fr. Fuliginea, sooty.

Differs from the type in the dark sooty colour of the clubs and flesh. Woods. Sept.—Oct. Uncommon. (v.v.)

var. macrospora Britzl. μακρός, long; σπόρα, seed.

Differs from the type in the larger spores, 12–14 × 8–10 μ. Rare.

2398. C. grossa (Pers.) Quél. (= Clavaria Krombholzii Fr. sec. Quél.) Grossa, thick.

R. 5–7 cm. high, snow white, sparingly branched; trunk 3–4 cm. × 3–5 mm., somewhat bulbous at the base. Branches compressed, deformed, acute, or incised. Flesh white, brittle. Spores white, elliptical, or subglobose, 9–12 × 6–8 μ, with a large central gutta. Woods. Aug.—Oct. Uncommon. (v.v.)


R. 5–7 cm. high, violet, or lilac grey; trunk slender, expanding upwards, and dividing into several obtuse, subcompressed branches. Spores white, subglobose, 8–10 × 8 μ. Scattered, or solitary. Woods. Sept. Rare. (v.v.)

2400. C. Krombholzii Fr. (= Clavaria Kunzei Fr. sec. Cotton & Wakef.) Krombh. t. 53, figs. 15–16, as Clavaria Kunzei Fr.

J. von Krombholz, author of “Abbildungen der Schwämme.”


R. 5–12 cm. high, ivory to cream white, irregularly and dichotomously branched, loose, rarely compact; trunk sometimes pink at the base, usually distinct, 1–2 cm. × 3–5 mm. Branches erect, or spreading, cylindrical, or slightly compressed, often elongated, 2–5 mm. thick, even, solid, axils lunate; apices blunt, or pointed. Flesh white, somewhat brittle. Spores white, globose, often minutely apiculate,
3·5–4·5 μ, with a large central gutta; "basidia 30–35 × 5–6 μ, with 4-sterigmata. Internal structure pseudoparenchymatous in transverse sections, cells long, 100–300 × 5–8 μ." Cotton & Wakef. Edible. Solitary, or gregarious. In long grass in woods, and pastures. Aug.—Nov. Not uncommon. (v.v.)


R. 5–7 cm. high, snow white, trunk thin, 2–3 cm. × 2–3 mm., very much branched. Branches long, thin, unequal, pointed. Flesh white, tough, somewhat elastic. Spores pale yellow in the mass, hyaline under the microscope, subglobose, with a basal apiculus, 4–5 × 4 μ, with a large central gutta. Bare soil in woods. Sept.—Oct. Uncommon. (v.v.)


R. 2–2·5 cm. high, white, becoming yellowish, trunk 1·1–5 cm. × 1–2 mm., glabrous at the base, equal, with few branches. Branches dichotomously forked, subfastigiate. Flesh white, tough. Spores white, oblong, elliptical, rounded at both ends, 6 × 3 μ, 1-guttulate. Amongst grass in woods. Sept.—Oct. Uncommon. (v.v.)


R. 2–5 cm. high, yellow, generally only twice or thrice branched; trunk white towards the base, thin, firm. Branches rounded at the axils, apex crescent-shaped, acute. Flesh yellow, firm, tough. Spores white, subglobose, often minutely apiculate, 5–6 μ, with a large central gutta; "basidia distinct, 50 μ long, vacuolate or clear, with 4-sterigmata, 10 μ long. Hyphae not interwoven, running parallel to the axis, easily separable, and becoming twisted, 4–8 μ in diam., fairly frequently septate, with cells 100–200 μ long, not pseudoparenchymatous in transverse section" Cotton & Wakef. Edible. Pastures. Aug.—Dec. Common. (v.v.)

var. pratensis (Fr.) Cotton & Wakef. (= Clavaria fastigiata (Linn.) Fr. Hym. Eur.) Pratensis, growing in meadows.

Differs from the type in being more branched, with short, divaricate, fastigate branchlets, and forming a level top. Edible. Pastures. Aug.—March. Common. (v.v.)


R. 2·5–3·5 cm. high, pale brown, irregularly and dichotomously branched, stem absent, branches distinct to the base. Branches erect, cylindrical, slender, 1–2 mm. thick, even, solid; apices blunt, or bifid.

2406. **C. curta** Fr. Fr. Icon. t. 199, fig. 2. *Curta*, short.


J. Bizzozero.

R. 5–10 mm. high, brilliant violet, becoming paler, at first simple and toothed at the apex, then dichotomously branched; stem reddish yellow (nankeen), pubescent. Flesh white. Spores white, globose, 2–5–3 μ; basidia 6–7 μ in diam. Gregarious, but scattered. Bare soil under nut trees. Oct. Uncommon. (v.v.)

**Growing on wood.**


*Pyxidata*, box-shaped.

R. 2.5–5 cm. high, pallid, then tan colour, somewhat rufescent; trunk thin, smooth, branched. Branches and branchlets all hollowed out in cup-shape at the apex, cups radiating in a proliferous manner at the margin. Flesh white, firm. Spores white, elliptical, 4 × 3 μ. Rotten, and buried wood. Oct. Rare. (v.v.)

2409. **C. Kewensis** Massee. (= *Clavaria stricta* (Pers.) Fr. sec. Cotton & Wakef.)

*Kewensis*, belonging to Kew.

R. 4–7 cm. high, rusty brown, becoming ochraceous upwards, base thick, dividing almost at once into numerous, subequal, divergent branches. Branches uniform in thickness throughout, often compressed, imperfectly hollow, dividing near the apex into 2–4 short branchlets, axils rounded, tips obtuse, or divided into 2–4 short finger-like processes, pruinose. Spores white, elliptical, apiculate at the base, 5–6 × 3.5–4 μ. Smell pleasant like that of *Lentinus cochleatus*. Forming dense tufts, 12–15 cm. across. Rotten wood. Oct. Rare.

B. Spores more or less ochraceous.

*Growing on the ground.**

2410. **C. botrytis** (Pers.) Fr. Rolland, Champ. t. 103, no. 231.

*Botrpus*, a bunch of grapes.

R. 7–10 cm. high, 6–20 cm. broad, whitish, or ochraceous; trunk

2411. C. flava (Schaeff.) Fr. Schaeff. Icon. t. 175. Flava, yellow.


2412. C. aurea (Schaeff.) Fr. Schaeff. Icon. 287. Aurea, golden.

R. 5–10 cm. high, 10–20 cm. broad, egg yellow, or somewhat tawny; trunk 2–4 × 1–5 cm., whitish at the base, concolorous above, base somewhat bulbous, divided into numerous, erect, stout branches. Branches tense, straight, dichotomous, round, flattened; apices paler, toothed, or incised. Flesh white, yellowish near the cuticle, tough, elastic. Spores ochraceous in the mass, oblong, or subfusiform, often obliquely apiculate, 9–12 × 3–4μ, 1–3-guttulate. Taste pleasant. Edible. Woods. Aug.—Oct. Uncommon. (v.v.)

2413. C. rufescens (Schaeff.) Fr. Rufescens, becoming red.

R. 7–9 cm. high, 3–6 cm. broad, branchlets all blood red, becoming paler; trunk 4–5 × 2–3 cm., whitish at the base, becoming yellow upwards, divided into numerous erect branches. Branches erect, subcompressed; apices dentate, or forked. Flesh whitish, reddish at the apex of the branches, tough. Spores ochraceous. Woods. Sept.—Oct. Rare. (v.v.)


R. 6–9 cm. high, 7–30 cm. broad, orange rose colour, or pinkish ochraceous; trunk 3–4 × 2.5–6 cm., whitish at the base, becoming rosy

2415. C. Broomei Cotton & Wakef.

C. E. Broome, the well-known mycologist.

R. 5–8 cm. high, 2–4 cm. broad, ochraceous orange, tips darker orange, turning brown easily on bruising, base white, or pinkish; trunk short, not swollen, white, becoming pinkish on bruising, somewhat branched, rooting base small. Branches irregular, or subdichotomous, slight below, more frequent above, axils not rounded, cylindrical, or flattened, short, solid, fairly erect, smooth, or the larger branches much wrinkled, tips flattened. Flesh white, becoming vinous later especially below, solid. Spores deep ochraceous, or even orange in the mass, fusiform, or pip-shaped, markedly aculeate, 14–20 × 6–8 μ (average 15–16 × 6–7 μ); basidia not conspicuous, 40–50 × 8–9 μ, with 2-sterigmata, contents granular. Internal structure composed of fine filaments, densely packed, slightly interwoven, 3–6 μ in diam., with vesicular ends, 10–12 μ in diam., not pseudoparenchymatous in transverse section; large crystals in abundance in the tissue. Smell slight, not pleasant. Taste bitter. Woods. Sept.—Oct. Uncommon.


Spinulosa, with little spines.

R. 5–8 cm. high, 3–6 cm. broad, somewhat cinnamon, brownish amber; trunk 2–4 × 2–3 cm., pallid, becoming yellowish, very much branched. Branches elongate, crowded, tense and straight; apices concolorous, forked, simple or toothed. Flesh white, firm, tough. Spores ochraceous, elliptical, or oboval, incurved and apiculate at the base, 8–9 × 4–5 μ. Woods, and heaths. Sept.—Jan. Not uncommon. (v.v.)

2417. C. abietina (Pers.) Fr. Abietina, pertaining to firs.

R. 2–5–7–5 cm. high, 3–6 cm. broad, ochraceous, becoming greenish when bruised or weathered; trunk 1–2·5 cm. × 8–15 mm., white tomen-
Clavaria apices

Condensata, Flaccida, trunks larch, yellow, spherical 4:fL erect, white, slightly matted. trunk faint, finely branched, 35-40 mm., 3-10 cm. woods. R. 4-5 cm. high, deep ochre, forming dense, compact, almost spherical tufts; trunks more or less distinct, short, often woolly, with white, or yellowish rooting strands, irregularly and frequently branched, axes acute. Branches slender, short, uneven, cylindrical, erect, smooth, solid; apices attenuated, pointed. Flesh white. Spores yellow, pip-shaped, slightly incurved at the base, echinulate, 7-9 x 4μ (average 8 x 4μ); basidia conspicuous, 30-40 x 7-9μ, contents finely granular, with 4 erect sterigmata. Internal structure of irregular, wavy, filamentous hyphae, 5-10μ in diam., loosely interwoven, and running equally in each direction. Smell slightly pungent. Taste faint, hardly bitter. Amongst leaves in thick plantations of spruce, larch, etc. Uncommon.

2418. C. Invalii Cotton & Wakef. Inval near Haslemere, Surrey.

R. 4-5 cm. high, deep ochre, forming dense, compact, almost spherical tufts; trunks more or less distinct, short, often woolly, with white, or yellowish rooting strands, irregularly and frequently branched, axes acute. Branches slender, short, uneven, cylindrical, erect, smooth, solid; apices attenuated, pointed. Flesh white. Spores yellow, pip-shaped, slightly incurved at the base, echinulate, 7-9 x 4μ (average 8 x 4μ); basidia conspicuous, 30-40 x 7-9μ, contents finely granular, with 4 erect sterigmata. Internal structure of irregular, wavy, filamentous hyphae, 5-10μ in diam., loosely interwoven, and running equally in each direction. Smell slightly pungent. Taste faint, hardly bitter. Amongst leaves in thick plantations of spruce, larch, etc. Uncommon.

2419. C. flaccida Fr. Fr. Icon. t. 199, fig. 4. Flaccida, flabby.

R. 3-10 cm. high, 3-4 cm. across, ochraceous, or somewhat tawny; trunk 2-3 x 1.5-2 cm. or almost none, concolorous, very much branched, flaccid. Branches erect, crowded, even, apices acute, simple, or forked, converging. Flesh whitish, yellowish upwards, elastic, firm. Spores very pale ochraceous, elliptical, 6-7 x 3μ, 1-guttulate, “minutely verrucose” Bourd. & Galz.; “basidia small, conspicuous, 30 x 7-9μ, contents finely granular, with 4-sterigmata. Hyphae loosely interwoven, slightly septate, 7-10μ in diam., not parenchymatous in transverse section, and more densely arranged towards the periphery.” Cotton & Wakef. Woods, and heaths. Sept.—Dec. Uncommon. (v.v.)

2420. C. condensata Fr. Condensata, pressed close together.

R. 5-10 cm. high, 3-4 cm. across, tan rufescent; trunk 1-2 cm. x 5-10 mm., ochraceous cream, or whitish at the base, divided into numerous branches almost to the base. Branches yellow, tense and straight, erect, crowded in a parallel manner, apices fastigate, twice or thrice toothed. Flesh white, deep yellow upwards, firm, tough. Spores ochraceous, elliptic oblong, depressed on the side, 8-9 x 4μ, 2-3-guttulate. Woods, and heaths. Aug.—Oct. Uncommon. (v.v.)
2421. **C. palmata** (Pers.) Fr.  
*Palmata*, palmate.

R. 5–6 cm. high, 3–4 cm. broad, tan, or tawny, becoming paler; trunk thin, very much branched almost from the base. Branches bifurcate, flattened, thin, erect, palmately branched, apices forked, or toothed. Flesh pale, firm. Spores pale ochraceous, minutely punctate, oblong elliptical, 6–7 × 3–4 μ, usually 1-guttulate. Smell very pleasant. Coniferous woods. Dec. Rare. (v.v.)

2422. **C. crocea** (Pers.) Fr.  
*Σκότος*, saffron.

R. 1–1.5 cm. high, saffron yellow; stem pallid, thin, naked. Branches and branchlets similar, somewhat forked. Spores “ochraceous, elliptical, 6–7 × 3–4 μ” Massee. Waste ground, downs, gardens, on peat. Sept.—Feb. Rare.

2423. **C. grisea** (Pers.) Fr. (= **Clavaria cinerea** (Bull.) Fr. sec. Cotton.)  
*Grisea*, grey.

R. 3–7.5 cm. high, fuliginous cinereous; trunk 4 × 2.5 cm., whitish. Branches 7.5 cm. long, attenuated, somewhat wrinkled; branchlets unequal, obtuse. Flesh firm. Spores “reddish ochre in the mass, slightly brownish, and with a yellowish gutta under the microscope, oboval, 10–12 × 7–7.5 μ” Bourd. & Galz. Woods. Sept.—Oct. Rare.

2424. **C. fuliginea** Pers.  
*Fuliginea*, sooty.

R. 5–7.5 cm. high, 5 cm. broad, cinereous, becoming rufescent, very much branched; stem thin; larger branches thick, compressed, lateral rather incomplete; branchlets subfastigiate, short, acute. Spores ochraceous, globose, with an apiculus, 10 μ. Ground. Rare.

**Growing on wood.**

*Stricta*, close.

R. 5–10 cm. high, 3–8 cm. across, pallid yellow, becoming fuscous when bruised; trunk 1–3 × 1 cm., whitish at the base, concolorous upwards, very much branched. Branches tense and straight, crowded, adpressed; apices acute, or toothed. Flesh white, firm, tough. Spores pale ochraceous, pip-shaped, with a basal, or lateral apiculus, 6–9 × 4–5 μ; “basidia distinct, 30–40 × 7–9 μ, contents granular, with 4 erect sterigmata. Hyphae interwoven, 4–10 μ in diam., not parenchymatous in transverse section, central hyphae rather thick walled” Cotton & Wakef. Rotten stumps, and buried wood. Aug.—Jan. Not uncommon. (v.v.)

var. **alba** Cotton.  
*Alba*, white.

Differs from the type in its creamy white colour. On the ground, amongst fallen leaves, etc. Rare.
2426. **C. crispula** Fr.  

*Crispula,* with little curls.  

R. 2·5–7·5 high, *tan, then ochraceous,* very much branched; trunk thin, with villose rootlets. Branches *flexuose, multifid, divaricate.* Spores "pale yellow, elliptical, 5 × 3μ" Massee. Base of trunks, ash, and elder. Oct.—Dec. Rare.

II. Simple.

A. Tufted, or caespitose at the base.  

*Purple, or reddish.

2427. **C. purpurea** (Müller) Fr. Fl. Dan. t. 837, fig. 2.  

*Purpurea,* purple.


2428. **C. rosea** (Dalman) Fr.  

*Rosea,* rose colour.

R. 2–5 cm. high, *rose colour, whitish at the attenuated base,* fusiform, apex acute, rarely toothed, or bifid, cylindrical, or somewhat compressed, sometimes becoming yellowish at the apex. Flesh whitish, stuffed, brittle. Spores white, subglobose, with a distinct basal apiculus, 6–6·5 × 5μ; basidia clavate, 22–37 × 7–10μ, with 4-sterigmata. "Hyphae irregular, 7–12μ in diam., frequently septate, semi-parenchymatous in transverse section; crystals sometimes present” Cotton & Wakef. Caespitose. Pastures. Sept.—Oct. Rare. (v.v.)

**Yellow.

2429. **C. fusiformis** (Sow.) Fr. Sow. Eng. Fung. t. 234.  

*Fusus,* a spindle; *forma,* shape.


Differs from the type in the blunter, often divided apices of the clubs becoming brown. Woods, and pastures. Sept.—Oct. Not uncommon. (v.v.)


Luteus, orange yellow; alba, white.

R. 4–5 cm. high, 2–3 mm. thick, deep rich yellow, or apricot colour, becoming pale ochraceous when dried, apex white, cylindrical, or slightly compressed, gradually attenuated downwards to the base, blunt, or acute, stuffed. Flesh orange yellow, or concolorous, floccose. Spores white, pip-shaped, or ovoid, 5–8 × 3–4 μ; basidia 25–30 × 5–7 μ, contents slightly granular, with 4-sterigmata. Hyphae 5–6 μ in diam., containing orange coloured granules. Taste “like tallow” Cotton. Fasciculate, or scattered. Woods, pastures, and heaths. Aug.—Dec. Not uncommon. (v.v.)


Inaequalis, unequal.


Dissipabilis, dispersed.

R. 3–6 cm. high, 2–3 mm. thick, yellow, to orange yellow, fragile, elongato-clavate, tapering downwards, or cylindrical, obtuse, rarely subacute, smooth, or furrowed, stuffed. Flesh white or yellowish, floccose. Spores white, or tinged with yellow, acutely warded, subglobose, 5–6 μ, with a large central gutta; “basidia conspicuous, clavate, yellowish, 30–40 × 6–8 μ, with 4 more or less erect sterigmata” Cotton & Wakef. Solitary, or in small clusters. Woods, pastures, and heaths. Aug.—Dec. Common. (v.v.)

2433. *C. persimilis* Cotton.

Persimilis, very like.

R. 3–5 cm. high, 2–3 mm. thick, orange yellow, to orange, becoming dark orange when dried, cylindrical, or subcompressed, apex usually acute. Flesh pale, floccose. Spores white, subglobose-oblong, with a conspicuous oblique apiculus, 5–6 × 4 μ, guttulate; basidia 30–35 × 7–8 μ, contents granular, with 4-sterigmata. Hyphae loosely packed, running longitudinally, 3–6 μ in diam., not pseudoparenchymatous in transverse section. Isolated, or fasciculate. Amongst short grass. Woods, and pastures. Not uncommon.
CLAVARIA

2434. C. argillacea (Pers.) Fr. (= Clavaria ericetorum Pers.) Boud. Icon. t. 175, as Clavaria ericetorum Pers.

Argillacea, clay colour.

R. 3–8 cm. high, 4–8 mm. broad, whitish yellow, or citron yellow, simple, elongate, attenuated at the base and shining, very rarely bifurcate, compressed, with one or two longitudinal channels, apex obtuse, or truncate, stuffed, fragile. Flesh concolorous, floccose. Spores white, reniform, or oblong and depressed on one side, 10 × 5–6 μ, with granular contents; "basidia conspicuous, 70 μ long, with 4 sterigmata, contents granular. Internal structure almost pseudoparenchymatous in transverse section even when old, cells regular, 10–14 μ in diam., with small, narrow filaments (4–5 μ in diam.) between; segments 50–70 μ long towards the margin, but up to 200–300 μ in the centre" Cotton & Wakef. Solitary, or in tufts of two or three. Heathys, and hillsides. Aug.—Nov. Not uncommon. (v.v.)


Straminea, straw colour.

R. 3–5 cm. high, 3–4 mm. thick, straw-coloured, becoming brownish with age or when handled, simple, cylindrical, or somewhat compressed, smooth, apex usually acute. Stem usually very distinct, cinnamon yellow, stuffed, brittle. Flesh somewhat darker than the hymenium. Spores white, globose, with a minute basal apiculus, granular, 5–7 μ; basidia 40–60 × 7–9 μ, with 4 sterigmata, contents granular. Internal structure pseudoparenchymatous in transverse section. Isolated, or caespitose. Amongst short grass, lawns, and pastures. Sept.—Oct. Rare. (v.v.)

2436. C. Micheli Rea. P. A. Micheli, an early illustrator of fungi.

R. 4–7 cm. high, 1–2 mm. thick, yellow, white at the base, cylindrical, hollow, apex acute, very fragile. Flesh yellowish, white at the base. Spores white, subglobose, 3 × 2 μ. Fasciculate. Amongst grass under a cherry tree. Sept. Rare. (v.v.)

***White, rarely yellow.

2437. C. vermicularis Fr. Vermicularis, pertaining to worms.

R. 6–12 cm. high, 3–5 mm. broad, shining white, elongate fusiform, attenuated at both ends, compressed, with a longitudinal channel down the middle, often twisted, hollow, apex acute, often becoming brownish when weathered, very brittle. Flesh white, fragile. Spores white, elliptical, with a basal apiculus, 5–7 × 3–4 μ, with a large central gutta; "basidia small, 30 × 6–7 μ, with 4 sterigmata. Hyphae parallel, septate, with rather long cells, pseudoparenchymatous in transverse section, central cells 10–15 μ in diam., with smaller cells intermixed"

2438. **C. fragilis** (Holmsk.) Fr. (= Clavaria vermicularis Fr. sec. Cotton.)

R. 5–6 cm. high, 2–3 mm. thick, white, or yellow, simple, cylindrical, slightly attenuated downwards, apex subobtuse, or slightly pointed, stuffed, becoming hollow, fragile. Flesh white, or slightly yellowish, loose. Spores white, broadly elliptical, 8–9 × 5–6μ, with granular contents. Edible. Fasciculate. Heaths, and pastures, rarely in woods. Aug.—Nov. Not uncommon. (v.v.)

****Fuliginous, or blackish.

2439. **C. striata** (Pers.) Fr. Pers. Icon. et Descr. t. 3, fig. 5.

**Striata,** furrowed.

R. 3–5 cm. high, 3–4 mm. wide, subfuliginous, cylindrical, attenuated at the apex and base, extreme base white, somewhat twisted, here and there longitudinally striate, compressed, apex subobtuse, stuffed, then hollow. Flesh white, loose. Spores white, subglobose, with a basal apiculus, 3–4 × 2–3μ. Amongst grass under beeches. Sept. Rare.

2440. **C. fumosa** (Pers.) Fr. Krombh. t. 53, fig. 18. *Fumosa,* smoky.


B. Clubs distinct at the base.

*Yellow, ochraceous, or tawny, often becoming rufescent.


R. 7–30 cm. high, 2–5 cm. broad, light yellow, then rufescent, finally dingy brown, obovate-clavate, obtuse, pruinose, stuffed. Flesh white, floccose, firm. Spores white, or tinged yellowish, pip-shaped, or elliptic-oblong with a lateral apiculus, 12–13 × 7–8μ, often 1-guttulate; “basidia about 70μ long, with 2–4-sterigmata” Cotton & Wakef. Edible. Woods. Sept.—Dec. Not uncommon. (v.v.)
2442. C. ligula (Schaeff.) Fr.  
   **Ligula**, a little tongue.
R. 3–6 cm. high, 1–1.5 cm. broad, yellowish, then pallid rufescent, elongato-clavate, obtuse, base villose, white, stuffed. Flesh white, floccose, loose. Spores white, elliptical, often with a lateral apiculus, 10 × 5–6 μ, contents granular; “basidia conspicuous, 40 × 6–8 μ, with 4-sterigmata” Cotton & Wakef. Edible. Woods. Aug.—Oct. Uncommon. (v.v.)

2443. C. contorta (Holmsk.) Fr. (= Clavaria fistulosa (Holmsk.) Fr. sec. von Hoehn. and Bourd. & Galz.) Boud. Bull. Soc. Myc. Fr. xxxiii, t. 1, fig. 5.
R. 5–2 cm. high, 2–6 mm. thick, watery yellowish, often tinged with brown, erumpent, simple, sometimes spathulate, somewhat twisted, wrinkled, obtuse, compressed, stuffed. Flesh yellowish, floccose, loose. Spores white, almond-shaped, 12–14 × 9 μ, contents granular, “fusiform, 15–18 × 7–9 μ” Boud.; “basidia rather large, very distinct, 50 × 10 μ, contents minutely granular, with 4-sterigmata. Internal structure in longitudinal section of long cells, 10–15 μ in diam., with narrower elements on either side; latex tubes present” Cotton & Wakef. Dead twigs. Oct.—Nov. Uncommon. (v.v.)

2444. C. fistulosa (Holmsk.) Fr.  
   **Fistulosa**, full of holes.
R. 10–20 cm. high, 2 mm. thick, yellow, then rufescent, cylindrical, subobtuse, straight, or curved, often contorted at the base, hollow; root short, villose. Flesh yellowish, firm. Spores white, verrucose (“smooth” Cotton), pip-shaped, or subfusiform, 12 × 7 μ, with a large central gutta; “basidia conspicuous, about 40 μ long, with 4 erect sterigmata, contents finely granular. Internal structure possessing a system of lacticiferous hyphae, aseptate, frequently branched, 6 μ in diam., contents granular” Cotton & Wakef. Dead branches, and pea sticks. Nov.—Feb. Uncommon. (v.v.)

2445. C. Ardenia (Sow.) Fr. (= Clavaria fistulosa (Holmsk.) Fr. sec. QuéI.) Sow. Eng. Fung. t. 215.  
   Ardenia, Lady Arden.
R. 12–30 cm. high, 8 mm. broad at the apex, ferruginous, then date brown, elongate, incrassated at the obtuse or acute apex, hollow, base tomentose, not rooting. Flesh yellowish, rigid, firm. Spores white, oblong elliptical, attenuated towards the base, 15 × 6 μ, contents granular. Fallen branches, and mosses. Sept.—Dec. Uncommon. (v.v.)

*C. tuberosa* (Sow.) Berk. = *Calocera tuberosa* (Sow.) Fr.

   **Juncea**, like a rush.
R. 5–15 cm. high, 1–2 mm. thick, pallid, then rufescent, filiform, flaccid, fistulose, apex acute, creeping base fibrillose. Flesh yellowish.
Spores white, elliptical, sometimes depressed on the side towards the base, \(8-9 \times 4-5\mu\), 1-guttulate; "basidia small, \(30-35 \times 6-7(-8)\mu\), with 4-sterigmata, slightly vacuolar. Internal structure parenchymatous in transverse section, with occasional large air spaces" Cotton & Wakef. Amongst leaves in woods. Sept.—Nov. Uncommon. (v.v.)

**White, or greyish.**

2447. *C. canaliculata* Fr. (= *Clavaria rugosa* (Bull.) Fr. sec. Cotton & Wakef.)

*Canaliculata*, channelled.

R. 3–20 cm. high, 4–6 mm. thick, *snow white*, or *greyish*, clavate, or cylindrical, *at length compressed*, channelled, or splitting longitudinally, stuffed, then hollow. Flesh *white*, loose. Spores white, broadly elliptical, \(11-12 \times 7\mu\), with a large central gutta. Solitary, rarely in pairs, or threes. Heath, and pastures. Sept.—Oct. Rare. (v.v.)

2448. *C. tenuipes* B. & Br. (= *Pistillaria tenuipes* (B. & Br.) Massee.)


*Tenuis*, thin; *pes*, foot.

R. 1.5–6 cm. high, 2–10 mm. wide, *pallid clay colour*, *pale grey* to *drab-coloured*, clavate, or cylindrical, often compressed, smooth, or slightly rugulose, apex blunt, hollow when old. Stem slender, 1–2 cm. \(\times 2–3\text{ mm.}\), more or less sharply marked. Flesh *concolorous*, loose. Spores white, elliptical, or oval, often with a minute basal apiculus, 6–9 \(\times 4-5\mu\), guttulate, then granular, "basidia 30–40 \(\times 7-9\mu\), with 4-sterigmata, contents granular. Internal structure consisting of loosely packed, oblong cells, 8–10\(\mu\) in diam., cells 50–150\(\mu\) long, hyphae unbranched" Cotton & Wakef. Isolated, or in small groups. Amongst short grass, bare soil, and old charcoal heaps, on heaths, pastures, and in woods. Sept.—Jan. (v.v.)


\(\alpha\sigma\tau\eta\rho\), a star; \(\sigma\pi\rho\alpha\), seed.

R. 2–3 cm. high, *pure white*, simple, slender, cylindrical, apex blunt, or pointed, smooth, hollow. St. slender, *greenish at the base*, not markedly distinct from the club. Flesh brittle. Spores hyaline, *with long, scattered spines*, globose, spore body 7–8\(\mu\) in diam.; basidia clavate, 30–40 \(\times 8\mu\), with 4-sterigmata. Internal structure pseudoparenchymatous in transverse section. Bare soil. Rare.


R. 3–7 cm. high, 2–3 mm. thick, *glistening white*, cylindrical, or compressed, smooth, becoming hollow, very brittle, attenuated; apex acute, or obtuse. Stem usually very distinct, 1–2 cm. long. Flesh *white*, loose. Spores white, subglobose, minutely apiculate, 7–10 \(\times 6-9\mu\), guttulate, then granular; "basidia 30–35 \(\times 7-8\mu\), with 4-sterigmata, contents granular. Internal structure pseudoparenchymatous in transverse section. Bare soil. Rare.
matous in transverse section, cells av. 10μ in diam.” Cotton. Isolated, or in twos or threes. Amongst short grass in woods, pastures, shady lawns, and in flower-pots. Sept.—Nov. Not uncommon. (v.v.)

2451. C. Crosslandii Cotton.

Charles Crossland, the well-known Yorkshire mycologist.

R. 2–3 cm. high, 1–3 mm. thick, greyish white, or grey, becoming darker with age, cylindrical, apex usually pointed, brittle. Stem hardly distinct. Flesh somewhat darker than the hymenium. Spores white, pip-shaped, 4–5 × 2.5–3μ; basidia 20–25 × 4–5μ, with 4-sterigmata, contents granular. Internal structure pseudoparenchymatous in transverse section, cells 5–8μ in diam. Isolated, or fasciculate. Amongst short grass in woods. Sept.—Nov. Rare.

2452. C. tenerrima Massee & Crossl. (? = Clavaria acuta (Sow.) Fr. sec. Cotton.)

Tenerima, very delicate.

R. 1.5–4 cm. high, 1–2 mm. thick, hyaline or shining white, simple, cylindrical, flexuose, smooth, subattenuated above, but by no means acute, not narrowed at the base, stuffed, firm. Spores hyaline, verrucose, subglobose, apiculate, 8–9μ; basidia with 4-sterigmata. Gregarious but distinct at the base. Amongst short grass.


***Rosy.

2453. C. incarnata Weinm.

Incarnata, flesh colour.

R. 1–4 cm. high, 2–3 mm. thick, flesh colour, or rosy, cylindrical, or compressed, pointed, or blunt, pruinose, base whitish, hairy, solid. Flesh purple, sometimes white, firm. Spores white, broadly elliptical, or pear-shaped, 10 × 6–7μ, 1-guttulate; “basidia 35–40 × 7–8(–10)μ, contents finely granular, with 4 erect sterigmata. Hyphae loosely interwoven, frequently septate, cells 50–100 × 5–10μ, with trumpet-shaped expansions in the subhymenial layer, pseudoparenchymatous in transverse section” Cotton & Wakef. Gregarious. Bare soil in woods. Aug.—Oct. Uncommon. (v.v.)

Typhula (Pers.) Fr.

(Typha, the reed-mace.)

Receptacle fleshy, waxy, or tough, erect, simple, very rarely branched, cylindrically clavate, with a long, thin stem, often springing from a sclerotium. Hymenium smooth, confined to the clavate portion of the receptacle. Spores white, oblong, ovate, subglobose, pip-shaped, or subcylindrical, smooth; basidia clavate, with 2–4-sterigmata. Cystidia none, or inconspicuous. Growing on dead leaves, herbaceous stems, twigs and wood.
*Springing from a sclerotium at the base.

2454. **T. erythropus** (Bolt.) Fr. Grev. Scot. Crypt. Fl. t. 43, as *Phacoriza erythropus.*

R. 1—2 cm. high, club white, 4—6 mm. long, cylindrical, linear, smooth. Stem reddish black, 12 mm., filiform, often twisted, springing from an elliptical, brown, or blackish sclerotium (sclerotium sometimes wanting), clothed with concolorous hairs at the base. Spores white, oblong, or subcylindrical, sometimes depressed on the side, 6—9 × 3—4 μ. Dead leaves, and sticks, and dead herbaceous stems.

Sept.—Dec. Common. (*v.v.*)

2455. **T. phacorrhiza** (Reich.) Fr. Stev. Brit. Fung. ii, p. 304, fig. 94.

R. 2:5—7:5 cm. high, brownish, filiform, acute, paler and tomentose at the base, flexuose, springing from a compressed, palloid, then fuscos, sclerotium. Flesh concolorous. Spores white, subglobose, 7—8 × 7 μ, with a large central guttula. Dead leaves, and herbaceous stems.

Sept.—Nov. Not uncommon. (*v.v.*)


2457. **T. gyrans** (Batsch) Fr.

R. 1—4 cm. high, white, very slender, subcylindrical, or subfusiform, 3—5 mm. long; stem hyaline, diaphanous, filiform, pubescent, springing from an elliptical, palloid, then fuscos, sclerotium. Spores white, “oblung, 5—6 × 2 μ” Pat. Straw, dead stems of grasses, and twigs. Oct. Uncommon.


**No sclerotium at the base.

2458. **T. Grevillei** Fr.

Dr Robert Kaye Greville, the eminent Scotch mycologist.

R. 5—12 mm. high, white, club elliptical, 2—3 mm., obtuse. Stem filiform, pilose. Spores white, pip-shaped, or oblong with a lateral apiculus, 4—5 × 2 μ. Dead leaves, especially alder, and poplar. Sept. —Dec. Common. (*v.v.*)

2459. **T. filiformis** (Bull.) Fr. Bull. Hist. Champ. Fr. t. 448, fig. 1, as *Clavaria filiformis.*

Filum, a thread; forma, shape.

R. 2:5—7:5 cm. high, club white, cylindrical, fusiform; stem date
brown, filiform, somewhat branched, decumbent, smooth. Spores white, "about 5-4 μ" Massee. Amongst dead leaves. Nov. Rare.

R. 0.5-2 cm. high, white, club elongate; stem very slender, curved, smooth. Various herbaceous plants.

R. 2-3 mm. high, club pallid, simple, or forked, acute, rough with spores and little prominent bristles; stem short, distinct, smooth, or strigose with "hyaline, flexuose hairs, 100-200 × 1-3 μ. Spores white, oblong, 7-9 × 3.5-4 μ; basidia 21-28 × 6 μ, with 2-sterigmata. Hyphae 3-9 μ in diam." Bourd. & Galz. Rotten leaves. Dec. Uncommon.

2462. T. tenuis (Sow.) Fr. Sow. Eng. Fung. t. 386, fig. 5, as Clavaria tenuis. Tenuis, thin.
R. 4-6 mm. high, fuscous black, club thickened, smooth; stem filiform. Rotten wood in cellar. Rare.

R. white, minute, pellucid, club irregular, somewhat obovate; stem short, thickened upwards. On the ground. Oct. Rare.
T pusilla Schroet. = Pistillaria pusilla (Pers.) Fr.

Pistillaria Fr.
(Pistillum, a pestle.)
Receptacle fleshy, or waxy, erect, simple, very rarely forked, club-shaped, with a short, thick, glabrous, or villose stem, rarely springing from a sclerotium. Hymenium smooth, confined to the clavate portion of the receptacle. Spores white, oblong, elliptical, subcylindrical, pruniform oblong, oblong elliptical, or sausage-shaped, smooth; basidia clavate, with 1-2-4-sterigmata. Cystidia none, or inconspicuous. Growing on dead herbaceous stems, and leaves.

*Rosy.

R. 0.5-1 mm. high, club glistening rose colour, obovate, or oblong, obtuse, pruinose; stem white, or concolorous, cylindrical. Flesh concolorous, soft. Spores white, elliptical, or oblong elliptical, 8-12 × 6-7 μ; basidia 35-40 × 7-8 μ, with 2-4-sterigmata. Dead herbaceous stems, and leaves, especially thistles. July—Feb. Not uncommon. (v.v.)
**Tawny.

2465. **P. fulgida** Fr. Sow. Eng. Fung. t. 391, as *Clavaria minuta*.

*Fulgida*, shining.

R. 1–3 mm. high, club-tawny, or tawny orange, cylindrical, or lanceolate, subacute, flexuose, smooth; stem whitish, or yellow, equal, or constricted at the apex. Spores white, “oblong or subcylindrical, obliquely attenuated at the base, 8–10 × 4.5–5 µ; basidia 18–25 × 7–9 µ, with 2–4-sterigmata” Bourd. & Galz. Stems of *Dipsacus pilosus*, and *Helianthus tuberosus*. Sept. Rare.

***White, or yellowish.

2466. **P. culmigena** Mont. & Fr. Ann. Sc. Nat. (1836), t. 12, fig. 2.

*Culmus*, stalk; *gena*, borne.


2467. **P. quisquiliaris** Fr. Sow. Eng. Fung. t. 334, fig. 1, as *Clavaria obtusa*.

*Quisquiliaris*, pertaining to refuse.

R. 3–8 mm. high, whitish, club-shaped, oval, rarely bifid, more or less compressed, attenuated downwards, smooth, sometimes springing from a minute sclerotium. Flesh white, soft, then rigid. Spores white, sausage-shaped, or oblong, and depressed on one side, 12–15 × 5–6 µ, contents granular. Dead fern stems, especially bracken. April—Dec. Common. (v.v.)


R. 4–6 mm. high, white, club ovate, or obovate, subglobose, pyriform, or turbinate, hollow, attenuated downwards into a smooth, diaphanous stem. Spores white, “pruniform oblong, 12 µ” Quél. Dead elm, and bramble leaves. Rare.

2469. **P. furcata** W. G. Sm. ex Cke. *Furcata*, forked.

R. 2.5–3 cm. high, white, or yellowish, compressed, broad at the apex, attenuated downwards, generally furcate. Flesh waxy, then tough. Caespitose. In greenhouses.

2470. **P. uncialis** (Grev.) Cost. & Dufour. (= *Clavaria uncialis* Grev.; *Ceratella uncialis* (Grev.) Quél.) Grev. Scot. Crypt. Fl. t. 98, as *Clavaria uncialis*.

Uncialis, a twelfth part.

R. 1–2.5 cm., white, becoming yellowish with age, cylindrical, gradually attenuated downwards, obtuse, smooth, naked, flexuose, stuffed.

46—2
Flesh white, tough. Spores white, "elliptical, 5 × 3μ" Massee. Dead stems of herbaceous plants, especially umbellifers. May—Nov. Uncommon.


R. 2–6 mm. high, white, obovate, ventricose; stem short, distinct, equal, or attenuated upwards, pellucid, tomentose. Flesh white, becoming firm. Spores white, "elliptical, 5 × 3μ" Massee. Dead bracken stems. Sept.—Nov. Not uncommon. (v.v.)

2472. P. pusilla (Pers.) Fr. Pusilla, very small.

R. ·5–2 mm. high, white, linear, or slightly thickened upwards, nodding when dry, smooth, even, with no distinct stem. Flesh white, soft, then firm. Spores white, oblong elliptical, 10 × 4μ; basidia with 2-sterigmata. Dead leaves. Sept.—Feb. Not uncommon. (v.v.)

****Purple.

2473. P. purpurea W. G. Sm. Purpurea, purple.

R. 2 mm. high, purple, obovate. St. whitish. Spores white, 4 × 3μ. Damp rotten leaves. Rare.

Pterula Fr.

(πτερόν, a feather.)

Receptacle firm, tough, filiform, branched, or simple, branches equal. Hymenium smooth. Spores white, oval, elliptical, or pip-shaped, smooth; basidia with 2-4-sterigmata. Cystidia none, or inconspicuous. Growing on the ground, or on wood.

2474. P. subulata Fr. Subulata, awl-shaped.

R. 3–4 cm. high, whitish cinereous, densely branched, tense and straight, equal, except at the attenuated base, tough. Branches becoming yellow, growing into each other, multifid at the apex, awl-shaped, smooth, not thicker than a fine thread. Spores white, "oval, 8–10 × 5–7μ" Rabenh. Densely tufted. On wood amongst pines and in gardens. Uncommon.

2475. P. multifida Fr. Fr. Icon. t. 200, fig. 2. Multifida, many cleft.

R. 2·5–5 cm. high, pallid whitish, then dirty pale yellowish, and finally brownish, almost black when dried, very much branched, very delicate, flaccid, but slightly tough. Branches tense and straight, not much thicker than a hair, heaped as if swept together, subfastigate, apex spear-shaped, or crisped. Spores white, pip-shaped, or elliptical, depressed on one side with a lateral apiculus, 6 × 3μ, contents granular. Dead branches and running over pine needles. Sept.—Nov. Uncommon. (v.v.)
EXOBASIDIAE.

**Parasites.**

EXOBASIDIALES.

Hymenium effused, rarely consisting of basidia only. Parasitic on leaves, etc. (especially Ericaceae).

EXOBASIDIACEAE.

Same characters as the order.

Exobasidium Woronin.

(ĕξ, out of; basidium, a basidium.)

Mycelium vegetating in the interior of the living host, and giving rise, on the exterior, to basidia. Hymenium discontinuous. Spores white, elongate fusiform, or oblong reniform, smooth, simple, or septate; basidia cylindrical, with 4–5–6-sterigmata. Cystidia none. Parasitic on living leaves and stems.

2476. E. Vaccinii (Fuck.) Woron. (= Exobasidium Andromedae Peck; Exobasidium Azaleae Peck; Exobasidium Rhododendri Cramer.) Engl. & Prantl, Nat. Pflanzenfam. i, 1**, fig. 65.

Vaccinium, whortle-berry.

Galls 1–2 cm., greyish, innate, effused, hypophyllous, or amphigenous, usually orbicular, or elongated, forming a scurfy or felted hymenium. Spores white, elongate fusiform, often curved, 10–20 × 2.5–5 μ, sometimes 1-septate, and becoming 3-septate on germination. Leaves, young shoots, and flowers of Vaccinium Myrtillus, Vaccinium Vitis-idaea, Rhododendron ferrugineum, Rhododendron hirsutum, Rhododendron Wilsonii, and Azalea pontica. May—Oct. Not uncommon. (v.v.)


Galls 1–3 cm., subcuticular. Spores oblong-reniform, 14.5 × 4 μ. Leaves and terminal shoots of Rhododendron indicum. Uncommon.

HETEROBASIDIAE.

Basidia longitudinally divided, transversely septate, or simple; spores on germination producing sporidiola, or a mycelium, but the former only in the case of the simple basidia.

AURICULARIALES.

Basidia transversely septate, cylindrical, straight, or curved, consisting of either probasidia, or normal basidia. Spores producing sporidiola, or a mycelium on germination.
1. Parasites, with or without probasidia.

**PUCCINIINEAE**

**COLEOSPORIINEAE** Not dealt with in the present work.

**USTILAGINEAE**

2. Saprophytes, without probasidia.

**AURICULARIINEAE.**

Hymenium fully exposed from the first.

**AURICULARIACEAE.**

Same characters as suborder.

**Helicobasidium** Pat. (ελυξ, twisted; basidium, a basidium.)

Receptacle membranaceous, soft, floccose; effused, incursting. Hymenium smooth. Basidia cylindrical, more or less incurved, transversely 2–4-septate, with subulate, unilateral sterigmata. Spores white, oval, or pear-shaped, smooth, producing, on germination, either sporidiola, or a mycelium. Growing on humus, or wood.


R. 3–6 cm., dingy reddish purple, margin paler, broadly effused, incursting, indeterminate, adnate, inseparable. Hymenium concolorous, then deep vinous colour, and covered with a white pruina. Flesh whitish, floccose, loose, thin. Spores white, pear-shaped, 10–12 x 6–8 μ; basidia cylindrical, incurved, 3–5 μ in diam., 3-septate. Basal hyphae pale brown, 4–7 μ in diam., septate, without clamp connections. Half buried ash bough amongst leaf debris. March. Rare. (v.v.)

**Platygloea** Schroeter.

(πλαγίας, broad; γλοία, glue.)

Receptacle homogeneous, waxy, gelatinous, or coriaceous gelatinous, tubercular, wart-like, or consisting of spreading, or erect, convolute plates. Hymenium smooth, unilateral, or amphigenous; basidia cylindrical, straight, palisade-like, transversely septate, with long sterigmata. Spores white, oval, or elliptical, obtuse, or apiculate, straight, or curved; producing sporidiola on germination. Growing on dead wood.


R. greyish, then whitish, effused, closely adnate, thin, subgelatinous, firm. Hymenium concolorous, pulverulent under a lens. Spores white, smooth, elliptical, or ovate, with an oblique apiculus, 7–8–10 x 4–5 μ;

**Auricularia (Bull.) (= Hirneola Fr. p.p.).**

(Auricula, the ear.)

Receptacle gelatinous-coriaceous, cartilaginous when dry; dimidiate, or cup-shaped, substipitate, or sessile; consisting of three layers, the upper layer thin and compact, very rarely glabrous, generally tomentose with thick, cylindrical, simple, erect or decumbent hairs, the intermediate layer consisting of thin, gelatinous hyphae forming a compact tissue, and the lower layer forming the hymenium. Hymenium smooth, reticulate, or ribbed, fully exposed from the first. Basidia cylindrical, transversely 3-septate, with long, thin sterigmata, and forming a firm, palisade-like layer. Spores white, cylindrical, oblong, or subreniform, producing sporidiola on germination. Growing on wood.

2480. **A. mesenterica** (Dicks.) Fr. Rolland, Champ. t. 106, no. 242. μέσος; middle; ἐντερος, intestine.

R. 5–30 cm., fuscous cinereous, grey, or tawny, resupinate, often cup-shaped, then confluent and reflexed, imbricate, flexuose, villose, fasciato-zoned. Hymenium pale, or greyish, then fuscous violaceous, costato-plicate, pruinose with the spores. Flesh fuscous, gelatinous, then cartilaginous. Spores white, cylindrical, curved, 17–20 × 6–7μ, 1–3-guttulate. Stumps and felled trunks, especially elm. Jan.—Dec. Common. (v.v.)

var. **lobata** (Sommerf.) Quél. Berk. Outl. Brit. Fung. t. 18, fig. 1, as **Auricularia lobata.**


2481. **A. auricula-Judae** (Linn.) Schroet. (= Hirneola auricula-Judae (Linn.) Berk.) Berk. Outl. Brit. Fung. t. 18, fig. 7, as **Hirneola auricula-Judae.**

Auricula, ear; Judae, of a Jew.

R. 2–8 cm., grey, then olivaceous, or brownish, and finally black, cup-shaped, hemispherical, concave, then ear-shaped, flexuose, pli-cate, transparent, tomentose with subbulbous hairs. Hymenium pale, then greyish and finally fuscous, smooth, then venoso-plicate. Flesh whitish, gelatinous, then cartilaginous, tough. Spores white, oblong, or cylindrical, curved, 16–20 × 6–9μ, often 2-guttulate. Edible. Common on old elders, more rarely on beech, elm, oak, walnut, willow, holly and Berberis arquata. Jan.—Dec. Common. (v.v.)
2482. **A. polytricha** (Mont.) Pat. (= *Hirneola polytricha* Mont.)

Jungh. Fl. Crypt. Jav. Ins. t. 13, as *Exidia purpurascens*.

\[\pi\delta\nu\theta\rho\iota\xi,\] with much hair.

R. 2–8 cm., *greyish*, cup-shaped, hemispherical, then expanded and ear-shaped, sessile, or extended behind into a short, oblique stem; margin undulate, densely covered on the outside with long, obtuse, *greyish* or tawny hairs, \(400 \times 5–9\mu\). Hymenium *pale*, then *brownish purple*, and finally becoming *blackish*, smooth. Flesh *pale*, or *brownish*, subgelatinous, then *horny*, tough, elastic, thick. Spores white, sub-reniform, “\(20–22 \times 8\mu\)” *Sacc.*; basidia cylindrical, \(85–90 \times 6–7\mu\), 3-septate. Wooden fire blocks. April—Nov. Uncommon. (v.v.)

**Eocronartium** Atkinson

(= *Clavaria* p.p.; *Helicobasidium* sec. Pat.).

(\(\eta\\iota\omega\s,\) dawn; *cronartium*, the genus *Cronartium*.)


2483. **E. muscicola** (Pers.) Fitzpat. (= *Typhula muscicola* (Pers.) Fr.)


*Muscus*, moss; *colo*, I inhabit.

R. 5–7.5 cm. high, *white*, simple, filiform, clavate, club cylindrical, attenuated into a thin, long, *smooth* st., obtuse, 2–4 mm. thick. Flesh *white*, thin. Spores white, “fusoid, curved or inequilateral, granular, \(18–24 \times 3.5–5\mu\)” *Atk.* Basidia cylindrical, “curved, or more or less sinuous, \(25–40 \times 6–9\mu\), 3–5-septate. Sterigmata flexuous elongate, usually \(10–20 \times 3–4\mu\)” *Atk.* Mosses. Aug.—Oct. Uncommon. (v.v.)

**Stilbum** (Tode) Juel.

(\(\sigma\tau\iota\lambda\beta\omega,\) I shine.)


2484. **S. vulgare** (Tode) Juel. Tode, Fung. Mecklenb. t. 2, fig. 16.

*Vulgare*, common.

R. 1–2 mm. high, *white*, then *yellowish*, globose. *St. concolorous*, becoming thinner upwards, fibrous, smooth. Spores white, “elliptical, *hyaline*, \(8 \times 5–6\mu\)” *Massee*. Rotten wood, oak cupules, etc. Sept.—Nov. Common. (v.v.)
ECCHYNA. TREMELLA

ECCHYNINEAE.
Hymenium inclosed within a peridium.

ECCHYNACEAE.
Same characters as suborder.

Ecchyna Fr.
(ἐκχύνω, I pour out.)

Peridium fibrillose, subglobose, stipitate, or substipitate, thin, fugacious. Gleba threads radiating, branched, flexuose at the ends. Basidia cylindrical, straight, or curved, transversely 3-septate; bearing sessile, or very short pedicellate spores; scattered, or in tufts on the lower portions of the threads. Spores fawn colour, elliptical, or subglobose, smooth, producing sporidiola on germination. Growing on wood.


P: 3–6 mm. high, 1–3 mm. across, whitish, or fawn colour, forming a globose head, smooth, then pulverulent. St. concolorous, or becoming black with age. Flesh fawn colour, floccose, loose. Spores fawn colour, elliptical, or subglobose, depressed or umbilicate on the one side, 5–6 × 4–5μ; basidia cylindrical, 3-septate. Hyphae concolorous, 3–4μ in diam., with numerous clamp connections. Beech, ash, hornbeam, and holly. Sept.—Jan. Not uncommon.

TREMELLALES.
Basidia subglobose, longitudinally, or vertically, cruciately divided into 2–4 parts. Spores producing sporidiola or a mycelium on germination.

TREMELLACEAE.
Same characters as the order.

Tremella (Dill.) Fr.
(Tremo, I tremble.)

Receptacle gelatinous, or waxy, soft; foliaceous, brain-like, or tubercular. Hymenium spread over the whole surface, very rarely papillate. Basidia amphigenous, superficial, or immersed. Conidia on the same receptacle, preceding, or accompanying the spores. Spores white, rarely yellowish, globose, subglobose, oval, elliptical,

1 Bayliss-Elliott and Grove hazard the opinion that both these species are only conidial forms of Roessleria pallida Sacc., but the transversely septate basidia, and frequent clamp connections of the hyphae seem to disprove this conclusion.
or pyriform; smooth, or punctate; producing sporidiola on germination, or tufts of conidia, that bud in a yeast-like manner. Hyphae filamentous, thin, gelatinous, sometimes inclosing mineral concretions, which form an irregular central nucleus. Growing on wood, rarely on the ground.

I. Foliaceous, divided up into lobes, and variously twisted.


R. 5–7.5 cm. high and broad, **olivaceous, inclining to black, erect, corrugated**; lobes flaccid, incised at the margin, undulato-fimbriate. Flesh gelatinous, very soft. Spores white, "subpyriform" Massee, "5–7μ long" Moll. Caespitose. Darkening water when soaked in it, and staining the fingers black. Dead branches, especially alder. Nov. —Feb. Rare.

2487. **T. frondosa** Fr. Bull. Hist. Champ. Fr. t. 499, fig. T, as **Tremella quercina**.

R. 10–12 cm., **yellow inclining to pale, or pale pinkish yellow, spathulate, or tongue-shaped, large, even, plicate at the base; lobes gyroso-undulated**. Flesh **concolorous**, gelatinous, thin, except at the base. Spores white, subglobose, apiculate at the base, 8–10μ, 1–2-guttulate. Caespitose. Stumps, and fallen branches, especially oak. July—Dec. Not uncommon. (v.v.)


2489. **T. lutescens** Pers. Pers. Icon. et Descr. t. 8, fig. 9.

**Lutescens**, becoming yellow.


II. Brain-like, with obtuse, and twisted veins.

2490. **T. mesenterica** (Retz.) Fr. Rolland, Champ. t. 105, no. 237. μέσος, middle; ἐντερόν, intestine.

R. 1–8 cm., **orange**, variously contorted, brain-like, plicato-undu-


III. Crustaceous, effused, smooth.


Naked soil. Aug.—Sept. Rare.

IV. Tubercular, small, suberumpent.

2494. **T. violacea** (Relh.) Fr. *Violacea*, violet.

R. 3–8 mm., *violaceous*, becoming *black when dry*, erumpent, subcompressed, *gyrose*. Flesh paler, gelatinous, then firm, 2 mm. thick. Spores "cream citron, punctate, ovoid, 5 μ" Quél. Gregarious. Pear trunks. Rare.

2495. **T. indecorata** Sommerf. Fr. Icon. t. 200, fig. 4. *Indecorata*, ugly.

R. 4–30 mm., *dingy, livid*, or *olivaceous*, becoming *fuscous*, black *fuscous when dry*, erumpent, convex when moist, then *plicate*. Flesh *dingy*, gelatinous, then firm, opaque. Spores white, globose, 6–9 μ, minutely punctate. Birch, oak, willow, and poplar. Oct.—Nov. Rare.


R. 4–8 mm. high, dingy white, nearly black when dry, erumpent, stipitate, head pileate. St. short, round. Flesh semi-transparent, horny. Spores “subglobose, with a large, obtuse, lateral apiculus, 5–7 × 5–8μ” Bourd. & Maire. Conidia straight, or slightly curved, 2 × 5μ. Fallen branches, especially oak. Oct.—Dec. Frequent. *(v.v.)*

*T. torta* Berk. = **Dacryomyces tortus** (Berk.) Massee.


2499. **T. atrovirens** Fr. *Ater*, black; *virens*, green.


2500. **T. clavata** (Pers.) Berk. (? = the conidial form of **Coryne sarcoides** (Jacq.) Tul.) Pers. Icon. Pict. t. 10, fig. 2.

*Clavata*, club-shaped.

R. 2·5 cm. high, 4 mm. broad, reddish flesh colour, becoming black at the base, club-shaped, solitary, simple, slightly twisted. Stumps. Rare.

*T. sarcoides* Sm. = **Coryne sarcoides** (Jacq.) Tul.

*T. folicola* Fuck. ? = **Hypocrea rufa** (Pers.) Fr. sec. W. G. Sm.

V. With a firm, hard nucleus.

2501. **T. encephala** (Willd.) Quél. (= **Naematelia encephala** (Willd.) Fr.) Willd. Bot. Mag. r, t. 4, fig. 14, as *Tremella encephala* Willd. *ἐν*, in; *κέφαλη*, head.

R. 1–3 cm., pallid flesh colour, pulvinate, subsessile, diaphanous, plicato-rugose, white pruinose, rooting. Nucleus white, large, hard.
Spores white, “pear-shaped, or subglobose, 12–16 × 10μ, or 9–10μ” Karst. Solitary, or clustered. Conifer branches. Sept.—March. Not uncommon. *(v.v.)*

2502. **T. rubiformis** (Fr.) Quél. (= *Naematelia rubiformis* Fr.) Corda, Icon. i, fig. 299, A. *Rubus*, blackberry; *forma*, shape.


2503. **T. virescens** (Schum.) Quél. (= *Naematelia virescens* Cda. sec. Fr.) Corda, Icon. iii, fig. 299, A.


**Phaeotremella** Rea.

*(φαιός, dark; *tremella*, the genus *Tremella*.)

Same characters as *Tremella*, but the spores dark coloured.


**Guepinia** Fr. (= *Gyrocephalus* Pers.).

*(Jean Pierre Guepin, a celebrated botanist.)*

Receptacle gelatinous, firm, erect, ear-shaped, spathulate, or infundibuliform, substipitate, or sessile. Hymenium inferior, smooth, or indistinctly veined. Basidia ovoid, vertically cruciately divided into one or two compartments, with long sterigmata. Spores white, oblong, or oval, smooth, producing sporidiola on germination. Growing on the ground, and on wood.

2505. **G. helvelloides** (DC.) Fr. (= *Gyrocephalus rufus* (Jacq.) Bref.) Rolland, Champ. t. 105, no. 240, as *Guepinia rufa*.

*Helvella*, a genus of fungi; *εἴδος*, like.

R. 5–10 cm. high, 4–6 cm. broad, *rosy orange*, becoming red, erect, variable in form, subspathulate, deeply infundibuliform, *like Craterellus cornucopioides*, substipitate, or sessile, diaphanous, entire, or lobed. Hymenium concolorous, smooth, or slightly wrinkled, white

**Exidia Fr.**

(ἐξίδιον, I exude.)

Receptacle gelatinous, soft, pellucid; globose, or hemispherical, marginate, substipitate, or sessile, sterile on the upper surface. Hymenium inferior, smooth, reticulately veined, foliaceous, even, or papillose with short, sterile papillae. Basidia deeply immersed in the gelatinous hyphae, and covered by a layer traversed by the sterigmata. Spores white, rarely tinged brownish, allantoid, cylindrical, or oblong, smooth, producing on germination, either strongly curved, or straight and rod-like sporidiola, or bunches of cylindrical conidia. Growing on wood.

I. Spores on germination giving rise to strongly curved sporidiola.

2506. **E. truncata** Fr.  *Truncata, cut off.*


2507. **E. intumescens** (Sm.) Rea. (= *Tremella intumescens* Sm.) Engl. Bot. t. 1870, as *Tremella intumescens.*

*Intumescens, swollen up.*

R. 2–5 cm., brown, becoming black when dry, rounded, or conglomerate, somewhat tortuously lobed, resembling the intestines of some animal, obsoletely punctate. Flesh whitish, streaked with fuscous, gelatinous, shrivelling to a mere skin when dry. Spores white, "oblong, slightly curved, 13 × 4μ" Karst. Fallen beech trunks, branches, and rails. Oct.—Jan. Uncommon. (v.v.)

2508. **E. recisa** (Ditm.) Fr. Ditm. in Sturm's Deutschl. Fl. 1, t. 13, as *Tremella recisa* Ditm.  *Recisa, cut off.*

*Glandulosa*, full of glands.


2510. **E. nucleata** (Schwein.) Rea. (= *Naematelia nucleata* (Schwein.) Fr.; *Tremella gemmata* Lév. sec Quél.; *Exidia gemmata* (Lév.) Bourd. & Maire.) Demid. Exped. t. 4, fig. 1, as *Tremella gemmata* Lév.  
*Nucleata*, having a kernel.

R. 2–10 mm., *hyaline, or tinged with amethyst or lilac, then opaline and finally brick or flesh colour, date brown when dry*, tubercular, round, then pulvinate and undulato-plicate, finally effused, and confluent, 4–5 cm., either inclosing a whitish separable core of oxalate of lime, or without a core (*Tremella hyalina* Pers.). Spores white, cylindrical, more or less curved, 10–14 × 5–7 μ; basidia ovoid, 12–16 × 9–12 μ. Hyphae 1.5–3 μ in diam. with indistinct clamp connections. Rotten wood, and fallen branches. Jan.—Dec. Not uncommon. (v.v.)

2511. **E. Thuretiana** (Lév.) Fr.  
G. Thuret.


2512. **E. viscosa** (Berk.) Rea. (= *Tremella viscosa* Berk.) Boud. Icon. t. 180, as *Tremella viscosa* Berk.  
*Viscosa*, sticky.

R. 1–4 cm., *white, with a greyish, or violaceous tinge, flattened, undulate, smooth, slightly viscid; margin more or less sinuate*. Flesh *whitish*, gelatinous, diaphanous, somewhat thin. Spores white, oblong, or sausage-shaped, often curved, 16–22 × 6–7 μ. Rotten wood, and fallen branches. Jan.—Dec. Common. (v.v.)

II. Spores on germination giving rise to straight, or rod-like sporidiola.

2513. **E. saccharina** Fr. (= *Ulocolla saccharina* (Fr.) Bref.)  
*Saccharina*, like sugar.

R. 3–8 cm., *tawny cinnamon, or the colour of crystallised sugar,*

var. foliacea (Bref.) Bres. (= Ulocolla foliacea Bref.) Bref. Unters. Heft vii, t. vi, fig. 2. 

Foliacea, leafy.

Differs from the type in its larger size, and lobes. Coniferous trunks, and branches. Nov. Uncommon.

Tremellodon Pers. 

(Tremo, I tremble; ὀδόν, a tooth.)

Receptacle gelatinous, soft, dimidiate, or spathulate, substipitate, or sessile. Hymenium covering fertile spines or teeth. Basidia globose, or ovoid, longitudinally cruciately septate. Spores white, subglobose, smooth, producing a mycelium on germination. Growing on wood.

2514. T. gelatinosum (Scop.) Pers. Boud. Icon. t. 178.

Gelatinosum, jelly-like.

R. 3–6 cm., glaucous fuscous, or tawny brownish, dimidiate, spathulate, or fan-shaped, rounded in front, attenuated behind, sessile or substipitate, surface papillose. Spines white, or glaucous, 2–4 mm. long, conical, straight, gelatinous. Flesh hyaline, gelatinous, transparent, thick. Spores white, subglobose, 4–7μ, multi-guttulate; basidia globose, longitudinally septate, 14–18 × 10–12μ, with 2–4-sterigmata. Edible. Coniferous stumps and on the ground. Sept.—Dec. Not uncommon. (v.v.)

Protodontia von Hoehn.

(πρῶτος, first; ὀδόν, a tooth.)

Like the genus Odontia in appearance, but possessing vertically septate basidia. Growing on wood.


R. 1–2 cm., pure white and slightly hyaline when fresh, yellowish when dry, effused, indeterminate, very soft and delicate. Spines hyaline, then yellowish and collapsing, slender, acute up to 400μ long, 100–150μ wide at the base. Flesh very thin, sometimes almost wanting, white and mealy when dry. Spores white, elliptical, one side flattened, 6–8(–9) × 3–4μ; basidia globose, immersed, vertically septate, 7–8μ in diam., with 2–4-sterigmata, 8–10 × 1.5μ. Hyphae very fine and closely adherent. Very soft, rotten wood. Dec. Rare.
Sebacina Tul. (= Thelephora (Ehrb.) Fr. p.p.).
(Sebacina, greasy.)

Receptacle coriaceous, gelatinous, membranaceous, waxy, floccose, or pulverulent, resupinate, effused, adnate, or crustaceous, and with the habit of a Corticium. Hymenium smooth, or papillose. Basidia longitudinally, cruciately divided, close together, or scattered, sometimes intermixed with the conidiophores. Spores white, cylindrical, oval, oblong, reniform or globose, smooth; producing sporidiola, or bunches of conidia on germination. Growing on the ground, or on wood.

Subgenus Eusebacina Rea.


2518. S. fugacissima Bourd. & Galz. Fugacissima, very fleeting. R. 5–2 cm., greyish, effused in a very thin, mucous, hyaline film, which disappears completely on drying, or leaves only a slightly glistening trace barely visible under a lens. Spores hyaline, cylindrical, curved, 4.5 × 2.5–4 μ; basidia longitudinally septate, 6–7 × 5–6 μ. Basal hyphae, thin walled, 2–3 μ in diam. Very rotten wood. Feb. Rare.

E. B. B.
Subgenus **Heterochaetella** Bourd.

(ἐτερός, different; χαίρετη, hair.)

Differs from *Eusebacina* in the hymenium possessing true cystidia.


R. 5–2 cm., hyaline, indeterminate, interruptedly effused, ceraceogelatinous, transparent, then collapsed and depressed, very thin, rough with hyaline setae under a lens; margin similar, or less continuous and reticulate. Spores hyaline, subglobose, or obovate, (4)-5-6 × (3)-4.5 μ, often 1-guttulate, germinating laterally or at the apiculus and then truly elongate, or conical; basidia obovate, or subglobose, 8–12 × 6–9 μ, longitudinally septate, with 2–4 subulate stigmata, 5–6 μ and finally up to 15 μ long. Cystidia scattered, or fasciculate, cylindrical, obtuse, 60–180 × 7–12 μ, projecting 10–45 μ above the hymenium, thin walled. Very rotten pine and juniper wood. Not uncommon. (v.v.)

**Subgenus Bourdotia** Bres.

(L’abbé H. Bourdot, the eminent French mycologist.)

Receptacle waxy or pulverulent, entirely resupinate, with the habit of a *Corticium*, possessing tubular, thin walled gloecocystidia, filled with a coloured juice, and rising perpendicularly in the hyphae.

2520. **S. (Bour.) Eyrei** Wakefield. (= *Gloeocystidium croceotingens* Wakef. sec. Bres.)

Rev. W. L. W. Eyre, a former President of the British Mycological Society.

R. 2–6 cm., hyaline grey, becoming whitish grey when dry, broadly and irregularly effused, closely adnate. Hymenium concolorous, smooth, or here and there tuberculate. Flesh very thin, 40–45 μ thick. Spores white, globose, 4–6 μ; basidia at first obovate, continuous, at length longitudinally, cruciately divided into 4 parts, 10–13 × 7–8 μ, with 4 curved stigmata, 7–9 × 1.5 μ (at the base). Gloecocystidia very numerous, arising from the base, not or scarcely projecting, cylindrical, or subfusiform, 25–35 × 5–7 μ, filled with a granular, yellow olivaceous juice. Vegetative hyphae either thin and hyaline, or red brown, thicker walled, 3–6 μ in diam., frequently septate, sometimes almost moniliform. The coloured hyphae often stain the wood a bright orange-red. Decorticated beech log. May—Oct. Rare.

**Eichleriella** Bres.

(Bogumil Eichler.)

Receptacle coriaceous, waxy, or membranaceous, subgelatinous, cup-shaped, or plano-concave, rarely pendulous; margin free. Hymenium smooth, rugulose, or Radulum-like. Basidia globose-ovoid,
longitudinally, cruciately divided, with 2–4-sterigmata. Spores white, cylindrical, or oblong, smooth, producing sporidiola on germination. Growing on wood.


*Spinulosa*, full of little thorns. R. 3–6 cm., *flesh colour*, then *wood brown*, longitudinally and broadly effused, confluent, separable; margin *white*, free, or reflexed, tomentose beneath. Hymenium *concolorous*, pruinose, *becoming red when rubbed*, usually bearing tubercles, distant, simple, or multifid. Flesh *concolorous*, coriaceous, soft, thick. Spores white, oblong, subcylindrical, curved, very obtuse, 15–18 × 6–10 μ; basidia longitudinally septate, clavate, then fusiform, 30–45 × 9–12 μ, with 2–3-, rarely 4-sterigmata; paraphyses brown at the apex. Dead branches of ash, and poplar. Sept.—March. Uncommon.

**TULASNELLALLES.**

Basidia subglobose, simple, with 2–4 very thick, stout sterigmata. Spores white, producing sporidiola on germination. Hymenium fully exposed from the first.

**TULASNELLACEAE.**

Same characters as the order.

**Tulasnella** Schroet.

(L. R. and C. Tulasne, the eminent French mycologists.)

Receptacle fleshy membranaceous, or gelatinous, then cartilaginous, resupinate, effused. Hymenium smooth, or plicate. Basidia globose, with 2–4 very thick, stout sterigmata, at first obtuse, then becoming elongated and filiform, springing from the apex, or the side of the basidia. Spores white, globose, ovoid, elliptical, pyriform, or pip-shaped, smooth, producing conidia or a mycelium on germination. Growing on wood, and humus.

2522. **T. violea** (Quél.) Bourd. & Galz. (= *Hypochnus violeus* Quél.)


branaceous, very thin. Spores white, pyriform, or pip-shaped, 8–11 × 5–7 μ; basidia obovate or clavate, 9 μ in diam. Sterigmata (or sessile spores according to Juel) usually 4, but sometimes 3 or 5, at first obovate, or elliptical, 10–13 × 5–7·5 μ, at length with a terminal elongation, 7–17 × 1–2·5 μ. Hyphae 3 μ in diam. Fallen branches of oak. Sept.—Oct. Rare. (v.v.)


R. 1–30 cm., purple, becoming blackish when dry, broadly effused; margin concolorous. Hymenium concolorous, undulately plicate. Flesh pale purplish, gelatinous, then horny, finally collapsing into a thin film. Spores white, elliptical, depressed on one side, laterally apiculate at the base, 8–10 × 4·5–5·5 μ; basidia clavate, 15–18 × 6·5–7 μ, with 4-sterigmata; sterigmata at first oblong, granular inside, 15 × 3–3·5 μ, at length collapsed, up to 20 μ long. Subhymenial hyphae, 6–8 μ in diam., basal hyphae pale purplish, 4 μ in diam. Pine needles, at the base of a stump. Nov. Rare.

CALOCERALES.
Basidia cylindrical, becoming forked with two long, pointed sterigmata. Hymenium fully exposed from the first. Spores always becoming septate on germination, and producing from each cell either one sporidiolum, or a bunch of conidia.

CALOCERACEAE.

Same characters as the order.

Dacryomyces Nees.

(δάκρυον, a tear; μῦκης, fungus.)

Receptacle gelatinous, or subgelatinous, homogeneous; globose, subglobose, tuberculate, often becoming cup-shaped, and sometimes flattened, sessile, rarely stipitate or substipitate. Hymenium smooth, wrinkled, or folded. Basidia with two long, pointed sterigmata. Spores white, or yellowish, oblong, cylindrical, ovoid, subelliptical, or ovato-triangular; simple, transversely septate, or muriform. Receptacles producing conidia, globose, consisting of radiating, septate, moniliiform threads. Growing on wood.

*Rosy.


**Yellow, or orange.


var. **hyalinus** (Pers.) Bourd. & Galz. (= **Dacryomyces hyalinus** (Pers.) Quél.; **Tremella albida** Huds. sec. Quél.) Hyalinus, transparent. Differs from the type only in being at the first entirely hyaline, then opaline. Birch. Sept.—May. Not uncommon. (v.v.)

2527. **D. stillatus** (Nees) Fr. Nees Syst. t. 90. **Stillatus**, distilled.

R. 2–8 mm., **yellow, then orange**, colour persistent, globose, then umbilicate and **Peziza-like**, somewhat confluent, at length plicate, sessile, or subtuplicate, white villose at the base, often yellow pruinose. Flesh paler, gelatinous, then firm. Spores white, or yellowish, “ovoid, or oblong, rarely depressed, 18–25 × 7–10μ, 1–pluri-guttulate, gutta yellow, finally 1-septate; basidia 50–60 × 7–12μ, filled with orange granules. Hyphae 1.5–3μ in diam., with small clamp connections” Bourd. & Galz. Dead pine branches. Jan.—Dec. Common. (v.v.)


R. 2–3 mm., **golden, orbicular, spherical when young**, immarginate, soon collapsing, pezizoid, at length flattened, persistently even. Flesh paler, gelatinous, then cartilaginous, firm. Spores yellowish, “oblong oval, or subelliptical, incurved especially towards the base, 12–24 × 6–9μ, becoming larger and 10-septate; basidia 45–85 × 4–6μ. Hyphae 1.5–4μ in diam., with clamp connections” Bourd. & Galz. Coniferous branches. Jan.—Dec. Not uncommon. (v.v.)

2529. **D. tortus** (Berk.) Massee. (= **Tremella torta** Berk.) **Tortus**, twisted.


2530. **D. succineus** Fr. (= **Peziza electrina** Phill. & Plowr.) Boud. Icon. t. 181. **Succineus**, amber colour.

R. 5 mm., **yellow amber**, punctiform, globose, gregarious, forming patches 3–6 cm.; margin minutely toothed, paler on the outside.
DACRYOMYCES. DITIOLA

Hymenium darker, velvety with the projecting sterigmata. Flesh subgelatinous. Spores white, oblong, slightly curved, 7–15 × 4–5 μ; basidia with two long sterigmata. Fallen oak branches and pine leaves. Rare.

***Pallid, or fuscous.


R. 1 mm., grey, worm-shaped. Sporophores 14 μ, spores 6 μ. Rotten wood. April—Sept. Rare.

Ditiola Fr.

(δίς, twice; ἓνθερνος, down.)

Receptacle gelatinous, subgelatinous, sometimes becoming horny, always firm and becoming indurated in the stem; cup-shaped, tubercular, or globose, sometimes branched, or lobed; stipitate, or sub-stipitate. Hymenium discoid, unilateral, smooth. Basidia cylindrical, with two long sterigmata. Spores white, oblong, cylindrical, elliptical, or elliptic cylindrical, smooth, simple, or 1–3 transversely septate. Growing on wood.


Radicata, rooted.

R. 2–8 mm., orange, tubercular, then nail-shaped with a distinct stem, convex, slightly viscid; margin obtuse: St. 3–6 × 2–3 mm., at first whitish, soon concolorous, rooting. Flesh paler, subgelatinous above, firm below. Spores white, oblong, cylindrical, rounded at both ends, 9–10 × 4 μ, becoming 1–3-septate; basidia cylindrical. Hyphae with clamp connections. Dead coniferous branches. Oct.—March. Uncommon. (v.v.)


Ulex, furze.

R. 1·5–5 mm., pale lemon yellow, becoming darker, head globose, then flattened and wrinkled, at first slightly villose with a thin, white, hyaline tomentum. St. 5–1 mm., sometimes absent, hyaline-villosé when young. Spores white, elliptico-cylindrical, 15 × 5 μ, 4–5-guttulate, then cylindrical, with an oblique, large apiculus at the base, 15–18 × 5 μ, 3-septate. Dead furze stems. Jan. Uncommon.

*Merulina*, like the genus *Merulius*.

R. 1–3 cm., yellow amber, cup-shaped, oblique, often irregular, and with linear folds on the outside; margin thin, waved. St. concolorous, slender. Flesh yellowish, diaphanous, gelatinous, then firm. Spores white, oboval, or oblong, depressed at the side, $9–13 \times 5–6 \mu$, 1–3-septate. Conidia rough, subglobose, 9–12 \mu, formed on the exterior of the receptacle. Hyphae swollen at the ends, 5–6 \mu in diam., with *Opuntia*-like branches” Bourd. & Galz. Dead branches, and wood, especially beech. Dec.—Feb. Uncommon.


R. 4 mm. high, orange red, concave, oblique, often like a rabbit’s ear. St. concolorous, short, oblique. Flesh gelatinous, then horny. Spores white, elliptical, slightly curved, $12 \times 5–6 \mu$. Gregarious. Dead wood. Nov. Rare.

**Femsjonia** Fr.

(*Femsjonia*, belonging to Femsj.)

Receptacle gelatinous, or floccose, heterogeneous, erumpent, convex, then plane, obconic, sessile. Hymenium smooth, becoming wrinkled. Basidia cylindrical, with two long, pointed sterigmata. Spores yellowish, boat-shaped, simple, and multi-guttulate, then becoming oblong and multi-septate. Growing on wood.

2537. **F. luteo-alba** Fr. Luteus, yellow; alba, white.

R. 2–15 cm., bright golden yellow, erumpent, convex, then plane, obconic, sessile, somewhat rooting, disc becoming wrinkled with age, white tomentose beneath. Flesh yellowish, subgelatinous near the hymenium, floccose below, firm. Spores yellowish, boat-shaped at first and multi-guttulate, 12–21 $\times 7–8 \mu$, becoming oblong, and 8–10 or more-septate, 18–22 $\times 7–8 \mu$. Basidia cylindrical, 75–80 $\times 5–7 \mu$, with two long sterigmata, 35–40 \mu. Hyphae with clamp connections. Fallen branches of oak, and birch. Sept.—Nov. Not uncommon. (v.v.)

**Dacryomitra** Tul. (= *Dacryopsis* Massee).

(δάκρυον, a tear; μύτρα, a turban.)

Receptacle gelatinous, or subgelatinous, firm, erect, cylindrical, apex globose, or elongate, stipitate. Hymenium smooth, or rugosely wrinkled. Basidia cylindrical, with two long sterigmata. Conidiophores present, or absent, accompanying, or preceding the basidia. Spores white, oblong, or elliptical, smooth, simple, or transversely septate. Growing on wood.
DACRYOMITRA. CALOCERA

*Hymenium with basidia only.

2538. D. glosoides (Pers.) Bref. (= Calocera glosoides (Pers.) Fr.)

γλῶσσα, tongue; εἶδος, like.

R. 3–12 mm. high, yellow, clavate, or pear-shaped, thickened, obtuse, compressed, slightly viscid. St. concolorous, round, white floccose at the base. Flesh concolorous, gelatinous, firm. Spores white, broadly oblong, or elliptical, incurved, often attenuated at the base, 13–15 × 5–6 μ, 2–3-septate. Dead oak branches. Sept.—Dec. Uncommon. (v.v.)

**Hymenium with conidiophores, and basidia.

2539. D. nuda (Berk.) Pat. (= Ditioila nuda Berk.) Massee, Brit. Fung. Fl. I, p. 56, figs. 5–6, as Dacryopsis nuda Massee.

Nuda, naked.

R. 3–4 mm., reddish orange, head hemispherical, flattened below. St. 3–4 × 2–3.5 mm., white, or tinged yellow, minutely tomentose. Flesh subgelatinous. Spores white, elliptic oblong, with an oblique apiculus, 14 × 5 μ, 3-septate; basidia cylindrical, 56–60 × 5–6 μ. Conidiophores linear, straight, aseptate, simple, or rarely with 1–3 short branchlets near the apex, 35–40 × 1.5 μ; conidia elliptic oblong, 3 × 1 μ. Fir stumps. Sept. Rare.

Calocera Fr.

(καλός, beautiful; κέρας, a horn.)

Receptacle gelatinous coriaceous, cartilaginous when dry; erect cylindrical, simple, or branched. Hymenium smooth, amphigenous. Basidia with two long sterigmata. Spores white, or yellow, elliptical, elliptic oblong, oblong, or comma-shaped, smooth, or punctate, simple, becoming septate on germination. Conidiophores rarely accompanying the basidia. Growing on wood, more rarely amongst leaves.

*Branched.

2540. C. viscosa (Pers.) Fr. Rolland, Champ. t. 104, no. 236, as Calocera flammea (Schaeff.) Quél. Viscosa, sticky.

R. 1–10 cm. high, golden-egg-yellow, becoming orange when dry, branched, long rooted, viscid, even, linear. Branches concolorous, round, or compressed, tense, straight, repeatedly dichotomous, apex generally forked. Flesh yellow, gelatinous, then cartilaginous, firm. Spores deep ochraceous, elliptic oblong, often depressed on one side, 10–11 × 4–5 μ, 3-guttulate; basidia 40–50 × 5–6 μ. Coniferous stumps. July—Jan. Common. (v.v.)

2541. C. palmata (Schum.) Fr. Palmata, palmate.

R. 2 cm. high, orange, then yellow, branched, compressed, dilated upwards, divided. Branches concolorous, somewhat round, obtuse.

**Caespitose.

R. 3–5 cm. high, yellowish, linear, simple, subacute, caespitose, two or three springing from a thick, strigose, subglobose, rooting, tuberous base. Flesh gelatinous, tough. Spores white, “elliptical, comma-shaped, 10 μ, punctate” Quél., “9–10 × 6 μ” Massee. Rotten trunks. Rare.


2544. C. corticalis Fr. Corticalis, pertaining to the bark.

***Simple, distinct.

2545. C. stricta Fr. Stricta, rigid.

var. epiphylla Fr. ἐπίφυλλος, upon; φύλλον, a leaf.
Differs from the type in being longer, 5–7.5 cm. high, in the base being naked and bluntly rooted, and in growing amongst pine needles. Sept.—Oct. Uncommon.

2546. C. striata (Hoffm.) Fr. Hoffm. Fl. Germ. Cr. 2, t. 6, fig. 1, as Clavaria striata. Striata, furrowed.
Apyrenium lignatile Fr. = the conidial condition of Hypocrea rufa (Pers.) Fr.
Apyrenium armeniacum B. & Br. = the conidial condition of Hypocrea gelatinosa (Tode) Fr.
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