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Mr. RAY's Travels.

Vol. I.
TRAVELS
THROUGH THE
LOW-COUNTRIES,
Germany, Italy and France,
With curious Observations,
NATURAL, | MORAL,
Topographical, | PHYSIOLOGICAL, &c.
ALSO,
A CATALOGUE of PLANTS,
Found spontaneously growing in those Parts, and their VIRTUES.

By the late Reverend and Learned
Mr. JOHN RAY, F.R.S.

To which is added,
An Account of the Travels of
FRANCIS WILLUGHBY, Esq;
Through great Part of SPAIN.

The SECOND EDITION.
Corrected and Improv'd, and adorn'd with COPPER-PLATES.

VOL. I.

LONDON:

MDCCXXXVIII.
TRAVELS
THE
ROUND
THE
COUNTRIES
OF
ENGLAND
AND
FRANCE
WITH
OTHER
OCCASIONS
AND
MORALS
EXTRACTED
FROM
THE
PHILOSOPHICAL
MAGAZINE
AND
OTHER
JOURNALS.

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THE
PREFA CE.

When I had travelled over the greatest part of England in search of plants, and sufficiently informed myself what sorts my own country naturally produced; I grew desirous to see what variety foreign countries of a different soil and temperature of air might afford. For which reason I was easily induced to accompany Francis Willughby Esq. Philip Skippon Esq. and Nathanael Bacon Gent. in a voyage beyond the seas. The success whereof, as to the number of plants found, exceeding my expectation I thought it might not be amiss for the satisfaction of the curious, and direction of those who may hereafter travel the same places with the like design, to publish a Catalogue of all not native of England that I had observed. But considering the paucity of those who delight in studies and enquiries of this nature, I have added a narrative of our whole voyage, with some Observations Topographical, Moral, Natural, &c. made by myself and the aforementioned gentlemen. I shall say nothing to recommend them, but only that what I write
as of mine own knowledge is punctually and in all circumstances true, at least according to my apprehension and judgment, I not giving myself that liberty which many travellers are wont to take, and the common proverb seems to allow them.

I might have been more large concerning France but that we were frustrated in our design of making the Grand tour (as they there call it) being driven out thence by the French King's declaration, commanding all the English to withdraw themselves and their effects out of his dominions within two months time. And that country being near us, much travelled in and well known to those of our nation, and there being many Itineraries and Descriptions of it extant in print, I thought it less needful to write much concerning it.

As for Spain, it being a country out of the ordinary road of travellers, and those that have viewed it giving others little encouragement to follow their example, but rather condemning themselves for their curiosity, as having found nothing there which might answer their trouble and expence, that the reader may know something of it without the hazard and charge of travelling in it, I have added an Account of Mr. Francis Willughby's voyage through a great part of it. And this is all that I thought needful to acquaint the reader with by way of preface.
OBSERVATIONS
Topographical, Moral, and Physiological,
MADE IN A
JOURNEY
Through Part of the
LOW-COUNTRIES, &c.

April 18, 1663.

E passed over in the packet-boat from Calais. Dover to Calais, a town formerly held by the English about 210 years, viz. from the 21. of King Edward III. when it was taken, till the last year of Queen Mary, when it was lost. Since that time, Anno 1596. it was taken by the Spaniards under Arch-duke Albert in three days time, only the castle held out seven or eight. And last of all, Anno 1598. it was restored to the French upon the treaty at Vervin, who now hold it. It is advantageously situate for defence, and now very strongly fortified after the modern fashion with an impenetrable wall and bastions of earth, a deep trench full of water to the landward, and a large citadel. The new wall and citadel were built about 44 years since. The old stone-wall B and
and ditch are still remaining, but inclosed within the new. The town for bigness exceeds Dover, and seem'd to us frequent and full of people. It hath a large square Piazzas or market-place, wherein are two great markets weekly kept, the one on Tuesdays, the other on Saturdays. The government is by a Mayor and four Eschevins chosen annually by the burgesses or freemen.

From Calais, April 21. we travelled to Dunkirk, by the way taking a view of Graveling, a town neither large nor well built, and, at our being there, but thinly inhabited; yet stands it in so low and plashy a level, and is environed with so many out-works and great ditches of water, that one would think it were by force inexpugnable, and wonder that in so short time it should be constrained to surrender to the English and French besieging of it, Anno 1658. Before we came into the town we pass'd over five draw-bridges.

Dunkirk. Dunkirk is one of the four port-towns of Flanders, about the bigness of Cambridge, according to our estimation; wellbuilt and populous, strongly fortified all about where it is capable: only toward the Downs or sandy hills on the southwest-side of the town, though there hath been much cost bestowed in raising forts, yet were they almost filled up and spoiled with sand driven in by the force of stormy winds, against which it will be very hard to secure any fort that shall be there erected.

Nieuport. From Dunkirk, April 23. we rode along the sea-coast to Oostend, diverting at Nieuport, to refresh ourselves and get a sight of the town. This is another of the ports of Flanders, and a place of good strength. It hath a long and secure haven, but scarce capable of ships of any great burthen, a handsome key, broad and strait streets. The houses generally but low-built, and of timber. The inhabitants maintain themselves chiefly by fishing.

Oostend is another of the port-towns of Flanders, a place very considerable as well for its strength as the convenience of its harbour, which is of good capacity, safe from winds, well defended, and deep enough to receive ships of great burthen. The buildings of the
town are not tall, but handsome and uniform; the streets regular, well paved, exactly level and straight. And it is no wonder they should be so, the present town having been contrived and set out all at once. For when it was surrended up to Arch-duke Albert, after that famous siege of three years, the Spaniards found nothing there but great heaps of earth and rubbish, scarce one house of the old building remaining. This town is most regularly and exactly fortified, so that it seemed to us one of the strongest pieces in all the Low-Countries.

The fourth, by some esteemed the fifth port-town of Sluys. Flanders, which hath the largest and most capacious harbour of all the rest, viz. Sluys, subject to the States of the United Provinces, we saw not.

April 24. We took places in the passage-boat for Bruges, and at a league and half's end came to a lock or sluice, where we shifted our boat. These locks or Softegni (as the Italians significantly call them) are usually placed at a great declivity of any channel or fall of water, and serve to sustain or keep up the water (as the Italian name imports) to make a river navigable which either wants water or hath too steep a decent. There are of them in England (as we have been informed) upon Guildford river in Surrey, and have been formerly upon the Trent. They are usually thus contrived: First, there are placed a pair of folding-doors or flood-gates cros the channel to stop the water de-
scent: then, a competent space being left to receive boats and lighters, &c., another single gate: in each of these gates, toward the bottom, is made a hole or window, fitted with a convenient shut or wicket (Portello the Italians call it) to open and shut as occasion requires. When a vessel comes down stream to the Softegni, first they open the Portello of the foremost gates, and let the water into the inclosed space, which will necessarily rise there till it come to be equal with the level of that above the gates; then they shut the Portello, and, the stream making no resistance, easily draw back the gates, and receive in the boat. Which done, they open the Portello of the lower gates, whereupon the stream above presently drives to and keeps fast the foremost gates, and the water in the inclosed space sinks till it be even with that in

B 2 the
Observations Topographical,

the channel below; and then they open the gate itself, and let the boat out. When a boat goes up stream, they first open the lowermost gate, and receive it into the middle or inclosed space; then withdraw or set open the Portello in the uppermost gates, letting in the water till it come to be equal with the level of that above the gates; and lastly draw back the gates themselves, and let out the boat. N. B. That both upper and lower gates open against the stream, and are driven to and kept shut by it; and that the leaves of the upper gates lie not in the same plain when shut, but make an obtuse angle, the better to resist the force of the water.

Bruges. Bruges, so called from the multitude of bridges therein, is four leagues distant from Ostend, a large city and well built, many of the houses being four or five, and some six stories high. It is of a round figure, well walled and intrenched, hath been formerly one of the chief mart-towns in Europe; and though it be at present less than what it was for trade, riches, and number of people, yet it is no mean, poor, or inconsiderable place, but in so good condition, that it may well challenge place among the cities of the second rate in Europe. It is now an episcopal see, and hath been noted for handsome women. Here we first observed the custom mention'd by Erasmus in his Colloquijs, of fastening a small piece of white linen to the ring or rapper of the door of that house where a woman lies in. A. Forte prateriens has Ædes vidi cornicem obducentam candido lineo: demirabar quid effet causa. Fa. Adeone hospes es in hac Repub. ut ignores hoc esse symboolum puerperi in Ædibus? Eras. Colloqu. Puerpera. We saw the manner of raking up water for the use of the citizens by a chain whereon are fastened cylindrical iron buckets. This chain is round in form of a bracelet, neck-lace, or wheel-band, and put over a large Axis deeply furrowed, from which it hangs down into a well of water, and being turned about by the Axis, the descending buckets have their mouths downward, and take up water as they pass through the well; which (ascending with their mouths upward, but a little inclining from the chain outward) they bring up to the Axis, to which so soon as they are come, by reason of their position they must needs turn it out into a trough placed under the Axis.
Gates for a Lock to keep up the water of any River for the use of Navigation.
The figure of the gates as well of if inside of them as the out.
An Engine to raise water with a chain of Buckets taken out of Kirchers Mundus Subterraneus
Moral, and Physiological.

Axis, by which it is conveyed to a cistern, and thence by pipes to private houses. This kind of machine is generally used in Italy, Spain, and France for raising up water, to water their gardens in summer-time. The deep furrows in the Axis are to catch hold of the buckets, that the chain flip not back by reason of the weight of the ascending buckets. In this city are no more than seven parish-churches, but of monasteries or religious houses (as they call them) good store, 60 according to Goltitz. In the church of Notre-dame, or St. Mary, lies the body of Charles the Hardy, duke of Burgundy, and lord of most of the Netherlands, under a stately monument with a French inscription upon it, which tells us, that he was slain in the battle of Nancy, 1476. and his body brought from Nancy hither by his great grand-child Charles V. Emperor, and that K. Philip II. erected to him that monument. We saw in this town one John Tates, a man of a gigantick stature, born at Schoonhowen in Holland: one of a middle stature might well stand under his arm-pit, from his middle finger's end to his elbow was 25 inches and a half, the length of his hand to his wrist 11 inches, his middle finger 7 inches. He was well shaped, and all his limbs proportionable to his height. He was afterwards (as we heard) brought over into England to be shewn.

Near this city (as Boetius de Boot, who was native thereof, relates) digging ten or twenty ells deep in the earth, they find whole woods of trees, in which the trunks, boughs, and leaves do so exactly appear, that one may easily distinguish the several kinds of them, and very plainly discern the series of leaves which have fallen yearly. These subterraneous woods are found in those places which 500 years ago were sea, and afterwards either left and thrown up by the sea, or gained from it, the tides being kept off by walls and fences. But before the fore-mentioned term of 500 years, there is no memory that these places were part of the continent. And yet seeing the tops of these trees do for the most part lie eastward, because (as is probable) they were thrown down by western winds, which on this coast are most boisterous and violent,
Observations Topographical.

it will necessarily follow that, in the most antient times and before all memory of man, these places were firm-land, and without the limits of the sea.

The describer of Amsterdam tells us, that in Friesland and Groningland, there are great numbers of these under-ground trees, found and digged up in mosses and fenny grounds where they dig for turves. In England also there are found of them plentifully in many places, the wood whereof they usually call Mosf-Wood, because it is for the most part digged up in the mosses, or moorish, boggy fens and levels where they get turves; though sometimes it be found in firmer grounds, and sometimes in the fides of mountains. The question is, How these trees came to be buried so deep under ground? To which we may probably answer, That many ages ago before all records of antiquity, yea, before primitive fame or tradition itself, these places were part of the firm land, and covered with wood; afterwards being undermined and overwhelmed by the violence of the sea, they continued so long under water, till the rivers brought down earth and mud enough to cover the trees, fill up these shallows, and restore them to the firm land again. In like manner upon the coast of Suffolk about Dunwich, the sea doth now, and hath for many years past very much incroached upon the land, undermining and overwhelming by degrees a great deal of high ground; infomuch that antient writings make mention of a wood, a mile and half to the east of Dunwich, which is at present so far within the sea. Now, if in succeeding ages (as likely enough it is) the sea shall by degrees be filled up, either by its own working, or by earth brought down by land-floods still subsiding to the bottom, and growing up over the tops of these trees, and so this space again added to the firm land; the men that shall then live in those parts (if the world so long last) will, it's likely, dig up these trees, and as much wonder how they came there, as we do at the present moss-wood.

And
Morals and Physiological.

And now that I am speaking of filling up and atterrating (to borrow that word of the Italians) the skirts and borders of the sea, I shall take leave to add by the bye, that to me it seems very probable, that all the Low-Countries have been in this manner gained from the sea. For Varenius in his Geography tells us, that, sinking a well in Amsterdam, at near an hundred foot deep, they met with a bed or floor of sand and cockle-shells; whence it is evident that of old time the bottom of the sea lay so deep, and that that hundred foot thickness of earth above the sand arose from the sediments of the waters of those great rivers, which there emptied themselves into the sea, and in times of floods brought down with them abundance of earth from the upper grounds: which yet is a strange thing, considering the novelty of the world, the age whereof, according to the usual account, is not yet 5600 years. That the rain doth continually wash down earth from the mountains, and atterrate or add part of the sea to the firm land, is manifest from the Lague or flats about Venice; the Camarg or isle of the river Rhone about Aix in Provence, in which we were told that the watch-tower had, in the memory of some men, been removed forward three times, so much had been there gained from the sea; and many places in our land: only it is a received tradition, and may perhaps be true, that what the sea loseth in one place it gotteth in another. 

That the height of the mountains, at least those which consist not of firm rocks, doth continually diminish, is I think very likely, not to say certain. I have been credibly informed, that whereas the steeple of Craich in the Peak of Derbyshire, in the memory of some old men yet living, could not have been seen from a certain hill lying between Hop- ton and Wirksworth, now not only the steeple, but a great part of the body of the church may from thence be seen: which without doubt comes to pass by the sinking of a hill between the church and place of view. Hence it would follow, that in process of time (but it would be many thousands of years first,
Observations Topographical,

first) all the hills and mountains (except the rocky) would by floods and shots of rain be quite washed away, and the whole earth levelled.

But to return to the trees. One material exception against our solution still remains, and that is, that a great many of these subterraneous trees digg’d up in England are thought to be firs, whereas that kind of tree doth not at present, and consequently we have reason to believe never did, grow wild in this kingdom. To which I answer, that this exception would indeed much puzzle me, were it certain and manifest, that this is fir-wood, which is so generally reputed from its grain, inflammability, and other qualities. But since it doth not clearly appear to me so to be, I shall repelte my answer, till I be fully satisfied concerning it.

From Bruges, April 27. we went by boat to Gaunt, the greatest city of Flanders; whence the Emperor Charles V. who was born here, was wont to boast, that he could put Paris into his Gant, in which word there is an equivoque, Gant in French signifying a glove. Yet is the wall too great for the buildings, inclosing much void ground. In this city, as in Bruges, are 7 parish churches, and, according to Golnitz, about 55 religious houses. We ascended the tower, called Bellefort, about four hundred steps high, and saw the famous bell, called Roland, not so great as we imagined. This city is well built, well wall’d, and trench’d about, and the inhabitants to us seemed very busy and industrious.

From Gaunt, April 30. We travelled to Brussels, about thirty English miles distant, passing through Asl, a fortified town of some note.

Brussels is the capital city of Brabant, where the Spanish governor of these provinces, who was then the marques of Caracene, usually resides. It is well built, large, and populous. The streets are broad; the stadthoufe a fair and uniform building. The common people here, and also at Antwerp, Lovain, Mechlin, and other cities of Brabant, (as hath been noted by others) make use of dogs to draw little carts and wheel-barrows laden with commodities about the streets. But for the advantage they make of them,
setting aside the maintaining of an old custom, I think they might as well employ their own arms and shoulders. In the gallery by the riding-place, is an echo, which reflects the voice fifteen times as we were affured: we observed about ten distinct reflections, the wind hindering us as to the rest. At this time it happened Ludovicus de Bills to be in town, whom we visited, and saw five bodies which he had with him, embalmed and preserved after his newly invented manner, entire with all their entrails and bowels. He was then going to the university of Lovain, with whom he had made an agreement for discovery of his art, and reading publick anatomy lectures.

Our next remove (May 2.) was to Lovain, a large city, but neither well built nor well kept, only the stadt-house is a stately structure, and makes a fair show at a distance. The wall is of great extent, more in circuit than that of Gaunt by three rods, taking in much void ground. The colleges are in number 43, the names whereof together with their founders are exhibited in the ensuing catalogue which we there found published in print.

Almae
Alma Universitatis Lovaniensis Collegia ac Pædagogia Anno Salutis CIO. IIC. LIV. enumerata.

1. Magnum five Majus Theologicum, in via quam Praepositī vocant, omnium Academiæ Collegiorum primum maximumque est; erexitum in honorem S. Spiritus, Anno Dom. 1442. Universitatis decimo-sexto, per Ludovicum Rycckium, Patricium Lovaniensem, ac Principum Brabantiae Quaestorem: quod ex tenuibus exordiis (ut plerumq; alia) variorum donationibus ita exrevuit, ut in aliu eadem adherens, quod hujus comparatione Minus dicitur, Anno 1562. diviserit. Mirum, quam

—Humili, verum sæcilibus, ortu,
Creverit auspiciis Academia magna Lovani.

3. Juris Utriusq; vulgo Baccalaureorum, S. Ioanni dicitum, in via nova, Anno 1483. per Robertum à Lacu Gandensi inchoatum, ac ab aliis auctum.


5. Atrebatense, in via Praepositi, à Nicolao Rutherio, patria Luxemburgensi, & Atrebatorum Episcopo, magnificâ domo
Moral, and Physiological.


Houterlaeum, in via Vaccariâ, Anno 1511. per Henricum de Houterle, Hooghstratanum, D. Petri, hic Scholar-Cham ac Militem Hierofolymitanum, Anno 1643. renovatum.


Sabaudia, in via Nummariâ, Anno 1548. ab Euftachio Chapuys, Sabaudo, Annessiacensi f. U. Doctore ac Carolo V. à Consiliis, &c. ingratiam suorum popularium, ut & aliiud in patriâ in honorem S. Euftachii, magnificè extructum & dotatum.

S. Annæ, in viâ Praepositi, Nicolaus Goblet, BovinienÆ, DionantenÆ Praepositus, Anno 1553. fundavit.

Druttianum, in angulo vulgo Cucullino, à Michaelæ Druittio, oriundo ex Vollerinchove territorii Gafletensii, f. U. Doctore, Prof. & hic ad D. Petrum Decano, qui obiit Anno 1559.


Vigilianum, quod etiam Frisonum, in viâ S. Quintini, Anno 1568. à Viglio ab Ayta Zuichemo, Frisio, Praeposito Gandavensi, & apud Belgas privati Concili praëside, popularibus suis ac Gandavensesibus cum amplâ dote ædificatum.
OBSERVATIONS Topographical,


Cranendonck, ad viam Judaicam incepit Anno 1574. Auctore Marcello à Cranendonck, Taxandro, Tongelrensi D. Jacobi hic Canon, in honorem quinque Vulturem Christi.

Divae, in monte Capellæ, ut vocant, Auctor est Greg. Divaeus, Bruxellensis, qui Namurci, Romæ ex Jubileo reiweis, ad beneficior mercedem & itineris quietem & vitæ decepsit, Anno 1576. Ætatis sua 22.

Brugeliana, unicum Medicorum, in viæ novâ, à Petro Brugelio Sylvæducensi Med. Doctore ac Professore, Anno 1577.

Seminarium Regium, in via Præpositi, à Philippo II. Hispaniarum Regis ac Belgarum Principis, de Academiâ & alis titulis bene merito, procurante Ioanne Vendevillo, Anno 1579.

Pelsanum, in via Prædicatorum, munificentia Ioannis Pels à Recklinchusia, Westphali, huic Universitatis ab ætis, An. 1574. suis conteraneis fundatum & cincinni renovatum, An. 1622.

Montenæ, in via novâ, Joan. de Bievene, Montenæ, J. U. D. ac Professore, moriens reliquit, Anno 1596.


S. Willebroldi quod vulgo Sylvæducense, in viæ novâ, jam ab annis plus minus 20. initium habuit, confirmatum est 1625. morte Fundatoris sui Nicolai Zoësii Amorsforitii Epis. Sylvæduc.


Divæ
Morale, and Physiological.

Divae Pulcheriae, in foro Boario, fundatum bonis auspiciis
Lovanii, Anno 1616, per divisionem cujusdam Fundationis
Universitatis Colonienensis, magna quotidie incrementa surrit
piam multorum liberalitate.

Ordinis Teutonici, ad viam lapideam exordiebatur Ed-
mondus Huyn ab Anstenraedt Ord. Teut. Eques & Com-
mandator Provincialis Balviniæ Juncetaniae, &c. Anno
1617.

Canonicorum Regularium S. Augustini, in viâ lapidea
juxta S. Iacobum. 1618. procurantibus Antonio van
Berghim Priorie in Viride-Valle, & Joanne Petersem Beth-
lehemitico juxta Lovanium.

Mylium vulgo Luxemburgense, in viâ vaccariâ,
Auctore Joanne Mylio Luxemburgenst J. U. Doctore, qui in-
gentem pecuniae summam mortis in hunc finem reliquerat,
tandum stabilitum Lovanii vigesimo tertio a morte Fundato-
ris Anno, scilicet Dom. 1619.

Hibernicum, in viâ que Bakelenica vocatur, Auctori-
tate Apostolico per sacram de propag. Fidei Congregationem
studio & dote Eugenii-Matthaei Archiepiscopi. Dublinensis,
An. 1623, incoatum.

Alnense, in viâ Quintinianâ, per Edmundum Jovent
Chymacensem, Alneâ Ord. Cisterc. Abbatem, pro Mona-
chis ejusdem Caenobi Anno 1626. fælicibus auspiciis ædi-
ficatum.

Floreffense, in Bakelenicâ, Anno 1626. exordia sua
acceptit à Joanne Roberti Floreffensi Ord. Praemont. Præ-
sule, Supriore Generali ac Circariarum Floreffæ & Flan-
driae Vicario.

Joan. Malderi, in viâ Martinianâ, Episcopi Antuer-
piensis, Anno 1633, coemptis in eum usum ædibus à V. N.
Ludovico Tempelio, Praetore Urbis Lovaniensis.

Franc. Hövi, Londerzelii S. T. L. Pastoris ad S. Wal-
burgim Antuerpiae, in Monte siliceo, cui Fundator inscribi
voluit Patrimonium Christi. Obiit An. 1633. Ibid. De-
cembris.

Minimorum, pro Religiosis Ord. S. Francisci de Paula,
Anno 1639.

Beggardorum, pro Religiosis sui Ordinis, Anno 1640.

Collegium S. Michaelis fundatum per R. & Erudissi-
mum D. Laurentium Zoëntium Sacræ Theol. Licent. Insigni
Ecclesiæ Collegiæ S. Petri Lovanii Canonicum & Sa-
cerdotem
Observations Topographical, circa 1651.

Sequentur quatuor Praedagogia, ut vocant, in quibus Artes liberales Philosophiæque docentur, Academiæarum omnium famosissimæ Scholæ, de quibus hoc vulgare Tetrafixion:

Quatuor hic inter se Collegia certant
De Sophiæ studiis, & vincere quodque laborat.
Porcus alit doctos: volitat super omnia Falco:
Castrum bella gerit: florescunt Lilia primis.
Moral, and Physiological.


Felixque augmentum precatur, J. O.

The several faculties are distinguished by their habits: Divinity-students wear constantly gowns and square caps; those of other faculties wear none, except at their publick exercises in the schools. The principal colleges, called Pedagogies, are four. In these only is philosophy taught by two professors, the one called Primarius, the other Secundarius. Those students that are gentlemen fit in a higher form, called Scamnum Nobilium; and give each of them six gilders quarterly to the Primarius professor, and two patacoons to the Secundarius. Those of inferior rank, who fit in the lower forms, give half so much to each. The Primarius reads in the morning from half an hour after six of the clock till half an hour after seven; then they go to mass till eight, and after that to their private studies till ten; then the professor reads again till eleven. In the afternoon the Secundarius professor reads from half an hour after one, till half an hour after two. He begins again half an hour after four, and reads till half an hour after five. All students must write after the professors in a large note-book, and in the intervals of lectures peruse and study what they wrote. The professors readings are divided into Dictata, which are theses or propositions, and Annotata, which are solutions of objections. The first thing they require of students, when they come to this university, is to be matriculated, and swear their belief of all the doctrines of the Romish church. The close or end of the oath is the same with that of our universities, Ita me Deus adjuvet & haec sancta Dei Evangelia.

Young students give their names to the president of their college or pedagogy, and for every time they are
Observations Topographical,
are absent from lectures are punished a shiver, which is somewhat more than a penny English. For every time they miss a publick exercise in law or physic, they pay three shivers; if they be to exercise themselves, and miss, they are mulcted twenty shivers. The students are not allowed to wear swords about the streets.

The professors of each pedagogy chuse yearly 12 of the best scholars who are of two years standing. These 48 are publickly examined, and out of them about 12 usually chosen to burse or exhibitions. The burses signify their diet, chamber, and a greater or less stipend, according as the burses are. It is very creditable to be chosen to a burse. He that is the first of the chosen hath a bell rung for him in his college 48 hours together without intermission. When they are thus chosen, they may go into what college they will and study what they please. They are commonly preferred to professorships, and afterwards to canons places. The degrees here conferred are Bachelor, Licenti¬ate, and Doctor. In Divinity after two years standing they may be Baccalaurei currentes, after another year Baccalaurei formati. Seven years after this they may be Licentiates in divinity. They are seldom created Doctors till they attain to 50 years of age, unless they be very eminent for learning. Every Bachelor is called Doctissimus: A Licentiate in medicine Peritissimus, in law, Consulti¬simus, in divinity Eximius: Doctors of medicine and law are Clarissimi, of divinity Eximii Domini, & Magistri nostri. When any one goes out Licentiate, there is a treatment made, to which all the doctors and the opponents are invited, and have gloves given them. The graduate is attended from the schools with drums and trumpets. At his lodging a bell is hung up and rung for 24 hours together. He hath liberty to chuse a coat of arms, and is immediately reputed a gentleman.

The men of most note for learning in this university at present (1663.) are Gutifchovius, Medicinæ & Matheseos Professor. Vopiscus Fortunatus Plem¬pius, Medicinæ Professor primarius, called Fortunatus, because he was cut out of his mother's womb, as we were
Moral, and Physiological.

were informed. Dorlix, Med. Doctor. Snnichius, Theologie Doctor, an Irish-man. Pontanus, Theologie Doctor, dean of S. Peter's, and Cenfor Libroram. Brady, an Irish-man, Juris Canonicci Doctor. Leyens, Juris Canonicci Doctor. Gulinx was profeffor of philosophy here, but is now turned Protestant, and lives at Leyden: Van Verpe, Theol. Professor primarius. The publlick schools are old, mean, and homely.

May 4. We walked out of Lovain about half a mile to see the duke of Arencbos palace, and the Celestants cloifter adjoining. We found, among the corn by the way-sides as we went, plentifully growing Caryophyllus arvensis umbelliferus. J. B. and Albin felis Plants a- hederacei Rutae modo divisis Lob. both in flower. At about Lo- vain.

this city we first observed storks, women-porters, and soldiers begging on horfe-back.

From Lovain, May 5. We travelled to Meclbin, Malines the French call it, a very elegant and well built city, exceeding our expectation both for beauty and greatness. It is the seat of an archbishop, and with a small territory of nine villages about it makes one of the seventeen provinces, called the lordship of Meclin. The cathedral church is dedicated to St. Runbald. Many manufactures exercised here of the most gainful sort, as making of linnen-cloth, casting of great artillery and bells; and which we especially took notice of tanning, there being two or three whole streets of tanners.

Hence May 5. We boated to Antwerp, a city for strength and beauty comparable to any of its bigness in Europe. For the latter, in my opinion, it much excels Florence, with which it is wont to be put in competition. And for the former, it is encompassed with a wall of earth faced with free-stone, of that thickness that there are several rows of trets and broad walks upon it; and with a ditch of water of a very great depth and breadth, excepting on that side the river Scheld washes it: so that, considering also the advantage of its situation in a low and level country, it seemed to me the strongest city in all the Netherlands. The citadel first built by the duke of Alva, and afterwards repaired by the prince of Parma,
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of a pentagonal figure, serves as well to bridle as defend the town. The houses of Antwerp are for the most part of brick, some few wooden ones of the antient building here and there remaining, which the owners are not suffered to repair. The chapel of the Jesuites college is very rich and sumptuous. The steeple of S. Mary's church is so curiously built and carved, that the Emperor Charles V. (as we were told) was wont to say, that it deserved to be kept in a case and shewn only upon holy-days. The Exchange or Burfe was the pattern after which our old Royal Exchange was built, but in all respects inferior to it, the copy excelling the original. The Stadthoufe is a magnificent structure. Several other publick buildings there are that deserve to be viewed, most of which are represented in the adjoined map. Plantius's printing-house, mentioned by Golnitz and others, is for a thing of that nature the best we have anywhere seen. This city for trading and wealth is much decayed since the Low-Country wars. In the garden of one Franciscus van Steerbeck a priest, we saw many rare plants: among others we took more especial notice of Lentiscus, Pistacia, Spiraea Theophrasti, Barba Jovis frutex, Cerasus nana, Almygdalus nana, Althaea montis Olbii in Gallo-provincia, Morus fructu albo, Jasminum hederaceum, Lycium, Rosa sine spinis, Capparis leguminosa sive Fabago, Convolvolus heptapbyllus, Acanthus aculeatus, Eufa rara Venetorum, Petrofohinum Macedonicum, Daucus Creticus verus, Convolvolus Althaeæ folio, Thapsia latifolia, Ephemerum Matthioli, Pisolochia Virginiana, Pyrethrum verum Auricula ursi folio & flore Boraginis, Sandalida Cretica, Sabdariffæ species, Telephium legitimum Antiquorum, Gnaphalium Americanum flore luteo pleno, Spartium marinum, Laurus Alexandrina, Absinthium arborosecens, Lilium Allobrogum majus, Geranium tuberosum, Hellebori albi tres species seu potius varietates, Centaurium majus Helenii folio & Scolymi folio, Coraloides, Urтика fatua Virginiana, Campanula Damascena lathyresecens flore purpureo & albo.

Lillo.

May 15. We took boat for Middleburgh; at Lillo a fort upon the Scheld, three leagues below Antwerp, belonging to the States of Holland, our boat was
was search'd, as are all vessels going to and from Antwerp. The wind and tide favouring us, we reach'd Middleburgh before sun-set, having made in all this day about 54 English miles. Upon the flats we passed over, at a good distance from us, we saw several sea-calves upon the sands.

Middleburgh is the capital city of Zealand, large, Middlewell built, having spacious streets, populous, full of burgh. wealthy merchants, and well fortified, as are generally all cities and towns of any account in the united Netherlands. It is situate near the middle of the isle Walachria, whence do doubt it took its name, and not from Metellus, quæ Metelli Burgum, as some have fondly imagined. From that side the island respecting Antwerp is an artificial channel cut up to the town, capable of ships of good burthen, which come into the town, the said channel passing through and making havens in three or four of the streets. There are (as we were informed) about twenty churches of all forts in this city, the Lutherans, French, Anabaptists, and Jews being here tolerated and allowed places of publick worship. At the stadhous we observed two eagles kept, which we were told the citizens were obliged to by their charter, by which they have great immunities granted them by the Emperor, as freedom from arrests any where but in their own city, &c.

May 16. We walked out to Flushing about two miles and an half distant from Middleburgh; a town once cautionary to the English, though not so large nor so well built as Middleburgh, and having narrow streets, yet very considerable for its strength and riches, the opportunity of its situation and conveniency of its harbour, ships of good burthen coming up into several streets of the town in artificial channels, and lying there secure from wind and weather.

May 19. We took another walk to Vere, called Vere, by the Dutch Ter-Vere, or Camp-Vere, some three miles distant from Middleburgh to the northward: a town for bigness inferior to Flushing, well fortified, having two fair harbours for ships with broad wharfs or keys within the walls. We returned back through Armuyden, a small town consisting of one street, yet intrench'd about.
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about. Here hath been formerly a good trade driven. By the way we observed the sea-banks to be faced with a kind of matting of rushes or flags flaked down as high as the tide usually arises, to defend them from being washed away by the water.

May 20. We went by boat from Middleburgh to Bergen op zome, passing by Rammekens, a strong fort at the entrance of the channel leading to Middleburgh. Bergen is a place of very great strength, besides the wall and trench, being fortified with half moons, horn-works, &c. famous for the notable resistance it made first to the duke of Parma, and afterwards to the marquess Spinola besieging of it, Anno 1622. At our being there it was held with a strong garrison, consisting of twelve companies of foot, two whereof were English, and two troops of horse, beside four companies of townsmen.

June 21. we travelled to Breda, eight hours distant from Bergen, for so they reckon or measure their way in these countries, by the time they spend in passing it. This town is considerable for its bigness, well built and populous; of great strength, being encompassed with very thick walls and mounts of earth and two trenches full of water, the one broad and deep: at our entrance in we passed through two ports, and over five draw-bridges. It belongs to the Prince of Orange, who hath a castle and a fair palace in the town. Here are maintained in garrison for defence of this important strength thirteen companies of foot, two whereof were English at our being there, and four troops of horse. Ever since the surprize of this town by the turf-boat, it is the custom to search all boats laden with commodities that enter here, by stabbing them through in sundry places with a spit.

St. Gertrudenberg. May 22. we travelled from Breda first to St. Gertrudenberg, belonging to the States, no great town, but well fortified and intrenched, garrison'd by three companies of foot, one whereof was English, and a troop of horse: and from Gertrudenberg the same day by water to Dordrecht or Dort, a large city, very rich and populous, well built with tall houses of brick, not inferior to those of Antwerp. The streets elegantly pav'd, in
the middle with stone, and on each side next the houses with brick set edgeways, so clean that a man may walk them in slippers without wetting his foot in the midst of winter. Thus paved and thus cleanly kept are the streets of all the cities and great towns in Holland. The English merchants have great privileges, and keep their court in this town. Here are two English churches and one French. From the tower of the principal church we had a fair prospect of the city and country adjacent, the steeple of Breda coming into view. In one of the upper rooms of the gunners doel or guild fat the synod assembled here, Anno 1611. The seats round about are still remaining.

May 23, we took places in one of the passage-boats that go off several times daily to Rotterdam, some three leagues distant from Dort, which brought us thither in five hours. Rotterdam is of a triangular figure, and much larger than I thought it to have been. It equals if not exceeds any city in Holland, except Amsterdam and and perhaps Leyden. It hath been lately much augmented by the addition of many streets of new buildings. Near the principal church dedicated to St. Laurence is a little house where Erasbus was born, over the door of which is placed his picture, and on one side of that this difficult written,

Ædibus his ortus mundum decoravit Erasbus
Artibus ingenuis, religione, fide.

Under it in Spanish this,

En esta casa es nacido Erasmo Theologo celebrado,
Par doctrina fennalado, la pura fea nos a revelado.

And in Latin this,

Fatalis series nobis invidit Erasnum,
At Desiderium tollere non potuit.

In a large Piazza stands a stately brass statue erected to his memory, with the figure of a book of the same metal in its hand, and in the posture of turning over a leaf.
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leaf, of which in drollery the people say, that, every time it hears the clock strike, it turneth over a leaf. The citizens of Rotterdam exercise no handicraft or manufacture to trade withal, but all their riches proceed from their sea-trade and merchandize. They have a very good ports, ships of great burthen coming up in deep channels into the very town: where they lie secure from all danger, and lade and unlade their commodities at the merchants doors. The government is by a president, four burgomasters, and twenty four magistrates or senators, which they call the Vroetschap. These chuse all publick officers out of their own number. Themselves continue in place during life, and when any one dies, the rest chuse out of of the citizens another into his room; so that the people have no interest or share at all in the government. The form of government is most what the same in all the other cities and towns of Holland, only the number of counsellors or the Vroetschap is in some more, in some less.

Delft.

Every hour of the day at the ringing of a bell goes off a passage-boat, somewhat like our pleasure-barges on the Thames, to Delft. We took places in one of these, May 25, which in two hours time brought us to Delft, three Dutch miles. This is also a large city, fair and well built, water runs through many of the streets. The stadhous is a very handsome structure. Here are two large churches, the one called the old, the other the new kirk. In the middle of the choir of the new kirk is a stately monument erected to the memory of Grave William of Nassau, Prince of Orange (who was assassinated here) with this inscription:

D. O. M.

Æternae memoriae
Gulielmi Nassovii,
Supremi Arausionensium Principis,
Patr. Patr.,
Qui Belgii fortunis suas poshabuit
Et Iurum.
Validissimos exercitus aere plurimum private
Bis conscriptis, bis induxit;
Ordinum auxiiciis Hispaniae tyrannidem propulit:
Vivæ
Morale, and Physiological.

Veræ religionis cultum, avitas patriæ leges
Revocavit, restituit:
Ipsam deniq; libertatem tantum non afferam
Mauritio Principi
Paternæ virtutis hæredi filio
Stabilendam reliquit;
Hæris vere filii, prudentis, invicti:
Quem Philip II. Hisp. R. ille Europæ timor timuit,
Non domuit, non terruit;
Sed empto percussore fraude nefanda
Suflulit.
Fœderat. Belg. Provinc.
Perenne memor. monum.
Fec.

In the choir of the old kirk is a monument to Van Trump with this inscription:

Æternae Memoriae.
Qui Batavos, qui virtutem ac verum laborem amas,
Lege ac luge.

Over his Arms this written,

* Urbs Phæbi cineres jaætat, sed * currus honores
   Ingreditur quoties egrediturq; mari.

One Jean vander Mere, an apothecary in this town, hath a Museum well stored with natural and artificial rarities, which we viewed, and therein observed among other things the following particulars. Zibetta or the civet cat. * Dens Hippopotami, as he pretended, though it be a question whether or no there be any such animal as the Hippopotamus; * Dentes Phæca, Cornu Gazelles, of these we have since that seen in several cabinets. * Costa Sirenis dicta, Cornua birci Bezoardici, Cornua & Pedes Alcis: this animal in English we call an Elk; I take it to be the same which in New-England and Virginia they call a Moose; it is of the deer-kind, the biggest and tallest of that genus. The horns have no brow-antlets, but only a broad palm with several flags upon it. I have seen one of these horns at Mr. Holney's an apothecary in Lewis that weighed 25 pounds. The skin of an Elk stuff'd we saw in the Great Duke's gallery at Florence, Cornu cervi Americani. The rattlesnake's skin. An elephant's tail, a very small thing considering the bigness of the animal. * Lacertus Indicus squamosus. * Acus piscis 4 species. A piece of a Rhinoceros's skin. At the anatomical theatre we saw the whole skin of a young rhinoceros stuff'd. The head of a dolphin. A giant's tooth, * si credere fas sit. The head of a horned hare. A chameleon. * A Soland-goofe out of Greenland. * A Tatou or Armadillo. Os petrosum Balanae. A young whale. A moriè or sea-horse's head. Guaina, a fitch from the island Mauritius. Petim-buaba or the tobacco-pipe fitch. * Orbis Echinatus. Cancer Moluccanus ex nova Belgio, which some call the sea-spider. Corallium nigrum five * Antipathes. * Spongia infusionibus specie. * Musella Afri-
cana. Indian habits, an Indian saddle, several sorts of Indian bread, Indian dice, several antient idols. The cup prince William of Nassau last drank out of. * Penecil-
lum Sinense. A Japan letter written to the Dutch go-
vernour, odiy painted. * Pafser Brasiliensis. Several sorts of
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Tominio's or humming-birds. A feather-garment from the freights of Magellane. Siliqua arboris fucciferæ. Nidus avis ex Surat. Cancer Americanus. Many sorts of Indian tobacco-pipes from new Belgium. A dart from Frelum Davis, wherewith the natives kill fith. A locust of that sort that St. F. Baptist ate in the wildernes. Onocrotali caput. Roffrum Rhinocerotis avis five Corvi Indici cornuti of Bontius, which is worth twelve florins at Amsterdam. A casswaries or Emeus's egg. A pelican's skin and bill. Many sorts of Indian weapons from Brazil. Eggs of an Indian goose. Cor Veneris (a shell like a Nerites.) Star-stones from Compostella. Several Indian and exotic fruits and feeds. Putorius Africanus, with hairs spotted like the quills of a porcupine.

In this city is a chirurgical and anatomical theatre, where lectures are read every Wednesday, and several rarities preserved, as the skin of a young rhinoceros stuff'd, before-mention'd. Lacertus squamosus of a different kind from what we had before seen. Manucodiatae seu avis Paradisi nova species. A flying squirrel. The skeleton of a dolphin. The tail of an Indian peacock. The head of an elephant. The horns of a hare. The head of a Babiroufia; it hath two long tufhes on the lower jaw, and on the upper two horns that come out a little above the teeth, and turn up toward the eyes. In the entry below hangs a Groenland man in in his boat, of which we have seen in several places, particularly in the Trinity-house at Hull.

This town is noted for good earthen ware, as stone-jugs, pots, &c. of which great plenty is made here. The government is by a praetor, two burgomasters, seven eschevins, and forty senators, which they call here, as in other towns of Holland, the Vroetschap.

May 28. We went by boat in an hour's time from Delf Hague to the Hague, which, though not walled about, is rather a great city than a village. It hath fair streets, stately and beautiful houses, especially about the palace where the States sit. Near this town is a large grove full of pleasant walks; where we first observed Monophyllum growing wild in great plenty. At Schevening, a village by the seaside, a mile from the Hague, we found a sort of Spartum maritimum, much taller and larger than our English kind.
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From the Hague we made an excursion to a village called Laufdun, distant about an hour and half's riding, famous for the burial of the counts of Zealand and her 365 children. The two bras basins in which they are reported to have been baptized hang up still in this church, and over them this inscription, which contains the history.

En tibi monstrorum nimis & memorabile factum, Quale nec a mundi conditione datum.

Margarita Hermanni Comitis Hennenbergiae Uxor, Quarti Florentii Comitis Hollandiae & Zelandiae Filia, Gulielmi Regis Romanorum ac postea Caesaris seu gubernatoris Imperii atq; Aletheiae Comitis Hannoniae Soror; cujus Patruus Episcopus Trajectensis, Avunculi autem filius Dux Brabantiae, & Comes Thuringiae, &c. Hæc autem illostrissima Comitissæ, annos quadraginta circiter nata, ižo die Paracées, nonam circiter horam, Anno 1276. 365 enixa est pueros, qui prius a Guidone Suffraganeo Trajectensi omnes in duas basins ex ære pelvisibus baptizati sunt, quorum masculi quotquot erant Johannes, puellas autem omnes Elisabethae vocatæ sunt, qui simul omnes cum matre uno eodemque die satis conceperunt, atque in hoc Laufdunensi templo sepulti sunt. Quod quidem accidit ob pauperulum quandam fæminam, quæ ex uno partu gemellos in ulnis gestabat pueros, quam rem ipsa Comitissa admirata dicebat, id per unum virum fieri non posse, ipsamque contumeliose rejecit; unde hæc paupercula animo perturbata atque pertulsa, mox tantum prolum numerum ex uno partu ipsi imprecabatur, quot vel totius anni dies numerentur. Quod quidem præter nature cœrum obstupenda quadam ratione ita factum est, sicut in hac tabula in perpetuum hujus rei memoriam, ex vetustis tam manuscriptis quære typis excufis Chronicis breviter positiun & enarratum est. Deus ille ter maximus hæc de re suscipiendus, honoran dus ac laudibus extollendus in sempiterna sæcula. Amen.

May
May 31. We took places in one of the passage-boats from the Hague to Leyden, which brought us thither in three hours. These boats are drawn to and fro by horses. Leyden is next to Amsterdam I think the greatest city in Holland, and well built. In the great church dedicated to St. Peter, are many monuments set up to the memory of persons eminent for learning, as Heurnius the famous physician, Bontius, Tho. Erpenius, Rembertus Dodonæus, Antonius Thyssius, Festus Homniius, Everardus Bronckhorst, and others, their inscriptions you may find in Hegenitius's Itinerarium Hollandiæ. In the French church lie buried Joseph Scaliger, Carolus Clujius, Willebrordus Snellius, and Ioannes Polyander à Kerckhove.

The schools are one pile of building of brick, three stories high, containing two rooms on a floor. The lower two are the divinity and physick schools. The middle the law and philosophy schools. The uppermost or garrets are the Officina Elzeviriana. The following Series Lectionum (of which fort there is one yearly printed and affixed to the school-gates) will give an account, what were the names of the professors in each faculty at the time of our being there, and what books and at what hours they read.

Rector & Senatus Academïæ Lugduno-Bat. Lectori Salutem.

Cum in constitutione Academiæ omnium nihil magis spectatur, quam Lectionum series, quæ in omnibus Facultate hybernis & aestivis temporibus habentur: visum nobis fuit, ut de his non nostris tantum, sed & exteris conspicerent, brevem indicem earum, & tabellam quas daret: ut qui Academïæ hujus nostræ celebritatem apud alios commemorari audiant, quid in ea doceatur, intelligant, priusquam ad eam accedant: aut potius ut accedant, cultumq; animi in ea percipiant.

Ordo
Observationes Topographicae,

Ordo Lectionum æstivarum in Academia Batava Leidensi. Anno 1663.

MANE.

HORA OCTAVA.


HORA NONA.

D. Ioannes Cocceius, SS. Theol. Doct. & Professor, Epistolam Pauli ad Philippenses succinctè explicat.
D. Jacobus Golius, Prof. Mathematicos, Elementa Astronomica exponit.

HORA DECIMA.

D. Abrahamus Heidanus, SS. Theol. Doct. & Professor, locos communes profitetur.
D. Daniel Colonius, J.U.D. & Professor, Academiae à Secretis, Codicem interpretatur.
D. Adolphus Vorstius, Med. Doct. & Professor primarius, interpretatur Aphorismos Hippocratis.
D. Henricus Bornius, Philosophiae Professor, Studiorum Coloffini Arausionensium Principis Ephorus, Ethicam profitetur.

HORA UNDECIMA.

D. Joh. Antonides vander Linden, Doct. & Professor Medicæ Practicæ primus, Morbos particulares cognoscendi & curandi methodum juxta Rationalis Medicæ præcepta tradit.

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A M E R I D I E.

HORA PRIMA.

D. Jacobus Golius, in Arabicis Alcoranum interpreta-
tur, & ubi opus est refutat.
D. Johannes Fredericus Gronovius, J.U.D. & Linguae
Grææ Graecarumque Historiarum Professor, alternis
Hærodianum & Historiam Romanam recitabit.

HORA SECUNDA.

D. Johannes Hornbeek, SS. Theol. Doctor & Professor,
librum Mosis explicat, Leviticum.
D. Adrianus Beeckerts à Thienen, J. U. D. & Pro-
feffor, Acad. in præfens Rector, Pandeias interpretatur.
D. Franciscus de le Boe, Sylvius, Medicæ Practicae
Professor, Affectus graviore, frequentiusve in Praxi Medicâ
obvientes tractat.

HORA TERTIÀ.

D. Allardus Uchtmannus, Hebr. Ling. Professor, Pen-
tateuchi capita selecta & difficilia interpretabitur in Genesì,
& Hebræam Grammaticam.
D. Georgius Hornius, Historiarum Prof. alternatim C.
Tacitum & Historiam Universalem interpretatur.

HORA QUARTA.

D. Stephanus Marchant, J. U. D. & Prof. Institutiones
Juris interpretatur.
D. Ioannes de Raci, L.A.M. Medicæ Doctor &
Philosophiæ Professor ordinari, profiteetur Physicam.
D. Adolhus
Observations Topographical,

D. Adolffus Vorftius, Medicinae & Botanices Professor primarius, Plantas in Horto Acad. demonstrat.


D. Johannis Antionides vander Linden, Med. Practicae Professor primus, alternis trimestribus in publico Nofocomio Studiofo Medicinae singulis septimanis aliquoties in agrotorum visitationibus, & mortorum, qui se fer offerunt, cognoscendi atque curandi ratione instruit, causasque mortis in cadaveribus distinctis ad oculatam, quantum fieri potest, fidem demonstrat.

D. Franciscus de le Boe, Sylvius, Medicinae Practicae Professor in Nofocomio publico trimestribus alternis, diebus singulis, exceptis Dominicis, Studiofos Medicinae in Morborum dignitione per sua signa, cognitione per suas causas, curatione per sua indicata exercet, atque sic ad praxin manudicit. Quicquid autem de partibus verè affectis & causis affectuum latentibus capi sensibus potest, id omne in demortuorum sectione rematur & patescit.


D. Antonius Thyfius, Eloquentiae Professor, Collegium Oratorium publicum instituit.

D. Henricus Bornius, Philosophiae Professor, Studiorum Celfianis Arausionensis Principis Ephorus, in omni Philosophiae parte Collegia habet & Disputationes, ac in illustr. V. H. Grotii lib. de Jure Belli ac Pacis Exercitationes instituit.

D. Johannes Fredericus Gronovius Graecae linguae & Graecarum Historiarum Professor, Graecos & Latinos auctores antiquos, quos studiosi desiderabunt, privatis Collegiis interpretabitur.

Ex Authoritate publica, diebus Mercurii & Saturni, Georgio Hornio Collegii Oratorii publici Praeside, in omnis generis & illustris argumenti Orationibus, ut & disputationibus Politicos habendis, publicè exercere se possint, quotquot illis studis operam suam addixerunt.

D. David

Adjoining to the school-yard is the Physick garden, a square of less than an acre of ground, but well stored with plants, of which there have been at sundry times several catalogues printed. Here are no colleges for students to live in, as in our universities (excepting two of the nature of hospitals, for the maintenance only of poor scholars) but the students live in private lodgings in the town, where they can best provide themselves. No scholastical habits, as gowns or caps, worn by any of the students, but they walk up and down, come to the schools, and perform their exercises in cloaks. The professors when they read lectures, or preside at disputations, wear gowns. No capping professors, or university-officers in the publick schools, but all the students are covered both at lectures and disputations, not only in this university, but in all the universities we have been at beyond the seas. If any desire to be admitted of the university, they go to the Rector magnificus, who gives them each a seal, and then they are freed from paying excise. The students usually lift themselves under some professor, who reads to them in private, running thro' a whole faculty, which they call Collegium institutum, and for this they give a gratuity to the professor. In conferring degrees, here is no respect had to standing. When any one intends to commence in any faculty, he makes Theses upon the subject he intends to answer, which Theses are printed, and these he is obliged to defend against all opponents. The respondent hath his seat under the professor's, as in our schools: for the opponents there is no particular seat, but in any part of the schools where they happen to be, they arise, and there stand and oppose, first asking leave of the professor that presides at the act. Any one that pleases may oppose with the professor's leave. Liberalium Artium Magister and Doctor are
are the only degrees conferred here. Each of the professors have 200 or 300l. per ann. stipend allowed them by the States.

The chief trade of this city is cloathing. The roofs of the houses are more steep than ordinary, made so on purpose to cast the rain-water into a channel or trough, which conveys it into a large cistern, where it is kept for the uses of the house. Great channels of water pass thro' many of the streets. On the tower of the Stadt-houfe stands a watchman, who blows a trumpet every hour, and if any fire happens, he sounds an alarm. Below stands a guard of thirty armed soldiers, and at each port ten. Every hour of the night a man goes about the streets, and making a noise with a rapper, tells with a loud voice what of the clock it is. In the anatomical theatre are preserved many skeletons of men and beasts, skins of beasts, parts of exotick animals, and other rarities. We noted a horned beetle from the East-Indies; an Armadillo; petrified mushrooms; Lapis ceraunias; Caput Porci fluviatilis è Brasilia; Ala Hirundinis marinae ex Oceano Orientali; Grammari Ethiopici; Thus fossile Moravicum; Capsula Chinenfis cum capita animalis partim cervinam, partim porcinam naturam representante ex isula Celebes Indiæ orientalis; Niduli crustacea ex cautibus regni Jehovæ, qua à Chinenibus in deliciis habentur, these we saw afterwards in Kircher's Museum at Rome and elsewhere; Folium bete sive siri, it resembles the great satyrion leaf: of these leaves and the fruit of the tree Arek, mingled with a little chalk, is made the Indian Betel, which is very stomachical, and a great regale at visits. Faba Egyptia sive Bonamicia; elephants skulls; Guandar fornicas vorans, or the ant-bear; Myrenceter, bigger than an otter, having a very long snout, long crooked claws, coarse bristly hair, and a long brufh tail; Gralla sive calopodia Norwegica; a fith with two feet; Capriscus Rondeletii, Tigris capta in facatra regno. In the publick library are preserved the manuscripts of Joseph Scaliger, and Libri Orientales quos Vir. Cl. Jacobus Golius impenfis publicis ex Oriente huc advexit. This town is well walled and trenched about, encompassed with pleafant walks of lime-trees. He that desires more particular information concerning the university and publick build-ings
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ings of the city, &c. may consult Meursius's Athenae Batavae, and Hegenitius's Itinerarium Hollandiae.

Before we left Leyden, we made a bye-journey to Se Sevenhuysen, a village about four leagues distant, to see a remarkable grove, where, in time of year, several sorts of wild-fowl build and breed. We observed there in great numbers (1.) Scholasters, i.e. Gracculi palmipedes, in England we call them Shags, they are very like to cormorants, only less. We were much surprized to see them, being a whole-footed bird, alight and build upon trees. (2.) Lepelaers, called by Gesner Plateiæ five Pælecani, by Aldrovandus Albardeolæ, we may term them in English spoon-bills. (3.) Quacks, or Ardeæ cinereæ minores, the Germans call this bird the Night-raven, because it makes a noise in the night, Nocte clamat voce absona & tanquam Vismiturientis. Gesner. (4.) Reyers, or herons. Each sort of fowl hath its several quarter. When the young are ripe, they who farm the grove, with an iron hook fastened to the end of a long pole, lay hold on the bough on which the nest is built, and shake the young ones out, and sometimes nest and all down to the ground. Besides the forementioned birds, there build also in this wood ravens, wood-pigeons, and turtle-doves. This place is rented for 3000 guilders per annum of the baron of Pelemberg, who lives at Louvain, only for the birds and gras. By the way to this place we observed in the ditches Lyfimachia lutea flore globo, and Arum five Dracunculus aquaticus. All the country about Sevenhuysen, towards Leyden, is a flat or fenny level, full of shallow pools of water; there we observed their manner of making turf. They rake or fih up mud from the bottom of the water with a net like a hoop-net, fastened to the end of a pole, and fill therewith a flat-bottomed boat. Out of the boat they throw this mud with a long fhovel, or fcoop, on an even piece of ground, making of it a bed of an equal thickness so near as they can; there it lies to drain and dry; after a while they tread it with broad boards fastened under their feet to make it close and smooth. When it is moderately dry, they cut the whole bed with a kind of spade into pieces, of the bigness of a brick. These they pile up in small conical stacks,
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or long ranks, laying the turves so, that a man may
see thro' the stacks, and the wind blow thro' them, to
be further dried. At last they house them in barns
that are thatch'd, the sides not walled up close, but
made of wooden bars set at a little distance one from
another.

Haerlem.

June 6. We took boat for Haerlem, where we arrived
at four hours end. This is a large, populous, and plea-
fant city, strongly walled and intrenched. Water is
brought thro' many of the streets. Without the walls,
towards Leyden, are pleasant groves. In the summer-
house in the garden of the Prince's court here, is a picture
of Laurentius Cofterus, in a spurred gown, holding the
Letter A in his hand, and this inscription over it,

M. S. Viro Consulari, Laurentio Coftero Harlemensi
alteri Cadmo, & Artis Typographicae circa Annun
Domini MCCCCXXXX Inventori primo.

His statue, and the inscription on his house in the
market-place, mentioned by Hegenitius, we could not
find, being, as we were told, lately bought and removed
thence. The butchery of this town is a handsome build-
ing, and covered with lead, which we thought not un-
worthy the notice-taking, it having been the first pub-
lick building that we saw so roof'd since we left Eng-
land. The citizens here drive a great trade of weaving,
as well silks, v.g. damask, velvet, fattin, taffaty, &c,
as linnen cloth, tiffany, holland, &c. On the sea-
coast near Haerlem, and all along North-Holland, are
great sandy hills or downs, which are a great defence
to the country hereabout against the incroachments of
the sea.

June 8. From Haerlem we boated to Amsterdam, two
hours distant. About the mid-way we passed by two
great mears, where we changed our boat. At the port
of Amsterdam stand two armed soldiers, one within,
the other without. This is the greatest city in all the
Low-Countries, and one of the richest and best traded
empories of the whole world. At our being there, we
judged it to be about the bigness of Venice, and leffer
than one half of London; but they had then taken in, and
inclosed with a substantial wall and trench, a great space
of
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of ground, wherein they had designed and set out streets, with intention to make their city, for bigness also, comparable with the best of Europe, London and Paris not excepted. I hear since, that this void ground is filled with rows of stately and beautiful houses. The publick buildings we especially took notice of were, (1.) The new Stadthoufe lately erected, the old one having been burnt down to the ground in three hours space (as we were told) June 7, 1651, but (as I find it in the printed description of Amsterdam) in July 1652. This is a magnificent pile of building, of a square figure, large and tall. The outside, or facing of the walls round about, is of free-stone, the body of the walls of brick. It is reported, that the foundation of this structure under ground cost as much as the superficies above ground, viz. 100000 l. sterling. The Describer of Amsterdam faith, that it standeth upon 13659 great mafts, or piles, driven into the ground. (2.) The Burfe, or Exchange, like our old Royal-Exchange at London, but not a perfect square, being longer than it is broad. The first stone of this building was laid May 29, 1608, and the first meeting of the merchants there August 1, 1613. Merchants of all nations resort thither, but of all strangers, the Jews are the most numerous, who fill one walk. (3.) The Admiralty-house, a handsome building with fair rooms. (4.) The Magazine, and (5.) the several Hospitals and houses of correction. In this city is an Athenæum, or Schola illustris, in which are maintain'd fix professors, who read publick lectures in several faculties in summer-time. Here is also a publick Physick-garden. The Jews are here allowed the free and open exercice of their religious worship. They live together in one quarter of the city, and are said to be in number about 20000 souls. They are in better condition, and richer, than in most places where they are tolerated. They are, for the most part, of a dark, or tawney complexion, and have black hair. Not only the Jews, but all other religions, the Romanish not excepted, are here tolerated. But if any, beside those of the State-religion build churches, they are prohibited to ered steeples, or make use of bells for the assembling of the people. In the new church
Observations Topographical,
is a handsome monument to John van Galen, with this
inscription:

Generofifimo Heroi
Johanni à Galen

Essenf

Qui ob res fortiter & feliciter gestas, sexies uno anno Dun-
kercanorum Prædatorum navem captam, & à Barbaris
opima spolia reportata, Ordinum Clasii in Mari Medi-
terraneo Præfectus memorabili prælio ad Livornam, Deo
auxiliante, Anglorum navibus captis, fugatis, incendio
& submersione deletis, commercium cum diēsi maris ac-
colis restituit, idibus Martii, A. CIE 110 111. Et
altero pede truncatus, nono die post Victoriam, annos
natus XLVII obiit, ut in secula per gloriem viveret.

Illu trick. & Præpotent. Federati Belgii
Ordinum decreto,
Nob. & Pot. Senatus Archibalaff.
Qui est Amstelodami
M. H. P.

In this church is a stately pulpit, said to have cost
1000 l. sterling the building. We were told that in this
city there were 24 ministers pensioned by the States.

The government is by a scout or prætor, four burgo-
masters, nine scabins, and thirty-six counsellors or sena-
tors, which they call the Vroetschap. The scout is stadt-
holder of Holland, and hath the first place in the bench
of scabins. He is chosen to this office by the burgomasters,
with the consent and approbation of the Vroetschap, for
three years: tho' he may continue in office six or more, if
they see good. He must have been a freeman at least
seven years before he be chosen. His office is with the
burgomasters and scabins, to make laws and constitutions:
to apprehend and imprison all malefactors within the
liberties of the city. He, as chief judge in civil as well
as criminal causes, hears the pleadings, and with consent
of the burgomasters and scabins pronounces sentence, con-
demning the guilty to death, if the cause require, and
taking care that the sentence be executed. In other
cities, the prætor hath to do only in criminal causes,
being no more than the commonwealth's solicitor, or publick accuser and prosecuted of malefactors.

The number of burgomasters is twelve, whereof four are regent yearly. They must not be under forty years of age. Every year, by the major vote of all the burgomasters that have ever been scabins, three out of the twelve are chosen to be regents, which three newly elect take to themselves a fourth out of the three chosen the year before, who gives the three new ones their oaths, and hath the precedence the three first months. Out of the other eight are other officers chosen, as treasurers, masters of hospitals, &c. The burgomaster's office is to govern the city, to arbitrate differences between man and man, to take care of the streets, walls, houses, publick buildings, &c. When one of the twelve dies, another is chosen into his room by the Vroetschap. As for the scabins, the Vroetschap chuse fourteen persons, out of which the burgomasters take seven; but so that none of them be near of kin to the scout, or the regent burgomasters. To these seven, the new and old burgomasters, with the new chosen scabins, do by most voices add two out of the seven that were chosen the last year; the which two for that year are the first and second presidents. The scabins are judges in all causes civil and criminal.

The council of thirty-six, or Vroetschap, continue in place during life, and when one dies, the rest chuse another into his room, but none under twenty-five years of age. This council chuses the fourteen scabins, and is assembled upon important occasions by the burgomasters, for their advice and direction in the weighty affairs and concerns of the city. The supreme power seems chiefly to rest in these.

Formerly none was capable of being burgomaster, except his father had been a freeman a year and six weeks before he was born; but of late they have made a constitution, that he, who will pay five hundred guilders, may be made free of the city, and capable of being burgomaster after seven years. Any one may be made a freeman for fifty guilders, but then he shall never be capable of being chosen burgomaster.
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The Describer of Amsterdam faith, that there were in that city 18 years ago 54000 houses, whereas in Paris, there were then but 46000, which is a thing by no means to be credited.

The militia of Amsterdam consists of 54 companies, divided into five regiments, each containing eleven companies, and every company consisting of 150 men, so that the whole amounts to 8250. Two companies watch every night for the guard of the city.

Utrecht. June 16. We took boat for Utrecht, where we arrived at six hours end. This is a great town, and the head of a province, environed with a thick and high wall, and a deep trench. The streets and buildings far short of the elegance, beauty and cleanliness of those in Holland, much like the houses and streets of our English towns. Water runs thro' many of the streets in deep channels. The domo, or cathedral church, hath a great tall tower, ascended by 460 steps, from whence we had a fair prospect of the city and country round about. Here is an university erected by the States of the united provinces, in the year 1636. Who were the professors in each faculty at the time of our being here, the following Series Lecionum will acquaint the reader.
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MANE, HORA OCTAVA.

D. Regnerus à Manfvelt, Philosophiæ Doctor, Logices & Metaphysices Professor, diebus Lunæ & Martis Logicalum cum quaestionibus Metaphysicis; Jovis vero & Veneris, Naturalen Theologiam docebit.

HORA NONA.

D. Cyprianus Regnerus ab Oofterga, J. U. D. & Professor, Codicem Academiac & Forensi explicatione explicant.
D. Henricus Regius, Eques Auratus & Medicinae Professor Primarius, suas Medicinae Medicationumque libros interpretabitur; & diebus Veneris Stirpium demonstrationes in Horto Publico instituet.

HORA DECIMA.

D. Gisbertus Voetius, SS. Theologiae Doctor & Professor, diebus Jovis & Veneris perget in explicatione Politicae Ecclesiasticae; diebus vero Lunæ & Martis, in Explicatione prioris partis Locorum Communium.

D 4 pitis,
Observationes Topographical,
pitris, quibus absoluitis, perget ad Historias morborum thoracicis, diebus Martis & Jovis in Nosocomio decumbentes ægrotos invisset, eorumque examen & medicationem docebit, ac praxeos specimina exhibebit. Demonstrationes vero anatomicas in theatro publico instituet, quum subjici humani copia dubitur.

Hora Undecima.

D. Andreas Effenius, S. Theologiae ac Philosophiae Doctor, illius Professor, diebus Lunae, Martis & Jovis Controversias tractabit ad selecta loca V. T. Veneris quoque Historiam Ecclesiasticam facultis Christiani duodecimi, e-narrabit.

D. Johannes Georgius Graevius, Philosophiae Doctor, Historiarum & Eloquentiae Professor, diebus Lunae, Martis & Jovis explicabit D. Taciti Annales, die vero Veneris Ciceronis orationem pro Milone.

A Meridie, Hora Prima.

D. Paulus Voet, P. U. D. & Professor, Juris Pandectas continuatam serie, interpretabitur.


Hora Secunda.

D. Franciscus Burmannus, S. Theologiae Doctor & Professor, diebus Lunae & Martis Evangelistam Matthæum cum necessariis questionibus & observationibus, quæ post
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terit brevitate, narrabit; diebus vero Jovis & Veneris Oeconomiam salutis humanæ sub Fædere Vet. ac Novo trac-tabit.

D. Johannes de Bruyn, L. A. M. Physicæ & Mathe-seos Professor, & p. t. Academiae Rector, diebus Luna & Martis in Physicis lectionibus perget; Jovis vero & Veneris continuabit explicationem fundamentorum Mechanicorum.

De Heer Hugo Ruys, sal Woensdaeghs en Saterdaeghs van Elf tot Twaelf wyen inde Fortificatie continuareren.

The garrison consisted of eight companies of soldiers, whereof one was English. The government is by an upper and under Scout, and four burgomasters, whereof two new chosen yearly,

June 18. We went by boat to Vianen, passing over a Vianen. branch of the river Rhine called the Lech. This is a privileged town, wall'd and trench'd about, subject to the lord of Brederode. Here we noted an engine or wheel for the weaving of inkle and tape, which moves many shuttles at once. The same day we travelled on to Leerdam, three hours distant from Vianen, a small incon- Leerdam. siderable town, belonging to the Prince of Orange.

June 19. We passed through Asperen a small wall'd Asperen. town, and further on ferried over the river Wale (Vaca-lis in Latin) to a pretty pleasant wall'd town, called Bommel, standing in an island. Here lay in garrison four companies of soldiers, where-of one of Scotchmen.

Not far from hence we ferried over the Mose, and passed by a strong fort nigh the water called Creve-Crevoeuro, and not much further another called Engelen; and after four hours came to the Bosch, Hertogenbosch the Dutch call it, and the French Bois le duc, i. e. Sylvia Bosch. Ducis. Before we entered the town, we passed through a water and over two draw-bridges. This place is situate on a hill in the midst of a low fenny level of a great ex-tent, the greatest part whereof is (at least now was) covered with water, so that the only avenues to the town are upon artificial caufways. It is encompassed with a strong wall and a deep trench. At one end stands a ci-tadel.
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tadel strongly fortified, which commands the town. By reason of its situation and fortifications one would judge this place impregnable, yet hath it been taken in the late wars. At our being there were kept in garrison for the defence of this important strength 21 companies of foot and four troops of horse. In the choir of St. John's church are painted the arms of many of the knights of the golden fleece, and over the upper stalls or seats this written in French, *Le treshaut & tres puissant Philip, dit le bon,* &c. which because it contains the history of the author's first institution and model of this order, I thought fit to translate into English, and here set down, "The most high and mighty Prince Philip called the Good, by the grace of God duke of Burgundy, Lorrain, and Brabant, in the year 1429. in the city of Bruges, did, in imitation of Gedeon create and institute to the honour of God and the Virgin Mary, and for the sake of St. Andrew protector and patron of Burgundy, a company or society of honourable knights, into which might be received Emperors, Kings, dukes, marquesses, and other personages, as well of his own subjects as of foreign countries, provided they were of noble blood and good fame: and called these great persons, *Knights of the Golden Fleece,* to whom he gave, for perpetual chief, him that should be lawful duke of Burgundy, and have the seigneury or lordship of the Low-Countries; limiting their number to 24, comprehending also the chief. And for occurrences and use of the order he created four honourable officers, viz. a chanellor, a treasurer, a secretary, and a king of arms. And for the establishment and well regulating of this order he made notable statutes and ordinances". The houses of this town are of a different make from those of Holland, the outside being covered with boards, like those of Edinburgh in Scotland. We observed great store of wild fowl to frequent the waters hereabout; and found growing wild *Herniaria hirsuta* on the sandy and gravelly banks, June.
June 20. We took a waggon drawn by three horses abreast, as is usual in these countries, which in six hours time brought us to Eindhoven, a small wall'd town; and thence in four hours more to Haumont, a pitiful walled town belonging to the bishop of Liege. June 21. Three hours riding brought us to another little wall'd town called Bry; the houses whereof were old and decaying. Bry. Between Haumont and this place, we rode over heaths of great extent, called the Champagne. We then left the level country and ascended some hills, from whence we had a pleasant prospect of the Mose and Maestricht, where we arrived this evening, though it be accounted seven hours distant from Bry. This city is fortified with good outworks, besides a strong wall and trench, garrisoned with 31 companies of foot, and six troops of horse, it being a great town and a frontier. Half of the magistrates are Protestants, and half of the Romanish religion. The greater part of the citizens Romanists. There are in town near 20 cloisters or monasteries of both sexes; and they have the free and publick exercise of their religious worship. For the Protestants there are three Dutch churches, and one English and French, which those nations use alternately. The old buildings of this city are like those of the Bosch; but since the States have been matters of it, it is become a rich and thriving place, and they are building fair new brick'd houses apace. They were also setting up a large stone stadthoufe, of a square figure, resembling that at Amsterdam. The river Meuse divides the city into two parts, which are joined together by a broad stone-bridge of nine arches. The lesser part over the water is called Wick. The garrison-soldiers are all Protestants.

The common people of Holland, especially inn-keepers, waggoners (foremen they call them) boat-men and porters are furly and uncivil. The waggoners bait themselves and their horses four or five times in a day's journey. Generally the Dutch men and women are almost always eating as they travel, whether it be by boat, coach, or waggon. The men are for the most part big-boned and gross-bodied. The first dishes at ordinaries and entertainments is usually a salad, Sla they call it, of which they eat abundance in Holland. The meat they com-
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commonly flew; and make their Hotchpots of it. Puddings neither here nor in any place we have travelled beyond sea do they eat any; either not knowing the goodness of the dish, or not having the skill to make them: Puddings and Brawn are dishes proper to England. Boil'd spinage minc'd and butter'd (sometimes also with currans added) is a great dish all over these countries. The common people feed much upon Cabiliau (that is cod-fish) and pickled herrings, which they know how to cure or prepare better than we do in England. You shall seldom fail of hung beef in any inn you come into, which they cut into thin slices and eat with bread and butter, laying the slices upon the butter. They have four or five sorts of cheefe, three they usually bring forth and set before you. (1.) Those great round cheeses, colour'd red on the outside, commonly in England called Holland-cheeses, (2.) Cummin-feed cheefe. (3.) Green cheefe, said to be so colour'd with the juice of sheep's-dung. This they scrape upon bread butter'd, and so eat. (4. Sometimes Angelots. (5.) Cheese like to our common country cheefe. Milk is the cheapest of all belly-provisions. Their strong beer (thick beer they call it, and well they may) is sold for three shillings the quart, which is more than three pence English. All manner of victuals, both meat and drink, are very dear, not for the scarcity of such commodities, but partly by reason of the great excise and impost wherewith they are charged, partly by reason of the abundance of money that is circulating here. By the way we may note, that the dearness of this sort of provisions is an argument of the riches of a town or country, these things being always cheapest in the poorest places. Land is also here sold at 30 or 40 years purchase, and yet both houses and land let at very high annual rents: so that, were not the poor workmen and labourers well paid for their pains, they could not possibly live. Their beds are for the most part like cabbins, inconveniently short and narrow; and yet such as they are, you pay in some places ten shillings a night the man for them, and in most parts. There is no way for a stranger to deal with inn-keepers, waggons, porters, and boat-men, but by bargaining with them before-hand. Their houses in Holland
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Land are kept clean with extraordinary niceness, and the entrance before the door curiously paved with stone. All things both within and without, floor, posts, walls, glass, household-stuff marvellously clean, bright and handomely kept: nay, some are so extraordinarily curious, as to take down the very tiles of their pent-houses and cleanse them. Yet about the preparing and dressing of their victuals our English housewives are, I think, more cleanly and curious than they; so that no wonder Englishmen were formerly noted for excessive eating, they having greater temptation to eat, both from the goodness of their meat, and the curiosity of the dressing it, than other nations.

In the principal churches of Holland are organs, which usually play for some time after the sermon is done. The collections for the poor are made in sermon-time, a purse with a bell hanging at the bottom of it, and fastened to the end of a pole, being by the collector reach’d to every one. The psalm to be sung is mark’d upon slates, which are hung up and down the churches. The people of these countries buy and sell small commodities, and travel by waggon or boat upon the Lord’s days. Their travelling wagons are some cover’d and some open: few travel on horse-back. No beggars to be seen in all Holland, care being taken to set on work all that are able, and provision made for the aged and impotent. There are in this one province of Holland three or four and twenty wall’d towns and cities, and six of these, at least, beside Amsterdam, bigger than any we have in England, except London; and Amsterdam, by this time, well approaches to the bigness of London.

To these I shall add some observations concerning the Low-countries, made by my much honoured friend Francis Barnham, Esq; deceased, at his being there in the retinue of my lord ambassador Holles.

In all the cities and towns of note throughout the United Netherlands there is a continual watch kept night and day upon the highest steeple, for the more ready and speedy discovery of fires, or other things of a surprising nature, which we have already noted in our description of the city of Leyden.
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All differences arising between skippers and foremen, &c. are decided by casting the dye: this we often observed them to do, when several of them strive who should carry us.

The rain that falls upon the houses is by pipes and gutters conveyed into a cistern, and there reserved for the uses of the house, as at Venice in Italy. This particular we have also before taken notice of in the description of Leyden.

The generality of the Dutch, from the better sort to the meanest, do much dread their superiors; I think the cause is, because, upon complaint made, there is speedy care taken to do justice. The generality of the people, of all sorts, are strangely given to the humour of running up and down to see any new or strange thing. The common sort have any thing that is rich or gay in great admiration, insomuch that, when my lord Holles made his entry into Breda, the coronets that were on the top of his coach were talk’d of with wonder all the country over.

The people universally are great lovers of money, very covetous and greedy of gain, yet in their bargains punctual and just. The knowledge of most of them extends no further than the arts of getting money, and an ability to talk of state-affairs, wherein you shall meet with mean persons very well seen: I think the reason may be, because the lowest of them is not without hopes of coming to be a burger, and at last one of the States.

I cannot allow the Low-Dutch to be of a valiant and courageous temper generally, notwithstanding they fight so well at sea; for the constitution of their bodies which is phlegmatic, and the temperature of the air which is moist, and their diet which is gross and foggy, forbid it.

Yet there are few or none in these countries that die of consumptions.

There is liberty of all religions and professions, but abundance of spies to watch them, that they disturb not the publick peace.

I think it harder to be a traitor under the government of Holland, than under any other kingdom or state, because they seem to be more watchful and suspicious.
The people say and print what they please, and call it liberty.

The better, much more the worse, fort have little sense of honour, governing themselves more by the rules of profit and advantage, than of generosity and Decorum.

Murder is not prosecuted with so much diligence and concern as felony or theft.

The times of the day for marriages and burials are limited, but with difference in respect of places: for at Breda they must bury their dead before 12 of the clock, and at Amsterdam not till the afternoon.

When any famous deed or exploit is done by any of their nation, it is represented to the people with all-instructing circumstances, to make them proud of the honour of being subjects in a state where such mighty deeds are done. Besides, for encouragement, there is, for the most part, a monument or statue erected to the memory of them who do great things.

Their solemnizations of Victoires, as they call them, seems to me of great use, like triumphs among the Romans. For those bonfires and other expressions of joy do make glad the people, and give them better thoughts of their governors, and dispose them to their service.

In the service of God the people seem more delighted and concerned in that part of worship which consists in singing than any other, and they provide more for it. For in their churches there are few other books among them than Psalters bound up with the Church-Catechism.

The common sort of women (not to say all) seem more fond of and delighted with lascivious and obscene talk than either the English or the French.

The women are said not much to regard chastity whilst unmarried, but when once married none more chaste and true to their husbands.

The women even of the better sort do upon little acquaintance easily admit saluting with a kiss; and it is familiarly used among themselves either in frolicks or upon departures and returns though never so short.

The women are in a sense privy-counsellors to their husbands; for they are for the most part privy to all their actions; and the men seldom do any thing without their
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their advice and consent. Yet doth not this indulgence enamour them of their own nation; for it is said, that, if a woman can get an English husband, she will never marry a Dutch.

The Dutch when they see their friends at the point of death, and past all hope of recovery, out of pity and tenderness, desirous to rid them out of their pain, will sometimes hasten their end by withdrawing the pillow, or the like. Thus far Mr. Barnham.

In most of the cities and towns in the Netherlands, there are a great number of chiming little bells which seldom rest, but were to us troublesome with their frequent jangling. But for rings of great bells, all Europe cannot shew so many as England alone; so that it might well be called the Ringing Island.

A multitude of storks frequent these countries, building upon their chimneys in the towns and cities as well as villages; but not in the territories of common-wealths only (as some imagine) but of Kings and Princes also, as at Louvain and elsewhere in the King of Spain's country, and in Germany in several Princes dominions.

June 22. We travelled from Maestricht to Liege four leagues distant. In the side of a hill we ascended at some distance from Maestricht, we saw an arched passage into a vault (as we were informed) some two hours in length. A good way within under ground they dig stone, which here they bring out in carts. It being a wet season, we made no stay to go into this vault, therefore I have added here the description of it out of the Philosophical Transactions, numb. 67, pag. 2051.

There is an excellent quarry within cannon-shot of Maestricht, upon the very brink of the river Maas, lying in a hill; where there are about 25 fathoms of rock and earth over head; the length of the hill being of some miles extending along the river towards Liege, situate on the same river; and towards Maestricht, having in breadth some half or quarter of a mile, but somewhat more further off. This quarry hath one entry towards the river, where carts can pass with great ease, and unload the stones upon the brink of the river, the quarry within lying parallel to the horizon or level, (which is a great advantage) and elevated but very little above
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above the river. This same quarry, which hath well nigh undermined the whole hill, affords one of the most surprizing prospects, when well lighted with many torches, that one can imagine: for there are thousands of square pillars in large level walks, and those almost every where above twenty, and in some places many more foot high, and all wrought with so much neatness and regularity, that one would think it had been made rather with curious workmanship for an under-ground palace, than that those pillars and galleries were made by quarriers that did it only for getting stone to build above ground. This quarry serveth the people that live thereabouts for a kind of impregnable retreat when armies march that way: for, being acquainted with all the ways in it, they carry into it whatsoever they would have safe, as well their horse and cattle as their moveable furniture, till the danger be over, there being so vast a deal of room, that 40,000 people may shelter themselves in it. And he that should attempt to seek them out in this vast wilderness of walks and pillars, without an expert guide, would not only be in hazard of losing his way, but of being knock'd on the head at the corner of every pillar; where people, lurking in the dark with their carbines and fowling-pieces, would have fair opportunity of shooting at them by the light of their own torches, &c.

Further upon the downs we saw three or four more of these passages, and from hence had again a very pleasanf prospect of Maestricht and the country about the river Moë.

Liege or Luyck is a large city, but not comparable to Liege, the Holland towns for beauty or riches; built for the most part of timber; some of the houses being cover'd with boards after the Scotch fashion, and some with flate [the walls I mean] the rest uncover'd and of clay. The streets are neither broad nor clean kept. The river Moë here divides itself, and runs through the town in two or three branches, over which are several bridges. Here is a convenient key, and upon the river we observ'd boats of an extraordinary length, the like where to we had before seen at Utrecht and Dort. This city is pleasantly situated, and environ'd almost round with hills. On the brow of a hill which hangs over it, stands a
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fort or castle which commands it. Upon the sides of these hills are abundance of orchards and cherry-gardens; on those near the city we first saw vine-yards; though there are near Lovain, which we saw not. All belly-provisions are cheap here. A great many of poor and beggars you meet with at every corner, but they are not importunate if denied. The country people are civil, well-manner’d, and kind to strangers. The women are of a dusky complexion, and generally not so handsom as the Hollanders. They do a great deal of drudgery, the poorer sort carrying coals and other burthens on their backs in baskets of a conical figure, to the end or bottom of which they apply a stiff bafton, and so rest themselves without setting down their burthens. Near this city are gotten coals in great plenty, but they lie very deep under ground; some of us went down into a pit 150 yards deep. The coal are like our stone-coal. The arts they use to get air enough to serve them in the bottom of these dells, see in the Philosoph. Transact.

At Luyck they use also for fewel a sort of round balls made of clay mixed with a certain proportion of coal, beaten small, temper’d together, and dried in the sun, which they call Hotbots. These we never saw used any where but here, though the making of them is described in many books. They serve to flake the heat of the fire, and keep the coals from burning out too fast. Here and at Namure (as we were told) are made stone pots and jugs. The cathedral church is dedicated to St. Lambert, to which belong 60 Canonici majores, who must be all of noble blood, except some few scholars which they may choose in. By these the bishop and prince of Liege is elected. Besides these there are twelve Canonici mediocres, and twelve minores five parva mense. On weighty occasions the prince assembles the states of the country for their advice. The Clergy, Gentry, and Commons send their several deputies to these conventions. No law can be made, nor any great tax imposed without their consents. In this city are an incredible number of monasteries, or religious houses, as they call them. In the garden of the English Jesuits college we saw many ingenious dials invented by Franciscus Linus. In the church of the Gulielmites cloister without the walls we saw Sir John Mandeville’s tomb-stone.
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In the vestry are kept his saddle, spurs, and bridle-bit; as also two great knives, which the monks, who shew'd us these things, told us were given him by the Emperor of the Turks, being such as himself used. Upon his tomb-stone was this inscription:

HIC JACET VIR NOBILIS DNS JOES DE MANDEVILLE AL' DICTUS AD BARBAM MILES DNS DE CAPDI NATUS DE ANGLIA, MEDICINE PROFESSOR, DEVOTISSIMUS ORATOR ET BONORUM LARGISSIMUS PAUPERIBUS EROGATOR, QUI TOTO QUASI ORBE LUSTRATO, LEODII DIEM VITE SUE CLAUSIT EXTREMUM ANNO DNI M° CCC° LXXI° MENSIS NOVEMBRIS DIE XVII.

Thereon was also engraven the figure of an armed man, treading on a lion, having a forked beard, his hand lift up to his head in a blessing posture, and these words going out of his mouth, VOS KI PASSEIS SOR MI POUR L'AMOUR DEIX PROIES POR MI. Which is old French, signifying, You that pass over me for the love of God pray for me.

June 26. We travell'd hilly and stony way from Spaw to the Spaw, seven hours distant. We had in prospect, on the left hand as we rode, Franchimont castle, and soon after came to the view of a deep valley, in the bottom of which lay the Spaw. It is a pleasant little wall'd town, though call'd a village, indifferently well built for a place so remote from commerce. The inhabitants reap no small benefit from the frequency of strangers, which, in the summer-time, repair thither in great numbers to drink the medicinal waters. There is one well called Poubont, within the town, in the market-place, which taffes strong of vitriol, the virtues whereof are contained in this distich written over it.

Obstruetum referat, durum terit, humida siccat,
Debile fortificat, fi tamen arte kibis.

E 2
The other wells are at a good distance from the town, (1). Sauvenir, to the eastward, about an hour's walk remote, (2). Geronfier, as far to the southward, and (3). Tonnelet, about the mid-way between Pouhon and Sauvenir. These waters seemed to me more brisk and sprightly, and better fated with mineral juices, than any I have tasted in England, and doubtless are more nimble and vigorous in their operations. But of their several natures and virtues Henricus ab Heers hath written a particular treatise, intitled Spadaerene, to which I refer the reader that is desirous to know more of them. In the woods and upon the rocks near this town we found many rare plants, which we had not before met with, I mean spontaneously growing in their natural places, viz. Asclepias flore albo, Polygonatum minus, Cyanus major, Rapunculus spicatus, Campanula perfolia, Sideritis flore pallido simulis Ladano segetum, &c.

Limbourg. June 28. From the Spa we travelled to Aken, passing through Limbourg three hours distant, a town considerable for its strength, being situate on the side of a hill, and encompassed with a strong wall and trench; not for its bigness, it consisting only of one short broad street, nor for its beauty, the buildings being all of wood. The garrison at our being there was about 300 soldiers. Before we entered the town we were met on the way by some of these soldiers, who very insolently stopp'd our horses, demanding money of us, which we were forced to give according to their discretion, before they would let us pass; which, though it were no considerable sum, yet was more than we were willing should be violently extorted from us. When we were past the town, we met also with many of these stragglers, by whom (it was told us) many robberies are committed hereabout.

Aken, called by the French Aix la Chapelle, to distinguish it, I suppose, from Aix in Provence, is a free city of the empire, very considerable for its strength and greatness, being encompassed with a double wall, and having in it 30 churches. About now some 15 years ago here happened a lamentable fire which almost ruined the town, burning down to the ground 4500 houses, from which calamity it was not half recovered at the time.
time of our being there. In the great Piazzza or market-place is a handsome fountain, with this inscription about the edges of the basin: *Hic aquis per Granum Principem quendam Romanum, Neronis & Agrippae fratrem inventis, calidorum fontium thermae à principio constructae, pastea verò per D. Carolum Magnum Imp. constituto ut locus hic sit caput & regni sedes trans Alpes, renovata sunt: quibus thermis hic gelidus fons influxit olim, quem nunc demum hoc cenae vafe illustravit S. P. Q. Aquiagra-nensis, Anno Domini 1620.* The iron crown wherewith the Emperor is crown’d, and the sword of Charlemaigne, which he holds when he is crown’d, and is obliged to wear by his fide three days together, and wherewith he creates noblemen; as also the gospels, said to be written by the Evangelists own hands, are here kept, and every coronation sent to Frankfurt. The chair, wherein the Emperor sits when he is crown’d here, hath its sides of ivory, and its bottom as they fondly imagine of the wood of Noah’s Ark.

This city (according to the best information we could get there) is governed by a mayor, two consuls or burgomasters, fourteen scabins, and about a hundred and twenty senators or counsellors. The mayor is president of the scabins and executes their sentences; he is put in by the duke of Gulick and continues during life, *modo bene se gefferit.* The consuls are chosen by the suffrage of the several companies of the city, and continue two years, *modo bene se gefferint*; every year there is one chosen. One that is no senator may be chosen consul or burgomaster, and yet these have the chief power. The scabins are judges and continue during life; when one of them dies, the rest chuse another in his place. The senators are chosen by the several companies, of which there are about fourteen or fifteen in this city. Every company chuses eight. Half the senate are yearly chosen.

The territory of this city is large, containing about 200 villages, and is for the most part encompassed with mountains. We saw here the manner of making brasses of copper, by mingling and melting therewith *Lapis Calaminaris,* which changes the colour thereof from red to yellow, and increaseth the weight by thirty in the hundred. But that for which this place is most remarkable, and from which it took its name, are the hotbaths,
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of which there are several within the walls and others without, at Borcet a great village less than an English mile distant. The waters of Borcet at the sources where they issue out of the earth are much hotter than those of the Bath in England, and the springs more plentiful. The people there told us, and I can easily believe them, that they will serve to boil eggs in. Their taste seemed to us saltish. They are used outwardly for bathing, and taken inwardly for many diseases. As we walked to Borcet we could not but take notice of a pool whose waters were almost tepid, by reason of a little stream from the hot baths running through it, wherein we were assured were bred and fed good store of fish, which are put into cold water for a month or two before they eat them. But of the nature, kinds, ingredients, and uses of the several hot waters, as well those of the city, as of Borcet, the following abstract of an Epistolary Discourse concerning them written in French, and published by Francis Blondel M. D. will give the reader more particular information.
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Observations concerning the Baths of Aken, collected out of an Epistolary Discourse Published in French by Francis Blondel, M. D.

NOT to trouble the reader with the various opinions of antient and modern philosophers concerning the cause of the actual heat of natural baths, our Author's account thereof in reference to these of Aken is in brief as follows.

These waters (faith he) passing through a certain argillaceous earth, pregnant with a kind of nitrous salt, almost of the same taste with the waters of the baths (which is to be found in good quantity in the lands about this city) charge themselves therewith, and so become a menstruum capable of dissolving such mineral metals as are contained in the veins of the earth through which they run. This solution he conceives is made by piercing and corroding the minerals, after the same manner as spirit of nitre and other Aqua Stygiae are wont to do, which usually causes a great ebullition and heat. So then the actual heat of these springs proceeds from the mixture and encounter of their waters (impregnated as is before intimated) with the mineral and metallic substances, juices, and spirits contained in the veins of the earth through which they have their course. The nitrous salt fore-mentioned may perhaps be the Hermetic salt of monsieur Rochas, or the eurine salt of Helmont. Now the water once heated, being contained in the vaults of the mountains as in a stove, continues hot a long time, the eruption thereof being, it is likely, at a good distance from the place where it did at first conceive its heat.

At the long continuance and duration of the heat of these waters, for so many ages past, no man need wonder; for (1.) It is generally taken for granted, that all
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sorts of mines do grow and increase by addition, converting the more refined, subtile part of the earth, and which hath a seminal disposition to such a change, into their own nature. (2.) The nitrous salts, the first ingredients of these waters, are also restored in their matrices, after the same manner as we see it happens in the Caput mortuum of vitriol, which, tho' the vitriol hath been once or twice extracted from it, will, by being exposed to the air, again recover more; whether it be by conversion of its matrix into its own nature, by a kind of aggeneration and transmutation, or by imbibing and retaining those subtile and volatile saline exhalations, which continually ascend out of the earth, or wander up and down the air.

As for the ingredients of these hot waters in general, he faith, that besides a threefold salt-nitre fixed, volatile, and mingled, or armoniack, they partake of a fixed and volatile sulphur, a manna of allum, some vitriol, divers metals, as copper and iron, a very little volatile earth, a certain argilla, sand and calaminary flowers. That they participate of copper he proves in that the territory of Aken abounds in divers places with Lapis calaminaris, which is, as it were, the aliment of copper: for being mingled in the furnaces with red copper, it augments it by the addition of 30 pound weight per cent. and gives it a yellow or golden tincture. As for iron, the many ferruginous springs, that are found within and without this city, are an evident testimony that there are plenty of iron mines hereabout; and therefore most likely it is, if not certain, that these hot waters charge themselves with that metal. That they contain a three-fold nitrous salt, he proves from their natural evaporations. (1.) The fixed is found in the wells of Borcet and the Emperor, chrysoallized into small shining square grains, mingled with a little flower of sulphur, sticking to the covers of those wells, which have not been of a long time opened. It may be also found in the chymical examination of these waters by evaporation, or distillation. (2.) The volatile is carried up by the volatile sulphur, as is hereafter shew'd in the description of the first sort of these baths. (3.) The mingled, or armoniac, is daily seen in all the waters of the city, and of Borcet, swimming in little cylinders.
cylinders on the surface of the waters, and this is that cream, or scum, which is ordinarily found upon the waters in the basons. That they contain the rest of the beforementioned ingredients, shall be shewn in the description of the particular baths: the waters whereof our Author reduces to four sorts.

1. Nitro-sulphureous, such are those of the Emperor's bath, the little bath, and St. Quirin's bath. 2. Sulphureo-nitrous, such are those of Compus, or the Poor-men's bath, the Rose bath, and St. Cornelius's bath. 3. Sulphureo-nitro-vitriolic, such is another bath of the same St. Cornelius. 4. Salpo-alumino-nitrous, viz. those of Borcet, a village adjoining to Aken.

I. As for the Nitro sulphureous kind, those of the Emperor's bath, and the little bath, are but one water, coming from the same source, and collected in one and the same well. That part referred in the Emperor's bath is divided into five great basons, or receptacles: that in the little bath, into three. All which might be renewed daily, if time would permit, the spring is so copious. But by reason of the excessive heat of the waters, it is necessary oftentimes that they stand in the basin 16 or 18 hours to cool, before they be fit for the patient's use. Notwithstanding when they are come to a jufť temper, one may bathe in them, and endure them a long time, as those of Borcet, without any inconvenience. This source hath that of peculiar to itself, that in its well one may find distinctly a quantity of nitre coagulated, and good plenty of flowers of sulphur very light, purely fine, and well scented. The nitre sticks to the sides of the well, and so do the flowers of sulphur above that: the which sometimes, whether by the extraordinary boiling up of the fountain, or by the impetuosity of the ascending vapours, or by their own weight are broken off, and fall back into the source; from whence being no more dissolv'd by the water, they come forth intire into the basons. If you take of this water, and let it stand in a vessel certain days, it will precipitate of these yellow flowers of sulphur, to the bottom of the vessel. Besides these volatile flowers, these waters contain also fix'd flowers of sulphur, a competent quantity of nitre both volatile, fix'd, and mix'd, or ammoniac, a little allum, lefs vitriol,
vitriol, the spirits and principles of copper and iron, a very
little volatile earth, argilla and sand: no bitumen, for let
them stand as long as you please, you shall find no fatty
substance swimming upon them, as upon the Spaw wa-
ters. The volatile sulphur evaporates so strongly,
that it carries up with it a quantity of nitre, as one may
see after the solution of the vapours, congealed and frozen
in winter time, when it remains incorporated upon the
walls, in the places where the icicles were. These wa-
ters are in weight equal to those of the Spaw; coming
fresh out of the source, they appear whitish, or bluish,
but having stood a while and grown cold, greenish. They
are very pure, and leave no kind of mud, or Lutum
thermale behind them; in cooling they yield a small
scum, as one may see after the solution of the vapours,
congealed and frozen in winter time, when it remains incorpo-
rated upon the walls, in the places where the icicles were.

11. The second, or sulphureo-nitrous sort of Campus, &c.
 tho' they spring up in several places, and have different
wells, yet is the nature of them all, their composition,
and mineral ingredients the same. The Poor-men's bath
hath one great basin or receptacle, the Rose bath four,
whereof two only are used, and St. Cornelius's bath of
this mine two. These waters are fit for use at all sea-
sons, being of a temperate heat, more efficacious, and
of greater force in their operations, than the first sort;
they weigh two per cent. more than they, and are of
a stronger scent. In these is never found any sulphur
condenied, no not in their wells, tho' they be covered:
but when they are emptied, and new water let in (as
in the Rose bath) the water running down along the
walls and seats, into the bottoms of the basons or con-
servatories,
servatories, the external air prevailing upon it, so spread, and in such little quantity arrests, fixes, and condenses its sulphur all along the said walls and seats, refreshing the eyes of the spectators with its beauty and lustre. But the water rising in the beforementioned basins, and covering the seats and walls, the sulphur again unites and incorporates with its dissolvent, and disappears and hides itself therein. The water of these sources contains great quantity of sulphur, very fine and sweet, less nitrous salt, a little vitriol, and less allum, more of the other minerals and metals, than the first sort, or those of Bor cet. So that they are more compounded, oleous and bituminous, than any of the other sources; and tho' they come out of the earth very temperate, as to actual heat, yet can sick persons hardly endure them for any long time, for the most part scarce half an hour.

III. The third sort, which I call Sulphureo-nitro-vitrilic, and is also of St. Cornelius, differs from the precedent, in that the taste is a little more acid, the smell sweeter, and liker that of spirit of vitriol, and the touch less oily. It is of less efficacy in use than the second sort, and of more than the first. Of this source there are three basins, which, with the two others of St. Cornelius beforementioned, make five in this house. These waters do agree much what in their composition with the precedent. They are very pure and clear, especially in their wells; and tho' they seem troubled in their basins, yet taken in a glass, they appear clear.

IV. The fourth, or Salso-alumino-nitrous kind, are those Bor cet of the neighbourhood, or Bor cet. These come out of baths, the earth extrem hot, and in great abundance, are all of the same medicinal quality, have several wells, and are reserved in ten or twelve houses, each whereof hath two basins, or receptacles; besides which, there is a common bath exposed to the air, for the use of poor people. These waters cast off a copious excrement or tartar, which yet is not stone, but only a sand mingled with, and united to the nitrous and aluminous salt of the water, coagulated by the beating of the cold air on its supercicies, to which also concurs the cold of the walls exposed to the same air. These excrescencies are found in
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in the subterraneous conduits, not only of these, but the other baths in the city; being held to the fire, they soon become friable, and are nothing but a pure round sand like the common. The higher houses and basins have the more of this tartar, yet is it so little, that it is not to be seen or perceived in the water. These waters are of a different species, virtue, and operation from those of the city, are very easy to suffer, and serve often for divertisement and recreation to persons that are in health. The content of them is a great quantity of sea-salt and allum, less nitrous salt, a very little sulphur, and not much of metallick substances.

Concerning the virtues and effects of these waters inwardly taken, he discourses to this purpose:

These waters taken inwardly are very available against the Phthiick, Asthma, or difficulty of breathing, occasion'd by tough phlegm lodging in the branches of the wind-pipe; against the weakness of the stomach, indigestion, crudities, flatulencies, vomitings, hiccoughs, and inveterate cholicks. They dissipate and dry up all manner of catarrhs and serous defluxions; and are very proper to be drunk by those that are troubled with the palsy, before the use of the baths. They quicken the appetite, cleanse the blood, and open the obstructions of the mesentery. They are of excellent use against hypochondriacal maladies, especially in such as have weak and cold stomachs. They mollify the hardness of the liver, spleen, and mesentery. They dissolve and bring away the gravel of the reins and the lesser stones: and here he produces many examples of such as voided stones upon the drinking these waters, and among the rest of some that had drank the Spaw waters, and came from thence without receiving any benefit. They cleanse the ulcers of the bladder, dissolving not only the gross, phlegmatick and viscous humors which coagulate the stone, but even the stone itself, whilst it is yet tender. They have sometimes cured intermittent fevers of long continuance, and scropulous tumors. They dry up and heal the itch, leprosy, and other affections of the skin. They stop the immoderate flowing of the menstrues in women, and cure the jaundice, the paleness and discolouring of the skin in virgins: and finally they give case and relief
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lief in the gout. Of all these faculties, he brings in-
fstances and examples of persons that have been cured. Particularly that these waters drunk may have a pow-
er of dissolving the stone, he proves by this experiment: Taking a stone voided by a man about two years be-
fore, and infusing it in water hot from the fountain, for
the space of three days, we found it (faith he) mollifi-
fied and reduced into a soft phlegm. Which virtue of
the waters was further confirmed to us by a late ac-
cident: for opening the vault of a well, there was found
a certain glue or mucilage, which, it's to me probable,
came from the solution of the mortar of lime and sand
in long time, by the volatile and diffolvent spirits of the
waters; especially there being found no other cement be-
tween the stones, and in that this same glue or mucilage
mingled itself intirely with the waters of the fountains,
without any appearance of scum or fat swimming on the
top, so as gum of cherry, or the like is wont to do in
water, and being cast into the fire burnt not, but dried
up. These experiments and observations were made
upon occasion of a burgomafter of Riga (who, being
afflicted with the stone, drank these waters) his passing
his urine thro' a linnen cloth, and finding therein a
certain thick phlegm left behind, which, being kept a
while upon paper, harden'd into a ftony substance.

From Aken, June 29. We travelled through a small
walled place called Altenhoven to Gulick, five hours distant.
This is an elegant little town, built of brick, though the
houfes be but low, having ftreight ftreets and a square
Piazza. It is well fortified with a strong wall and trench,
but moft considerable for its citadel, which for greatnefs,
strength, and beauty gives place to few that we have seen.
Within it is a flately palace of the Prince, who for the
defence and security of this city maintains here a garrifon
of 1000 foldiers. About ten or twelve years since this
place was poffefsed by the Spaniards. When the peace
was concluded between them and the Hollanders, it was
agreed, that the duke of Newbergh fhould have Gulick
and Berg; and the marquefs of Brandenburgh, Mark and
Cleve. The main trade and employment of this town is
making of malt,
June 30. We proceeded on to Collen some seven hours distant from Gulick, by the way passing through a little walled place called Berchem. A great part of this day's journey was through pleasant woods. We observed, by the way-side and in the woods and hedges as we went, Mes-zereon Germanicum, Mollugo montana latifolia ramosa, Pulmonaria maculofa, Galeopis five Urtica iners flore purpurecente majore, folio non maculato, and among the corn, Vaccaria Ger.

Collen. Collen, though it gives title to an archbishop who is one of the electors, is a free city of the empire, and one of the greatest in Germany. The middle part of it is well built of stone, wherein are two fair and large piazza's, the skirts meaner and of wood. The walls of the city are of stone, very tall, but not proportionably thick, and covered with a Tectum. Round the walls without is a pleasant walk of trees, two deep trenches, and at convenient intervals strong bulwarks. Within the wall are inclosed 300 acres of void ground (not built upon I mean) planted with vines; of the grapes whereof we were told many hundred tuns of wine are yearly made. In the Domo or church of St. Peter are preferred in a golden chest the bodies (as they would have us believe) of the three wise men of the East that came to worship our Saviour, commonly called the three Kings of Collen; Melchior, Gafpar, and Balthasar. To this church belong fifty four canons nobles, and eight canons presbyters. By these sixty two with the dean of the cathedral, who hath two votes in the election, and the two consuls regent of the city who have four, is the archbishop chosen, who is not allowed to continue in the city at any time for above three days together. The government of the city is by six consuls or burgo-masters, who continue in office during life, yet but two only in power yearly; seven scabin and 150 senators. When a burgo-master dies, the senate chooses another into his place. The senators are chosen by the several companies of the city, and continue during life; only fifty are in power yearly; so the power revolves to the same every third year. The scabins are put in by the Prince, and continue during life. The main body of the citizens is of the Roman religion; yet are there a good number both of Lutherans and Re-formed.
formed or Calvinists. The Lutherans are allowed a church within the walls; the Reformed are forced to go cross the water a mile out of town to church. In one of the churches of this town are preserved the bones of those 1000 virgin which accompanied St. Ursula to Rome, and in their return here suffered martyrdom.

From Collen we went up the Rhine in a boat drawn by men, which brought us the first day to a small village called Virdich. By the way we found growing among the corn in great plenty, Delphinium simplici flore purpureo caruleo vulgare, and Nigella arvensis: in some barren grounds near the rivers Staechas citrina Germanica latioe folio J. B. Next morning we passed Bonna, a pretty walled town with a handsome piazza. Here the elector of Collen hath his palace and usual residence. This night we lodged at a pitiful poor walled town called Brifaca, where we first began to have feather-beds laid upon us instead of blankets and coverlets.

July 6. We passed by Rineck castle on our right hand, and about a mile from Brifaca came to Andernach a walled town of some note, subject to the archbishop of Collen. Over-against this town is Hammerstein castle belonging to the archbishop of Triers. Then we passed by two castles of the earl of West, one on the right hand on a high rock, well built, with a cloister in it.

Two leagues from Andernach we passed by Engers, and this night lodged at Coblenz, a considerable city belonging to the archbishop of Triers, called in Latin, Confluentes, because situate at the confluence of the rivers Moselle and Rhine. Here is a fair stone-bridge of thirteen arches over the Moselle, which, notwithstanding its diminutive name, is no small river. Here is also a bridge of boats over the Rhine, to a strong castle called Hermanstein, situate on a high rock; under which, near the river, is a beautiful palace of the archbishop of Triers, whose name is Carolus Caspar. Not far hence is Helfenstein castle, near which springs an acid water. Another well of this nature there is at Antoniftein, three or four hours distant from Andernach, belonging to a cloister of Carmelites, who sell the water sealed up in bottles; a third of greatest note at Zwoibach, four miles off Frankfurt. All these waters are sold to the towns and countries about,
Obsevations Topographical,

about, and commonly drunk mixt with wine, to which they give a pleasant taste and purging quality. I cannot say, as Blondel affirms of them, that upon mixture with wine I saw them smoke, or found them actually hot: Indeed I was not careful to observe these particulars.

July 7. We passed by Lodesheim town and castle on the left hand, and Capelle, a castle of the bishop of Triers, on the right; then a large island in the middle of the Rhine; next Rens, a small wall’d place belonging to the archbishop of Collen, on the right hand, and a little further Browbach, and a castle above it. About four hours from Coblenz, Boppaert, a wall’d town of some note on the right hand, and not far from thence, a castle called Bornhalm on the left. We rested this night at a village called Hertznacl.

July 8. In the morning we came to a pretty pleasant St. Gower, wall’d town call’d St Gower, a mile distant from Hertznach, under the Landgrave of Heffen, who lives in a fair castle, built on a rock above the town. On one of the towers of the wall, by the river’s side, is fastened a brass ring, given by the Emperor Charles V. which is put upon strangers necks, and then they are obliged to drink wine, else they are sprinkled with water. The migrates, and greatest part of the inhabitants of this town, are of the Reformed religion, yet have both Lutherans and Papists their churches. Just without the walls, over-against St. Gower, is a town and castle call’d Weilnich. Somewhat further on the right hand is Wefel town and castle of the archbishop of Triers, and higher up on the left hand Cub, a considerable wall’d town, with a castle upon a rock, belonging to the Prince Elector Palatine. Here we observed a float of timber going down the river, which was directed by many men, who moved two long oars at each end thereof, which served instead of rudders. In the rocks hereabout is flate gotten. Next Baccharac we came to Baccarach, a wall’d town on the right hand, having many towers, subject to the Prince Elector Palatine, famous for the goodness of its wine; as is also Rhineow, a town not far from Mentz. At this, and many other towns between Collen and Mentz, our boatmen paid toll. A little distance from hence we had in view a small wall’d town on the left hand, and on the
right we left a pitiful village, yet walled about, called Heinbach, and came to a second of no better note, called Dreckhauen, where we lodged. Both these are under the archbishop of Mentz. Over-against Heinbach is Lewry, a small walled town of little account.

July 9. We paffed by Aspitthouse castle, then by Moufe-Mousetower, standing in a little island, famous for the story of Tower, the bishop devoured by mice and rats. Over-against this tower stands a castle, and a little further up the river on the right hand, Bing, a handsome walled town be-Bing, longing to the Elector of Mentz: at some distance hence on the left hand, Rhodes, then Gifon and Elvede, a walled town, and daily, Wallop, where we observed ftrorks nests upon the chimnies. This night we arrived at Mentz.

From Collen to Widdich the river is of a great breadth, but above that, till you come to Moufe-tower, much narrower, being freightened by high hills and rocks on each side. The sides of these hills are in some places covered with wood, in some planted with vines, and below the vineyards, near the river, are large orchards of fruit-trees. The vines are tied to stakes or poles, of about a man's heighth, so that, were not the poles much shorter, their vineyards would nearly resemble our hop-gardens. All this way the river flows with so swift a current, that I conceive it impossible to get up stream with oars and fails.

In this journey in the corn-fields, meadows, rocks, woods and sands by the river's side, &c. (which the slowness of our boat's progress gave us leisure to search) we observed many* plants, which we had not elsewhere, or but rarely before found growing wild, viz. Gentiana cruciata, Chamaedrys spuria angustifolia, Chondrilla juncea, Chamaedrys laciniatis foliis, Lychnis sylvestris calyculis striatis, Persicaria filiformis, Gentiiella montana Germanica Park, Genistella aculeata, Baphthalmum vulgare, Fraxinella, Cardamine impatiens, Iberis, Millefolium nobile, Digitalis lutea magno flore, Eryngium arvensis foliis ferrae similibus, Caulalis albis floribus, Saxifraga Venetorum, Chondrilla

* Plants observed as we travelled between Collen and Mentz.
Observations, Topographical.

cæerulea, Tithymalus magnus multicaulis five Esula major, Helleborus major maximus in great plenty, Tithymalus pineus and sundry others. Near the city of Mentz we found the sea-gilly-flower, or thift, called by C. Baudine, Caryophyllus montanus major flore globofo, Caryophyllus gramineo folio minus, Caryophyllus arvensis umbelliferus, Cyoglottium minus, Thalapi minus, alii Alysson minus J.B. Thalapi capsulis sublongis inanum, Heliotropium majus, Campherata consener, Prunella flore major & Prunella folis diffectis.

Mentz.

Mentz is a large city and well fortified: the buildings generally old and but mean, the streets narrow and not well paved, yet are there many great houses of noblemen scatter'd up and down. The Prince's palace is moted about. The present Prince, or Archbishop's name, is Joannes Philippus a Schafenborn; he was besides bishop of Wurtzburgh, and a few weeks since chosen also bishop of Worms. The canons of St. Martin's church here, who are in number 24, all barons or noblemen, chuse the archbishop out of their own number; and when any one of themselves dies, or is removed, a canon into his room out of the Domicillares. The arms of the archbishoprick is a wheel, derived from the first archbishop, who was a wheelwright's son, his name Willigefus, a Saxon; he was wont to say, Willigés, Willigef, recogita unde veneris. Jews are allowed in this city. Here is a bridge of boats over the Rhine.

July 13. We took boat for Frankfort, going up the river Mainus which near Mentz runs into the Rhine. By the way we took notice (1.) of Rußeheim, a handsome fort on our right hand, belonging to the landgrave of Darmstadt. (2.) A little further up on our left hand a small village called Etersheim, and (3.) Hocht.

Hocht, a walled town on the same hand, garrison'd by the Elector of Mentz. Here we may note, that the dominions of the Princes of Germany, that border on the Rhine, are strangely mingled one with another.

Frankfort. Frankfort is about five miles or leagues distant from Mentz, tho' the houses thereof are for the most part built of timber, yet is it fair, populous and rich, very strongly fortified and encompassed with a deep trench of water; the walls and bulwarks are kept very trim, and
Moral, and Physiological.

and in good repair. The river Main divides it into two parts, the lesser, on the south side, is called Saxenhausen. They are joined by a fair stone-bridge of about fourteen arches. In the great piazza are three handsome fountains. The Emperor is now-a-days usually chosen here in the curia, or senate-house; and crowned in the collegiate church of St. Bartholomew. There have been about 25 or 26 Emperors here chosen. By the favour of one of the consuls, or burgomasters, we saw the original imperial grant, or constitution, whereby the college of electors is appointed, called Bulla aurea. It had, in place of the seal, a great medal of gold hanging at it, on which was stamped, or engraved, on one side the figure of the Emperor Charles IV. with this inscription round, Carolus quartus, divini favente clementia, Romarum Imperator semp. Aug. On the reverse, the figure of the city of Rome, and thereon written, Aurea Roma, and round about, this rhyming verse, Roma caput mundi regit orbis fæcna rotundë.

This city is governed by 42 senators, two burgomasters, a praetor, and fourteen scavins. The senators are divided into three scavina; or benches: the highest is Scabinorum; the second, or middlemost, Literatorum, and the lowest, Opificum. When one of the scavins dies, or is removed, they choose into his room one out of the Scammum Literatorum. Those of the Scammum Opificum can rise no higher. These senators choose yearly the two consuls, or burgomasters, out of their own number. The people have no part or interest in the government of the city, or choice of the senate. Many Jews live here, who have their ghetto, or particular quarter, wherein they are locked up every night. Their trade is only brokage, and most of them are very poor. They are forced to wear a piece of yellow cloth somewhere about them, to distinguish them from other people.

All the magistrates, and the greatest part of the citizens are Lutherans, who have five churches. The Roman Catholics are allowed the free exercise of their religion, and have within the city two cloisters of men, and one of women. The Reformed had formerly a church within the walls, afterwards, that being taken from them, they had one just without, which being burnt down, .
whether by accident or malice, their church is now a good distance from the town. The English church, used in Q. Mary’s days, goes to decay. The English house is made a granary, or store-house. The country here-about is pleasant, and the ground rich. We found growing wild Gramen amoris dictum & Ischaeon vulgare, Portulaca syvessiris, and in some hedges, Alflexe baccifera, which, it was not my fortune in all this voyage, to meet with any where else.

July 17. We left Frankfort, taking the post-coach for Frankenthal. After one half hour’s riding, we enter’d into pine-woods, the first we met withal: they reach’d almost to our lodging, this night, which was at a village called Geinbsheim, three German miles from Frankfort.

Kernbheim. July 18. At a little walled town called Kernbheim, we ferried over the Rhine, and at six miles end came to Worms, a great old city, but meanly built, and in a decaying condition. It seems formerly to have been richer and more populous. The bishop is chosen by the canons of the great church, being 20 in number. All the magistrates are Luthers. After we had pass’d Worms, one hour’s riding brought us to Frankenthal, or (as we usually pronounce it) Frankendale, a town belonging to the Prince Elector Palatine, situate in a level by the Rhine, more considerable for its strength than greatness. The houses are low built, the streets broad and freight. The wall, mounts, and outworks neatly kept in good repair. The garrison consists of five companies, whereof two are citizens. There are in it three churches, one Almagne, one Low-Dutch, and one French.

Frankendale. July 20. We travelled from Frankendale, beside the Rhine, thro’ Oberiskeim, a small walled town to Spier, two miles and a half distant. Spier, tho’ it hath a bishop, yet is it a free city of the empire, and governed by its own magistrates, of considerable strength and greatness. The houses are most old-built of timber, rather vast than handsome or convenient. We could not learn that there was any considerable trade driven here, so that were it not for the imperial chamber (which draws much company hither) we believe it would soon grow.
poor and infrequent enough. The Romish religion prevails most, yet have the Lutherans their church. In the cathedral church are the monuments of several Emperors and bishops, who lie interred there. The imperial chamber consists of 36 assessors, and a chief president appointed by the Emperor, besides whom, there are other three presidents chosen by the Emperor out of the delegates. Every Elector of the empire, and each of the ten circles, send two delegates or assessors. There is another chamber of like power at Vienna. These courts determine all controversies arising between the several Princes and States of the empire, by majority of vote. The subjects also of many of the Princes may appeal from their own Princes to this court; but it is not prudent nor safe for them so to do, unless they first withdraw themselves out of their territory. Some Princes, as the Count Palatine, have Jus non appellandi.

July 21. We turned a little backwards, and crossed over the Rhine to Manheim, a town belonging to the Manheim. Prince Elector Palatine, situate just in the angle made by the Necker and Rhine meeting, and strongly fortified. The houses in the late wars were most of them beaten down, but now they are rebuilding them a-pace, the Prince having given the town great privileges, to invite strangers to come and inhabit there. At the time of our being there, his highness was building a new citadel, which was like to prove a strong piece. It wanted not much then of being finished. Who it was that first advanced this place to the dignity of a city, and fortified it with walls, ditches and bulwarks, this inscription over over the gate, towards the Necker, will acquaint the reader:

Quad felix faxit Jehova,
Fredericus III. Elector
Palatinum Rheni, Dux Bavariae,
E veteri Pago Manhemio
Ad Rheni Nicerique conflitum
Justa spatiiorum dimensione
Nobilem Urbem molitus,
Vallo, fossa, muro clausit,
Portam bonis civibus aperuit.
Anno Domini MDCX.
Observations Topographical,

Heidelberg. July 22. From Manheim we rode to Heidelberg, just before we enter'd the town passing a wooden bridge over the Neckar cover'd over with a tectum, as are also many of the great bridges in Switzerland, to preserve the timber, as I conceive, from the injuries of the weather. Heidelberg, tho' none of the greatest cities, yet is the chief of the Palatinate, and for its bigness, populous; which is much, considering the devastations made by the late wars in this country. The houses are most of timber, yet handsome, and in good repair; which argues the inhabitants to be industrious, and in a thriving condition. It is situate on the right bank of the river Neckar, under hills of considerable height; by reason of which it cannot be made strong, tho' it be encompassed with a double wall and trench.

In this city are five jurisdictions, (1.) Aulica, under which are all the Princes or Noblemen: of this jurisdiction the master of the house is president. (2.) Cancellaria, under which are all the councils and other officers, as advocates, doctors of law, &c. (3.) Bellica, or the soldiery: the general is their president. (4.) Academica, in which the Reitor magnificus presides, and (5.) Civica. The members of each jurisdiction may refuse to be judged by any but their own judge, before whom the plaintiff must implead them, according to the maxim in law, Actor sequitur forum rei. The city is divided into four quarters, and governed by a praetor and burgomasters. It can raise two companies of foot, and one of horse. The Lutherans are permitted the exercise of their religion here, and have lately built them a church: there are also Roman Catholicks, who have a church without the walls.

About the middle of the ascent of the hill, called Koningshall, stands the castle where the Prince keeps his court, a lately pile and of great capacity, encompassed with a strong wall and a deep trench hewn out of the rock, which, upon occasion, may be filled with water. Over the gate leading into the palace, is a Dutch inscription, signifying the building of it by Ludovicus V. in the year 1519. It is not all of one piece, but since the first foundation several buildings have been added.
added by several Princes. One part is called the English building.

Under one of the towers flowed the great tun, which almost fill'd a room. It held 132 fudders, a fudder (as we were informed) being equal to four English hogheads. The old tun is taken in pieces, and there is a new one in building by the Prince's order, which is to contain 150 fudders, or 600 hogheads. Being invited by the Prince's order, we dined in the palace, where we observed all things carried with little noise, and great decency. After dinner, his highness was pleased to call us into his closet, and shew us many curiosities, among others (1.) a purse made of Alumen plumosum, which we saw put into a pan of burning charcoal, till it was thoroughly ignite, and yet when taken out and cool, we could not perceive that it had received any harm at all from the fire. (2.) Two unicorns horns, each eight or ten foot long, wreathed and hollow to the top. By the way we may note, that these are the horns of a fish of the cetaceous kind (two distinct species whereof you may find described and figured in the History and Description of the Antilles, or Caribbe Islands, written in French by R. F. of Tertre, and the head of one in Wormius's Museum) not the horns of a quadruped, as is vulgarly, but erroneously thought. Whatever the antients have delivered, modern voyages and enquiries have discovered no other terrestrial unicorn besides the Rhinoceros, which, it's most likely, is signified by the word ΙΧΘΥΣ used in in scripture, which the Septuagint render Μωνοκέφως. (3.) The imperial crown and globe of Rupertus Imp. who was of this family, richly adorned with precious stones. (4.) An excellent and well digested collection of antient and modern coins and medals of all sorts, in which the Prince himself is very knowing. Among the rest, we could not but take notice of a Swedish dollar of copper, about the bigness, and of the figure of a square trencher, stamped at the four corners with the King's image and arms, of that weight, that if a man be to receive ten or twenty pound in such coin, he must come with a cart and team of horse to carry it home. The Prince Palatine's name and titles are, Carolus Ludovicus, Comes Palatinus Rheni, sacri Romani.
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Imperii Elector, utriusq; Bavariae Dux. He speaks six languages perfectly well, viz. High-Dutch, Low-Dutch, English, French, Italian and Latin, is greatly beloved of his subjects, of whom he hath a paternal care, and whose interest he makes his own.

In the great church where the famous library was kept, we observed many fair monuments of Princes of this family, some with Dutch, most with Latin epitaphs or inscriptions: others in the Franciscans church. In St. Peter's church also a great number of monuments of learned men of the university; which is of good account and one of the best in Germany. Three or four colleges there are built and endowed chiefly for the maintenance and accommodation of poor students.

The government of this university is by a senate, which consists only of sixteen professors. The number of professors is limited, and their stipends fixed by the statutes of the university given them by their founder Rupertus count palatine Anno 1346. and confirmed by the Pope and Emperor. Of these professors three are of divinity; four of law; three of medicine, and six of philosophy. Of the philosophy professors four only are admitted into the senate, lest they should make too great a party. Besides the senate chooses a new the philosophy professors every year, and may change them if they please: the other professors are chosen for term of life. When one dies the senate chooses two and presents them to the Prince, of which he takes one to succeed in the vacant place. This senate chooses every year a rector magnificentissimus, which is only an honorary title conferred upon some Prince or great person, for he hath no power at all in the university.

(2.) A rector magnificentus out of their own number by major vote, the chief officer for power and answerable to our vice-chancellor. (3.) An aedilis who takes care of the publick buildings. (4.) A praefectus rei vinariae. (5.) A praefectus rei frumentariae, which officers answer to our Taxers. (6.) A questor, who gathers up the university revenue and rents. Further this senate is a jurisdiction by themselves, and have absolute power in criminal causes extending to life and death: only after sentence given the Prince may pardon. The degrees conferred here are in philosophy masters, of which lately there have been but
Moral, and Physiological.

but few created; in law and medicine licentiates and doctors; in divinity batchelors, licentiates, and doctors, of which last there have been but few lately. They confer degrees without any regard of standing. The candidate must undergo a double examen. (1.) By the faculty wherein he is to commence, the rector magnificus being present, and if he be found insufficient he is remitted, and appointed a certain time to study to prepare himself. (2.) By all the professors together, the rector magnificus being also present. The first they call Examen tentatorium, the second rigorem. Having past both examens he is to dispute publickly sub Praeide, then to make a lecture in the faculty wherein he is promoted, and lastly a speech. The speech ended, he asks the vice-chancellor, ut det facultatem promotori ipsum promovendi. Note that by the statute the Praepostus Ecclesiae Wormatienfs is perpetual chancellor, and substitutes a vice-chancellor in his place. But now this is only done pro forma, for the university is not obnoxious to the chancellor. The vice-chancellor granting leave, the promoter, who is usually the * dean of the faculty, in the name of the Prince Elector, and by the leave of the vice-chancellor, pronounces such an one doctor, and bids him ascend in superiorum cathedram; then kisses him, puts a ring on his finger, and a cap on his head, and gives him a book; first shuts and then open. Then the graduate takes an oath touching with his finger the two beaddles staves set leaning one against the other, and last of all feasts the professors in the room called the Prytaneum, which is now used as the divinity-schools: At which feast the Prince himself is present or sends the marshal of his house. To save charges two or three candidates, if they be of meaner condition, get to be promoted together.

* Note that the professors in each faculty take the deanship by turns, though the senate may appoint any other.

D. T.
D. T. O. M. A.


In FACULTATE THEOLOGICA.

Hora X. Ridericus Spanhemius, SS. Theologiae Doctor, & Professor Ordinarius Novi Testamenti; Diebus Lunaæ Martis, Iovis & Veneris, altera quidem Septimanæ persequitur Vindicias Locorum controversorum, altera vero illustriora ex Paulinis Epistolis loca, ea methodo exsequitur, ut praemissis Quæstionibus, ad elucidationem cujuslibi loci subjungatur, cim Analysis Logica, tum Paraphrasis Rhetorica, tandemque eruantur ordine usus cum theoretici tum practici.

Collegia privata exegetica, disputatoria, examinatoria, prioribus nuper absolutis, Studiosis offert, Disputationes ordinarii & extraordinarii argumenti negantur nunquam.

Hora IX. Johannes Ludovicus Fabricius, SS. Theologiae Doctor & Professor Ordinarius, diebus Lunaæ Martis, Iovis & Veneris Theologiae Systema explanare perget, praeterea absoluto Casuisticò Collegio, Universale explicatorio-examinatorium, aliaque pro Studiosorum desiderio exercitia tum publica tum privata continuabit atque infinitum.

Henricus
II. In FACULTATE JURIDICA.

Henricus David Chuno, D. & Jurium Professor pri-Horâ IX, marius Academiarque Procurallarum, Lectiones Codicis, cujusque tituli principii & fundamentis propostis, legibusque peregrinis & fugitivis, id est, non suo titulo collocatis, (ubi spicilegium facturus est) seorsim explanatis, publicè continuabit : addendo Jurium concurrentium ampliationes & restrictiones ex omni fure.

Iadem privatim operam iuam pro captu & desiderio Studio-

orum eogè ponet.

Johannes Fridericus Böckelmann, J. U. D. Pandecta-Horâ I, rum Professor Ordinarius, & Judicuii Electoralis Audici Assessor, publicè Pandectas decebit hac methodo, ut (1.) cu-
jusque tituli qua est, ostendat connexionem. (2.) Fas cert-
tum, quod in Legibus eò spectantibus reperitur, per definitiones, dōrōnones & Canones compendiosè proponat. (3.) Controver-
sas questiones, additis solidioribus rationibus propagandi & oppugnandi subungat. (4.) Siqua lex nostris Viciniorumque moribus antiquata est, moneat. (5.) Denique te.x.tus in qui-
bus singularis materiæ alius esse est, speciatim assignet.

Collegium etiam disputatorium publicum, necnon explica-
torium privatum, utrumque ad Pandectas institutum, con-
tinuabit, alisque exercitiis Auditoribus, ulti bactus prodeè
studebit.

Banier Shuttenius, J. U. D. Institutionum Imperialium Horâ X, Professor Ordinarius, in tradendis Institutionibus sensum cu-
jusque paragraphi genuinum ubi expetuerit, dubia occurren-
tesque circa præsentem materiam controversias breviter
resolvet.

In Collegiis privatis, explicandi, dictandi, disputandi ope-
ram (quam nec publicè denegabit) etiam pollicetur.

III. In FACULTATE MEDICA.

Johannes Casparus Faufius, Medicinæ Doctor & Pro-

Horâ IX, fessor primarius, necnon Archiater Palatinus, Prae-
licam Medicinam docet, Ideæ morborum succinâ tradit. Medi-
camenta ωτεόνα, officinalia & Chymica, eorumque præ-
parationem enarrat, & formulas elegantiores cum proprios

longæ
Observations Topographical,
longe praxem experimentis feliciter tradit. Chymicam quoque officinam ejus rei Studiosis aperuit.

Hora III. Jacobus Israel, Med. Doct. & Physiologiae Professor Ordinarius, à Nundinis Autumnalis ad Vernalis Anatomiam & Chirurgiam: à Vernalibus verò ad Autumnales Institutiones Medicas aeditavit.
Ex Collegis privatis unum Anatomicum dissectionem, quod circa manualem dissectionem operabit: alterum de generatione & incrementis pulli in suo beneficio furni Chymici & ignis Lampadis habebit.

IV. In FACULTATE PHILOSOPHICA.


Hora XII. Johannes Seobaldus Fabricius, SS. Theologiae Doct. & Ecclesiastes, necnon Linguæ Graecæ Professor Ordinarius, Xenophonius quiæ μετέχεις Β'βλίων A. pertactabit.

Hora IX. Sebastians Rampeck, Politicæ & Eloquentiae Professor Ordinarius, Synopsis Politicæ telam proprièm pertexet, Oeconomicorum Epitomen breviter illustrandam additurum, idque diebus Lunae, Martis & Iovis: diebus Veneris M. Tullii de Oratore libros Rhetoricæ ac Politicæ illustrabat. Studiosis quinetiam id petitoris publica privatique industria succurreret.

Hora X. Stephanus Gerlachius, Historiae Ecclesiasticæ Professor, Historiam Sulpitii Severi eadem quà cecipit methodo hoc Semestri persequetur. Statum nempe ad faciem Veteris Ecclesiæ, ab.
The Prince Elector is absolute in his own territory. He can make laws and repeal them, treat with foreign Princes, sending ambassadours to them, and receiving ambassadours from them, make war and peace, impose tributes arbitrarily on his subjects, without the consent of the States of the country. The Emperor hath nothing to do with his subjects, they swearing allegiance only to him. He only can excommunicate, having referred to himself the episcopal power. The Prince Elector hath seven councils or courts. (1.) Concilium Augustum, or his privy council, (2.) Concilium Status, (3.) Concilium Ecclesiasticum, consisting of four, whereof two are lay-men,
men, and two clergy. (4.) Dicasterium, who judge causes between man and man. (5.) Concilium feudale. (6.) Concilium reeditum temporalium, or rationum. (7.) Concilium reeditum Ecclesiasticorum. The Prince hath thought fit to keep these two last distinct, partly that he may know how to proportion the ministers allowance, and partly that if any of his successors should happen to change his religion (as is ordinary for Princes to do in Germany) they may be able to distinguish clearly between their own proper temporal and the church revenue.

The Prince in his own territory is general bishop and supreme head in ecclesiastical affairs. Formerly this country was under the inspection and jurisdiction of the bishop of Spier, but, since the reformation, the Prince hath not only seized the revenues of the church into his own hand, but also assumed to himself entirely the episcopal power and jurisdiction. He is also universal patron, and disposes of all vacant benefices as he pleases: indeed, the council of four nominate and present two unto him, of which usually he chuses one; because it may well be presumed that he knows not so well as they what persons are best qualified and fit to be preferred; but he is not obliged to confer the benefice upon either of the persons by them so nominated, but may either put in another known to himself, or command them to nominate others, if he like not those presented. The religion of the country is the Reformed. The whole patalinate is divided into three Praefetura, and some, viz. the greater of these subdivided into lesser. Every Praefetura hath its inspector or bishop, who is pastor of some church in that Praefetura: he differs not from any other in any jurisdiction, but in that commonly he hath a larger stipend. His business is only to give information, if he be of a lesser division, to the inspector of the whole Praefetura under which he is; if of a greater, to the council of four. If need be, every Praefetura or great town hath a presbytery. The presbytery of Heidelberg consists of the five ministers of the city, two deputies from each jurisdiction, except the Aulica; and two from each quarter of the city; so that, at this time, the number in all is twenty-one. These all have equal suffrage,
frages, the lay-men with the ministers, only one of the ministers always presides in his course. This presbytery assembles once every week, at whose meeting is always present a delegate from the Prince, to see that nothing be agitated there which it concerns not the presbytery to meddle withal. This presbytery hath no power to excommunicate or inflict any church censure; but if any person be accused to them of any crime, they send him to the jurisdiction to whom he appertains, to enquire into his offence. The court, having received this information from the presbytery, either neglect it if they please, or, if they see cause, enquire into it, and punish the delinquent according to his demerit; and, in the close of the sentence or warrant for execution, add this clause, Quod ad Scandalum Ecclesiae datum remittimus te ad Presbyterium. Now at last, all they can do, is to exact of him a publick confession before the church, and a promise of amendment for the future. As for ordination, it is given by the council of four by imposition of hands, after examination of the person to be ordained, and testimonials exhibited from the university, or other persons of known credit. The Prince receives all tythes, except such as in some places, for conveniency’s sake, are paid immediately to the ministers, and other church revenues, most whereof is paid out again in stipends to the ministers, which the Prince proportions according to their merit and his own discretion; the rest is reserved for emergencies.

July 25. We hired a coach for Strasburg, which brought us thither in three days. At three miles distance from Heidelberg we passed in sight of Philipsburg, a well fortified place situate in a level near the Rhine, now possessed by the French. The castle or palace yielded a goodly prospect. A mile further we passed through Graffe a small town with a castle belonging to the marquis of Tourlach, where our coachman paid toll. We lodged this first night at a village called Linknom under the same lord, who is a Lutheran.

July 26. At four miles end we baited at a large village called Raspach; and two miles on further we passed through Stolehoven a little walled town, where our coachman paid another toll; and after one mile more another walled town called Lichtenau, both under the marquess...
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marquess of Baden. This second night we took up our quarters at Seritz, a village under the earl of Hanau.

July 27. We passed over the Rhine divided into two branches or streams by two great wooden-bridges, which instead of boards are floored with whole fir-trees laid loose across, neither pinned nor nailed down: I conceive that the bridge might upon any exigent be more suddenly thrown down and broken. Soon after we were past the bridges we entred Strasburg. In this journey we observed great plenty of Maiz or Indian wheat planted; in some places Lathyrus fatioius, and in others Carthamus or bastard saffron sown in the fields: growing wild besides what we had before observed in other places, Blattaria, Solidago Saracenica, and in the meadows near Strasburg, Carduus Praenensis Trogi.

Strasburg is a free city of the empire, large, well-built, rich, and populous, encompassed with a double wall and trench full of water, besides the advantage of a good situation in a large level, very exactly fortified, and the walls and works most regular, elegant, and scrupulously kept in repair: so that it seems no easy thing by force to take this city; neither was it I think once attempted in the late German wars. It lies as a block in the Frenchmen's way, and is as it were the rampart of the empire in these parts. The government is by a greater council of 300, chosen by the several companies of citizens, and a letter of 7t, of which number six are Burghomasters, six Stetmasters, 15 Patres Patriae, and 13 of the Militia. The women of this city are well-favoured and of good complexions. The inhabitants are most part Lutherans, who have seven churches: some Papists, who have one church and four cloisters, two for men and two for women; and a few Reformed, who yet are not allowed a church in town, but forced to go some two miles to church in the territory of the earl of Hanau. This city is an episcopal see, the bishop whereof is lord of the lower Alstia. He hath a palace in the city, but is not suffered to lodge therein above three days together; in an inn he is allowed eight days at a time. Here is the fairest, largest, best furnished, and handomeliest kept armory or arsenal that we saw in Germany, or in all these respects any where else.
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else. Here are also publick granaries, wine-cellar, and store-houses. The river Elle runs through the town. The Domo or cathedral church is a fair building of stone, having a great pair of brafs folding-doors at the west end. Herein we viewed the famous clock described by Coryat and others, a piece of excellent workmanship, made, as we were told, by one Isaac Habrechtus of Strasbourg. The steeple of this church is curiously built of carved stone, and incomparably the highest that ever we yet saw. The number of steps from the bottom to the top is 662. We ascended 640 steps to the place called the Crown, from whence we had a wide prospect of the country round about. In this steeple two men watch constantly by day and four by night. Ten hours distant from Strasbourg towards Stuttgard is Soureboorn, from whence acid water is brought hither, which they mingle with their wine and drink as at other places. By the inhabitants of this and other imperial cities, especially the women, are many different sorts of habits used.

July 31. We left Strasbourg and began our journey towards Basil, travelling as far as Tivelsheim a village under the bishop of Strasbourg, some two miles and half. August 1. After three miles riding forward we passed through a small walled town belonging to the same bishop called Markleheim. Two miles further we rode in sight of Brisach, a town seated on a rock by the Rhine side, a place of great strength and importance, much contended for in the late wars. It is now in the French hands, as is all Alsavia almost to the walls of Basil: and after two other miles we came to a village called Lodeheim pleasantly situated in a large plain where we lodged.

Aug. 2. We rode but one league and an half ere we arrived at Basil. This city is large and fair, the houses being for the most part built of stone, tall and painted on the outside. It is compassed about with a double wall and trench, rich and populous, built upon hills, so that which way forever you go you either ascend or descend. The river Rhine divides it into two parts, which are joined together by a bridge of 14 arches. That part on the north side of the river is called
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led Little Basil. There are said to be 300 fountains in this city, scarce a street or house of note but hath one. It is one of the thirteen cantons of Switzerland, and hath in its territory about 100 villages. It gives title to a bishop chosen by canons, who yet is not suffered to lodge in the town one night. He lives at Broudlint, keeps the state of a temporal Prince, and coins money, which is not current in Basil.

As to the civil government, the citizens are divided into 15 tribes or companies. Each company chooses 12 men by major vote, who are called Sexers, because six of them only are regent at once, viz., one six one year, and the other six the next, and so alternately. These twelve Viri or Sexers chuse out of each tribe two funst-masters, or Tribuni Plebis for their lives. The Tribuni Plebis chuse two out of each tribe who are called Senators. Of these sixty, and the four heads (two whereof are called burgomasters, and chosen by the senators properly so called, and two Tribuni Plebis or funst-masters, and chosen by the Tribuni Plebis) the lesser council consists. Both burgomasters and funst-masters, tribunes and senators rule alternately. The old senators, or that half of the lesser council which was in power the precedent year, do first debate and agree upon any business of moment before it be propounded to the new senate, who confirm or reject as they please. The great council (which is assembled by the ordinary council upon weighty occasions) consists of all the magistrates, viz. the twelve Viri, and all the lesser or ordinary council. The lesser council judges in criminal causes. In this city is an university founded by Pope Pius II. The university senate consists of the seventeen professors. The names of the present professors in each faculty, now Anno 1663, are,

In Divinity.

Johannes Buxtorfius Professor Veteris Testamenti et Lin- guae Hebraicae.

Joh. Rudolphus Wetstenius Professor N. Testamenti.

Lucas Kamlerus primarius Pastor & Prof. Controver- siarum.

In
In LAW.

Remigius Fechslius Pandectarum Prof. He has collected many rarities.
Lucas Burchardus Cod. Prof. magnificus Rector.
Jacobus Brandmullerus Institut. Prof.

In MEDICINE.

Emmanuel Stupanus Med. Theor. Prof.
Joh. C. Bauhinus pater, Praxeos Prof.
Hieronymus Bauhinus F. Anatomæ & Botanices Prof.

Of these two the father is the son, and the son consequently the grand-child of that famous herbarist and anatomist Caspar Bauhinus.

In PHILOSOPHY and Human Literature.

Christophorus Fychslius, frater Remigii, Histór. Prof.
Rheinbar dus Iselius Ethic. Prof.
Rudolphus Burchardus, cognatus Lucæ, Mathem. Prof.
Mr. Henricus Kefelbachius, Phys. Prof.
Fridericus Burchardus, Henrici patruus, Orat. & Elog. Prof.
Samuel Burchardus, Logicae Prof. cognatus caeterorum.
Simon Bathienus, Rhet. Prof.
Joh. Zuingerus, Gr. Linguae Prof.

The professors are to read every day in the week in term-time, except Thursdays and Sundays; their stipends are small, and not a competent maintenance.

Here are no doctors in divinity created beside the professors, and some the condition of whose places require that degree. In Law, they confer two degrees, Doctor and Licentiate; in Medicine, only Doctor; in Philosophy, Master and Bachelor. The ecclesiastical government is by the three professors of the first faculty, the four Scholarchae, and all the ministers. When a benefice happens to be vacant, the senate nominates three to it, out of which
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which the ministers chuse one. The city-ministers have a certain stipend in money; in the country-villages the ministers have part of their allowance in tythes, and part in money. No minister, before or after imposition of hands, is obliged by oath or promise to continue his profession so long as he lives, but may leave his ministry when he pleases, and betake himself to some other calling. This and all other the Protestant cantons of Switzerland are of the Reformed religion.

Erasmus. In this city Erasimus Rot. lived the latter part of his time, and here he died and lies buried in the great church, where there is a fair marble monument erected to his memory, against a pillar on the north side of the communion table. He founded and endowed a college in Bafil, wherein are maintain’d twenty persons, eighteen whereof are to be students in divinity, who may live there as long as they please, provided they follow their studies and continue unmarried: only the magistrates have a power to command them thence to another kind of life. Of the other two one is a bedel, and the other a school-master. Over this college there is a regent, without whose leave no student may lodge out of the house one night. Ten of the students are to be Basileans, and ten strangers. At the great church is preserved Erasimus’s library, called Bibliotheca Amberbachiana, because Erasmus bequeathed it to Amberbachius, by his last will and testament, which we saw written with his own hand in half a sheet of paper, dated the 12. of Feb. 1536. In this library are preserved many good pieces and designs of Holbenius, a famous painter born in Basil: a box full of Diplomata, given to Erasmus by the Pope, Emperor, and several Kings and Princes of Europe: Erasmus’s seal and ring: a fair gold medal sent to Erasmus by the King of Poland: many antient and modern coins and medals: three Rappers (i. e. small pieces of money of a mix’d metal not fo big as a silver penny of the value of a farthing) turned into gold by Leon. Turnitius, a famous alchymist of this place, who turned the nail at Florence: several antient Entaglie: many papers of Amberbachius concerning the antiquities of Augusta Rauracorum, formerly a great city, now a village called Augsbl, not far distant from Bafil. The great church or cathedral at Bafil was built

Bibliotheca Amberbachiana.
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built by the Emperor Henry II. who married Cunigunda, the daughter of an English King. St. Pantalus an Englishman, was the first bishop here. The graver sort of citizens and magistrates wear ruffs and steeple-caps. The professors and ministers wear the same caps and ruffs, and besides short gowns, which reach little lower than their knees. Many of the country-boors wear straw-hats. The women wear their coats very short, and some of them little round caps on their heads, very like the young scholars caps in Cambridge, but less; and a tin-girdle about their waists. We saw in this city Dr. Fel. Plateus's Museum or cabinet, wherein there is a good collection of minerals, stones, metals, dried fishes, and other natural and artificial rarities, gathered by Tho. Plateus the father, and Fel. Plateus the son, and disposed in a good method, the names being let to each one. Here and at Zurich are sermons every day in the week at several churches.

David George, that monstrous fanatic, died in this city, at whose death there happened a great tempest of thunder and lightning, and a thunder-bolt brake into his house.

About Basl we found growing wild, beside what we had before met withal, Scrophularia Ruta canina dicta, Passerina Tragi among the corn. Phalangium parvo flore ramosius, Blitum minus album J. B. in fimetis, Cymbalaria Italica hederacea, in muris urbis ad portam quae Argentinam ducit. Stoebe major calyculis non splendentibus, in marginibus agrorum & muris passim toto itinere ad Frankendaliæ ad Basileam usque. Polium montanum Lavendulæ folio, Consolida media Genevensis J. B. & Cneorum Matthioli seu Thymelæa minor Cordi. But if any one desires a more particular account of what plants grow wild about Basil, C. Bauhinus's Catalogus Plantarum circa Basileam nascentium will give him full satisfaction.

August 10. From Basl we set forward for Zurich. At the end of one Dutch mile we passed Augst, supposed to have been Augusta Rauracorum. There we view'd the ruins of an antient building, judged by Amberbachius to have been an amphitheater. Next we rode fast by a walled town on the Rhine subject to the archduke of Innsbruck. On the hills hereabout we first saw fir-trees growing
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growing wild. Then we passed through Bruck a pretty little walled town, having one handsome street well built with tall houses of stone, and fountains in the middle, and lodged at the baths of Baden six miles distant from Basl. This day we first took notice of the little green tree-frogs. The baths here are said to be sixty in number, but small; the water is very hot. Baden is a walled town, seated on the side of a hill by the river Limagus, about half an English mile distant from the baths. Here the delegates of the thirteen cantons meet and sit. The poor people put a cheat upon strangers, bringing them to sell, as they pretend, false dice, which they say, they dig out of the earth naturally so figured and marked. But I am well assured, such as they brought us were artificial dice, and, if they digg'd them out of the earth, they first buried them there themselves. From Baden, Aug. 11. We rode along by the Limagus on one hand, and fair vineyards on the other to Zurich.

Zürich is pleasantly situate at the end of a lake called Zurich-sea, scarce so big as Basl, but I think more populous. The river Limagus which runs out of the lake divides it into two almost equal parts, which are joined together by two bridges; one very broad for carts and horses to pass over.

The houses are built of timber with clay-walls, handsomely painted, many of them four or five stories high. The streets are narrow but well paved with flints and great pebbles. This city is as well fortified as the situation of it will permit, besides the wall, being encompassed round with good earth-works and trenches after the modern fashion. The river Sole runs by and gives defence to it on the south-side, and a little lower empties itself into the Limagus. The citizens are given to merchandise, all very busy and industrious. They either are rich or at least so esteemed, and therefore envied by their neighbours of the Roman religion. Here are no guards of soldiers at the city gates; no strangers examined or search'd, either at coming in or going out. We observed the colour of the water of the Zurich-sea to be greenish and well approaching to that of sea-water. Afterwards we found the water of all the lakes and rivers near the Alps to be of the same colour, at which we were not a little
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a little surprized. For we were wont to attribute that colour in the sea-water to the mixture of salt that is in it, whereas the water of these lakes and rivers discovers to the taste nothing of salt or brackish. But afterwards, considering that these waters did consist for the most part of snow dissolved, and that snow is supposed to contain good store of nitrous salt, we thought it not altogether improbable that this colour may be owing to the nitrous particles remaining in the water, though they be not copious enough to affect our taste, and it would be worth the while to distil good quantities of this water, to see whether it would leave any salt behind.

That these lakes and rivers do consist for the most part of snow-water it is manifest, for that upon the mountains, excepting the lower parts of them, no rain falls in winter-time, but only snow, with which the higher parts of them are covered to a great thickness for at least six months in the year; and for that the rivers that flow from the Alps run lowest in winter, and abound most with water in the summer-time; so that sometimes they overflow their banks in the hottest months of the year, and when no rains fall; as myself can testify concerning the river Rhodanus, because the sun at the season melts the snow upon the mountains. Hence it appears, that their opinion was not so absurd who attributed the yearly increase and over-flowing of the river Nile to the dissolution of the snow upon those mountains where it hath its first rise. Though I do not think this to be the true cause, partly because that part of the earth where those mountains lie is so hot, by reason of its situation under the direct and sometimes perpendicular beams of the sun, that it's not likely any snow should fall, much less lie there; chiefly because travellers generally agree, that, in most parts of that climate where those mountains lie, there are at that time of the year great falls of rain, to which therefore the over-flowing of Nile is more probably attributed.

The government of this city is by a greater and a lesser council. The lesser council consists of fifty, viz. twenty four tribunes or masters of the companies chosen by the twelve tribes or companies, into which the city is divided, two by each company. These twenty four are called G4 Twelve,
Zwehvers, because twelve of them only are regent at once. Twelve senators, chosen out of the companies, one out of each company by the greater council according to our information, according to Simler by the lesser. Six, elected by the same greater council as we were informed, but according to Simler by the lesser, out of the people indifferently where they please; four Tribuni nobilium; chosen by the gentlemen; two Senatores nobilium; and two burgomasters or confuls chosen by the council of 200. The consuls and half this council rule by turns, viz. twelve Zwehvers and twelve Senators with one consul one half year, and the other half the next; and this half that rules is called Concilium novum. All the fifty meet every week, and, if any decree be to be made, it is dated in the presence of the Concilium novum & vetus. All the fifty hear civil causes, Simler faith eight chosen by the fifty; and the Concilium novum judge in criminals alone. The greater council consists of 200, viz. 144 elected out of the tribes, twelve out of each tribe; eighteen chosen by the noblemen among themselves; twenty four Zwehvers; four Tribuni nobilium; two Senatores nobilium; the six elected indifferently, and the two burgomasters. Why the twelve chosen by the greater council should be left out, we know not, and therefore suspect our information was not good, about the making up the great council; but of the twelve out of each tribe, and eighteen out of the noblemen, we are sure. This great council chooses Landtvoights, and assembles upon important occasions that concern the whole common-wealth. They elect four Stadtholders or Proconsuls out of the twenty four masters of the companies; two Sekelmaisters or Treasurers either out of the twelve senators of the companies, or the twelve tribunes of the Concilium novum. Half the lesser council is chosen every half year at Christmas and Midsummer. The Concilium vetus goes out, and then the Concilium novum becomes vetus, and chooses a new Concilium novum, but for the most part the same are chosen again.

August 12. From Zurich we travelled to Schaffhausen, passing by a great cascade or cataract of the river Rhine called Wasserfall; near to which we first observed Orobus sylvaticus purpureus vernus and Hepatica nobilis growing wild.
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This journey we also found Ulmaria major five Barba capri, by a little bridge not far from Schaffhausen.

Schaffhausen is seated upon the river Rhine, over which there is here a bridge, part of wood and part of stone. All boats or flotes that come down the river must here unload, there being no passing further by reason of great stones in the channel, and the precipitous descent of the water at Wasserfall. This town is well built, the houses being most of stone, walled about and intrench'd. It hath two fair streets handsomely paved, besides many other small ones. Here, as at Zurich, the citizens when they walk abroad wear their swords.

As to the civil government, the citizens are divided into twelve tribes or companies. Each tribe chooseth two Tribuni Plebis, and these 24 make the lesser, or ordinary council. The great council consists of these and sixty more, chosen also by the companies, each company choosing five. The father and son, or two brothers, cannot be together of the council. By the greater council are chosen yearly two consuls or burgomasters, two questors, one proconsul, and one Aedilis, but for the most part they choose the same. All causes civil and criminal are tried before the lesser council. Every one of the twenty-four hath 52 florins and nine modii frumenti allow'd him yearly.

August 13. We rode to Constance. By the way we found Horminum luteum glutinosum five Colus Jovis, and in a wood, upon a mountain, Pyrola folio mucronato serrato, Pseudosphodeleus Alpinus, Anonymus flore Colutece, & Sonchus caeruleus latifolius. Constance is an imperial city pleasantly situate in a fair level by the Rhine side, and at the end of the Bodenzee, or lake of Constance, called Bodenzee, antiently Lacus Brigantinus, and Lacus Acronius. There is a long bridge over the river or lake, made part of wood and part of stone. The streets of the city are fair, and the buildings of stone. The council that was held here Anno Dom. 1417, at which John Hus was condemned, hath made this place well known. For what end this council was assembled, and what they did, the following inscription on the council-house will acquaint the reader:

Gaude
Gaude clara Domus, paece populo generosi
Christificae, dum Pontifices tres Schismate vexant;
Tunc omnes abigit Synodus quam tu temisti.
Ipse sedem scandit Martinus nomine quintus
Dum quadringentes numerabant post mille Salutis
Festo Martini, decem & septem simul annos.

This town is also famous for the resistance it made to the Swedish forces commanded by Horn, besieging of it Anno 1598. vid. Galeazzo.
Yet it seemed to me but slenderly fortified, having toward the water only a wall, and toward the land an earthen rampart, or wall and ditch, drawn at a good distance from the stone-wall. It hath indeed advantage by its situation, having a lake on one side and a feney level on the other.

Aug. 15. We took boat, and crossed the Bodenzee from Constance over to Lindaw, and by the way had a fair prospect of the strong town of Oberlingen. Lindaw standeth in the middle of the lake environ'd with water. It is joined to the land by a bridge of 290 paces, one half of it being stone, and the other, that is, that next the town, wood, which may upon occasion easily be taken down and removed. This city, besides its natural strength by reason of its situation, is also artificially fortified with stout walls and bulwarks standing in the water, that side most which is nearest the land. On that side toward the lake are many rows of great stakes driven into the ground, to hinder the approach of any boat or vessel to the town; so that a man would think this place impregnable. The streets and houses are not so spacious and fair as those of Constance, yet proper enough: several fountains also there are in the streets. Towards the Bodenzee are two walls, and between the walls a large vacant space of land wherein vineyards are planted, of the grapes whereof are said to be made yearly 100 fudders, that is, 300 English hogheads of wine. Eight villages belong to this city, their territory extending about three hours.

For plants we found, not far from Lindaw in the mountainous woods, Erica procumbens herbacea, Scabiosa latifolia
Aug. 17. We rode post from Constance towards Munich in Bavaria. The several stages where we changed horses were (1.) Wangen, a small imperial town, two miles distant from Lindau. (2.) Laykirk, another small Imperial town, two miles further on. (3.) Memmingen, a free city of the empire, and one of the chiefest of Swabia, via, both for greatness and strength. The streets are broad, water running thro' them. (4.) Mundelheim, a small town under the Duke of Bavaria, where we lodged. (5.) Lansberg, a pretty town, with a handsome fountain in the market-place, built in 1663: four German miles from Mundelheim. From hence we rode thro’ no considerable town till we came to Munich, passing by the Ammersee, a great lake about three German miles in length, where we had the Alps, or some high mountains in prospect.

All strangers that enter Munich are first distinctly examined at the gate, their names sent in to the governor, and they detained till the return of the messenger with leave for their admission. This city is very strongly walled and fortified, and, for the bigness of it, is the most splendid and beautiful place we have seen in all Germany; so that well might Cluverius term it omnium Germaniarum pulcherrimam. The streets are broad and straight, adorned with sumptuous churches and cloisters, and stately houses. Above all, the Duke’s palace deserves respect, not to say admiration, it being the most magnificent and sumptuous edifice for a house, that we have any where hitherto seen beyond the seas. In the great garden of this palace we saw many rare plants, among the rest, we especially took notice of the Aloe-trees (for so I may well call them, for the greatness and height of their stalks which shoot up in one year) of which there were more, I verily think, in this one garden,
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garden, than in all Europe besides; I mean of such as came to stalk and flower. In this city, so far remote from our native country, it seemed strange to us to find a cloister of English nuns. We thought it worth noting, that the bodies of the churches here are fill'd with pews and seats, as ours in England, whereas generally in the churches of the Roman-Catholicks there are no fixed seats, or but very few; the people either standing to hear their sermons, or fitting on moveable benches and stools, that so when the sermon is ended, the body of the church may be again cleared. Having viewed Munchen, the nearness of Augsburg invited us thither, where we arrived August 21. having pased by the way a pleafant little town belonging to an abby of Bernardines, called Pruck; and after that a little walled town feated on a hill, called Fridberg.

Augsburg Augsburg is a great city about eight miles in compass, well walled and trenched about, standing upon the river Lech; the houses for the most part well-built, the streets adorned with several lately fountains: the armory comparable to that of Strasburgh, consisting of twelve rooms filled with arms and weapons of all sorts; the Stadthoufe, next to that of Amfterdam, the fairest and most lately of any we have yet feen; in which there is one upper room, or chamber, very large and high-roofed, paved with marble, richly gilt and painted both roof and walls, and in all respects scarce to be paralleld.

The citizens are divided between Papifts and Lutherans; these latter being esteemed double the number of the former; yet have they seven cloisters of men, and five of women, whereof one English. Very few Reformed here. This is a free city of the empire, and governed by its own magistrates. It seems to me at present, for the bigness, not very populous, and is, I believe, somewhat decayed and short of what it hath been, both as to riches and multitude of inhabitants: which may be attributed to the losses and injuries it sustained in the late wars. In a large plain not far from Augsburg, over which you pafs going thence to Munchen, we observed many rare plants, viz. Thymalus verrucosus, Trifolium pratense album à Fuchfo depictum scro mas J. B. Pseudo-cibodius Alpinus C. B. Thalps Phœbeatum afferifolium seu bifcu-
August 28. We departed from Augsburg, and being loth to leave behind us unseen so considerable a city as Nurenberg, which Cluver calls Germanicarum superbissimam, we bestowed three days on a journey almost directly backwards to see it. The first day, after the riding of six German miles, we crossed the Danube over a wooden bridge to Donavert, a pretty town belonging to the Duke of Bavaria, where we lodged. The second being the 29th. of August, we passed through two walled towns, viz. Monbaim and Papenhaim, and lodg. Monbaim. ed
ed at Weißenbergh an imperial town of some note, the inhabitants whereof are all Lutherans; it is five miles distant from Donauert, Nigh this town is a strong fort built upon a hill, belonging to the marquess of Ansbach, who is also a Lutheran.

The third day being the thirtieth, we passed through a small walled town called Pleinfeldt, and at three miles distance we rode close beside another walled town called Rotte, under the marquess of Ansbach, and, after two hours riding more through woods of pine, we arrived at Nurenbirg, which city we found to answer if not exceed our expectation, it being the most flately and best built that we have seen in Germany. The houses are for the most part of free-flone, and, were they but as uniform as those of the Low-Country-towns, Nurenbirg would not for beauty give place to any one of them. Besides it is rich, populous, and for bigness I think not inferior to the best in Germany, though I am not ignorant that in this last respect some give Collen, some Erfurt the preeminence. It hath under it a large territory, comprehending above 100 towns and villages. The country round about is barren and sandy, and the city far distant from the sea, and standing upon but a small river; notwithstanding which disadvantages, by the industry of the people, it is become one of the best traded and most potent towns in Germany. The inhabitants are for the most part Lutherans; they seemed to us, in the ornaments of their churches and manner of their worship, more to symbolize with the Roman-Catholicks than any other people of that profession we had then observed. The Papists are allowed a small church within the walls, but the Reformed none. The great Piazza, the Stadt-haus, and other publick buildings deserve remembrance. This town wants not for walls and ditches, being every way well fenced and fortified. Finally, it is an imperial city or free common-wealth, being governed by a senate and magistrates of its own: but of the model or form of government, for want of good acquaintance, we could not get a perfect account.

As for plants, we found no great variety near the city, but, by the way we came from Augsburgh, we observed, in several woods near Popenhain, Caryophyll-lus
Morale, and Physiological.

Not far from Weis-fenbrg, Draba lutea filiguis striisformis C. B. Gentianula lanugine ad singularum foliorum lacinias donata, flore quadrifloris J. B. Buglossium angustifolium, Cytisus Gefferi cui flores feri spicati J. B. and a kind of plant like to our Meadow. Saxifraga, but taller and larger, An Sefet pratense Lob.

September 3. From Nurenberg we began our journey to Ratisbon or Regensberg. This day we proceeded no further than Aldtdorf, a little walled town and an university belonging to the Nurenbergers, where there is a pretty physis-garden. This inscription in a cloister in the college contains the history of the founding of this university.


In the college are maintain’d 36 students at the charges of the city of Nurenberg, which also pays the professors their stipends. The degrees conferred here are doctor of law, phyfic, and poetry, batchelor of divinity, and
and master of arts. As for plants, there is a double catalogue put out by Dr. Mauritius Hofman: one of such as are nursed up and preserved in the physic-garden; the other of such as grow wild near the town; in the composing of which he seems to have taken much pains, so that I believe this catalogue is very full and exact.

Dr. Hofman shewed us several Cornua Ammonis, or serpent-stones, and some petrified cochle and muschel-shells found in the fields and hop-gardens near Altdorf, of which we ourselves the day following as we travell'd from thence to Nieuemarkt, in some fields we pased through, oberved and gather'd up good store. Of these kinds of bodies, I fhall here take leave, by way of digreffion, to discouer a little. And firft I shall make a particular enumeration of some of the moft remarkable places where they have been found, as well in England as beyond the seas, partly of my own obfervation, partly out of good writers. Secondly, I fhall give the opinions of the beft authors concerning the original and production of them.

I. Firft then, those places of England which afford plenty of these petrified shells are (1.) Whitby, or White-bay in the North riding of Yorkshire, where (as Camden relates in his description of that country) Lapides inveniuntur serpentum in spiram revolutorum effigie, nature lucidentis miraculum—Serpentes olim fuis crederes quos lapidus cortex interiijet. Befides these serpent-stones, which he alone mentions, we found there both upon the shores and in the rocky cliffs by the sea-fide petrified muscles and Belemmites in great plenty. (2.) Huntley-nabb, on the fame coaft, not far from Whitby to the northwards, where (as the fame Camden relates) upon the shores under the cliffs lie ftones varia magnitudine tam affabre sphærica fignum à natura efformati, ut globi artificis manu in majorum tormentorum usum tornati videantur. In quibus effractis inveniuntur Serpentes faxei, fuis spiris evoluti, sed quater pleiq; capitis deftituti. At this place I never was; but, upon the shore at Whitby, I obferv'd many of this kind of balls, that is, serpent-stones crufled over or inclosed in another ftone, as in their cafe or Matrix, and leaving therein, when broken, their impression; but none of that exact sphærical roundnefs he mentions, but rather
rather of a lenticular figure. (3.) Alderley in Gloucestershire, mention’d by the same Author in his description of that county. Ad fontes Avon fluvioli (faith he) vix octo mill. pass. à litare in collibus prope Alderley viculum lapides cochlearum & ostrearum specie enacuntur, quæ five viva fuerint aliquando animantia, free nature Ludicra que-rant Philosophi naturæ venatores. (4.) Kinesham, or Cainsham in Somersetshire, not far from Alderley, so called (faith Camden) from Keina, a holy Britishe virgin, quam serpentes in lapides mutasse superiéris ævi creáultas multis perfusit, eo quod ejusmodi ludentis naturae miracula ibi in latomis nonunquam inueniantur. Videmus enim lapidem hinc delatum serpentis in spiram revoluti effigie, cujus caput imperfessi in circumferentia prominuit, extremá cauda centrum occupante. Of thefe serpent-stones we saw several forts here, and some of that extraordinary bigness, that (as I remember) they were about a foot in diameter. (5.) Farnham in Surrey, mention’d by Dr. Merret in his Pinax. (6.) Richmond in Yorkshire, mention’d by Camden. Besides which places myself and friends have seen and gather’d of them at Lyme in Dorsetshire, Adderbury in Oxfordshire (which doubtless thence had its name) about five miles distant from Banbury, Bracksworthe in Northamptonshire, and in several places near Daventry, Verulam in Hertfordshire, Shukborough in Warwickshire. And, which is most strange, Mr. Eyre of Highlouse in the Peak of Derbyshire shew’d us a great lump of them amasied together by a cement as hard as marble, found in that mountainous country: and Mr. Martin Lister assures us, that there are store of them found in Craven, the most mountainous and craggy part of Yorkshire; and in a discourse of his concerning them, publish’d in the Philosophical Trans- actions, Numb. 76, p. 2283. he mentions for them Adder- ton in Yorkshire, thence denominate, Wansford bridge in Northamptonshire, and Gunthrop and Beauvoir-castle in Lincoln and Nottinghamshire.

Besides these petrified shells, there are found in several places of England other congenerous bodies, viz. Star-stones, by some called Ajroites; by Boetius de Boot, Ajterias vera seu Lapis stellaris; by Gesner, Sphragis Ajleros; by Fer. Imperat. Stella Judaica. (2.) St. Cuthbert’s beads, or Trochites; and (3.) Cap-stones, or Echinites, called by

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naturalists Lapides Brontiae. Of the Glossopetrae I have not yet heard that there have been any found in England, which I do not a little wonder at, there being sharks frequently taken upon our coasts.

I. Of those they call star-stones (because they run out into five angles like so many rays as they use to picture stars with there are found at Shukborough in Warwickshire and Caffington near Gloucester, where we also have gathered of them. Camden mentions a third place, that is, Beauvoir-caffle in Lincolnshire, sub quo (said he) inventur Astroites lapides, qui stellas invicem connexas representant, in quibus radii eminent singulis angulis quini, & singulis radiis cavitas media subsidet. We have had them also sent us out of Yorkshire, but remember not where they were gathered.

II. Those they call St. Cuthbert's beads are found on the western shore of the Holy Island. This last Summer (1671.) Tho. Willisell discovered them in the chinks of the stones in the bottom of the channel of the river Tees, which parts Yorkshire and the bishoprick of Durham. These are round and not angular like the star-stones. Both (if they be owing to the sea) seem to be the Spina dorsales or tail-bones of fishes petrified, they consisting for the most part of several plates or pieces sticking together like so many vertebrae, though I confess the particular pieces are shorter or thinner than the vertebrae of any fish I have as yet observed.

III. The Echinites or Brontiae are found scattered all over England of several magnitudes and shapes. I have not heard of any bed of them or great number found in one place. Beyond the seas we have (besides the place which gave occasion to this discourse) found of them at Brescia in Lombardy on the sides of a hill adjoining to the city; upon the banks of the river Tanaro in Piedmont four miles below Asti, but most plentifully in the island of Malta, where we also saw great store of Glossopetrae or sharks teeth petrified of all sorts and sizes.

For the Glossopetrae, Bocrais d' Brot lib. 2. cap. 168. faith they are found in the sands near Daventer in Overysel, and in the allum-mines near Lumenburgh in Germany. Goropius Becanus in Orig. Antwerp. 1. 3. faith that they are often digged up in the ditches about Antwerp; and found in so great plenty in a hill near Aken in Germany.
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that he thinks it a good argument to prove that they could not be the teeth of sharks: In calle illo qui Aquisgrana imminet tantum id genus pthicium suisse quis crederet quantum de Glaudopetram copia conjectari debetur.

For petrified cochles and other sea-shells, Geo. Agricola faith there are found of them in the stone-quarries of Galgeberg and those beyond mount Maurice in the territory of Hildesheim in Saxony; and sometimes in the new part of the city itself in digging of cellars and in the town-ditch. (2.) At Alfeld in the same Saxony between the watch-tower and the town as one goes to Embeck.

(3.) At Hanover in the lime or chalk-stone pits, and near a village called Lindau. (4.) In Misnia in the village Rabschyt near the brook Trebitia. (5.) In a certain place of Prussia called the Rose-garden. (6.) In Hassia near the castle of Spangeberg. (7.) In Italy in a mountain near Verona. (8.) In the banks of the river Elfa; & prope oppidum ex Florentinis conditoribus nominatum. Of these shells amassed together into great stones by a petrified cement are found (as Paufanias relates) in the quarries of Megara, which kind of stone is therefore called Conchites. They are also found in Trachy, Hemionia, Macedonia, the mountains of Calabria, &c. And Steno in his Prodromus faith, that in those huge stones which lie scattered in some places about the town of Volterra (being the remainders of antient walls) there are found all sorts of shells, and not long since in the middle of the market-place there was cut out a stone full of streaked cochles. Jo. Bauhine faith that in the slate-stone digged out of the fountain of Boll, wherewith the inhabitants covered their houses, there appeared several figures, whereof some represented serpents, some snails, some scallops, some cochles, some muscles, &c. and that there were digged up many petrified shells of cochles, muscles, scallops, periwinkles, Cornua Ammonis, &c.

Scaliger Exercitat. 196. Sect. 9. faith, In saxis Lararum (traetis sicut hic Agri Vafatenis) ad pagum qui Cohors dicitur, saxos canceros multos vidimus, procul a mari plurimum, a Garumna 30 circiter millia passuum.

Bernardus Palissius names these places in France where petrified shells are found; the suburb of St. Martial near Paris; the mountains of the forest of Arden, especially
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near Sedan; the province of Valois; the mountains near Soisson; the province of Xantogne and Champagne.

Joannes de Laet in his second book de Gemmis, cap. 29. relates how Bartholomew Moret wrote to him from Dijon in Burgundy, that in a rock near that city, at that distance from the sea, called le Fort aux Fées, were found great numbers of stones imitating sea-shells, his words are, Ubique profant lapides formâ rotundâ ac striâtâ, qui ipsam superindusse videntur Conchyliorum marinorum materiem, non intu quo male per infirmiora crescentium lapidum penetrante, paulatinâque ita crescente ut ambienti undique lapidi uniformem Conchyliorum formam faciat, nisi quod alia alia majus sit, ita ut si lapidi lapidem attriveris, medio uirisque conchyliarum formâ erumpant, obversâ, transversâ, mixta, inaequali quidem proportione sed formâ unâ, &c.

The same Joannes de Laet gives us another relation from Jacobus Salmasius uncle to Claudius Salmasius and lord of Sauvignac, of great store of these petrified shells found in the stony fields about Sauvignac, which I shall here exhibit to the reader in his own words; Pagus ille Salviniacum uno milliari dislat ab Avallono, ut nunc appellatur, vel ut prius vocabatur Aballono, & 3 aut 4 mil. à Vezelio patria Theodori Bezæ. Hujus pagi ager arabilis montosus est & lapidosis totus, qui tamen est seracissimus. In lapidibus illis reperiuntur inferta quasi ex differenti lapidis materia omne genus conchyliaria aliquando plura, aliquando pauciora prout est ipsius saxi magnitudo. Videntur ibi Pectínes, Ofírea, Solenes, Cornua Ammonis & alia genera. In toto illo tractu per spatium trium aut quatuor milliarium hac το χρυσιάθν in agris reperiuntur usq; ad oppidum vel castrum Montis Regalis, nomine Mont-real, cujus ditionis ager constitus est totus huysmodi lapidibus varias conchyliorum species, partim interius infertas, partim in superficie etiam extantes praferentibus.

In Italy besides the places already mentioned, we were told, that there were found of these shells in the territory of Modena in a mountain called Monte Nicani, and in the channel of a river near Udine in Friuli thence called Rius miraculorum, and doubtless in many other places. And for the Low-Countries, Goranus Pecanus fætus, Apud vicinos nostros Limburgos, Leudios, Chondrusos, Namurcos, Hannones, Astrebates, Turnacensæ, & alios multos, à quibus.
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bus vel marmora nobis vel alia lapidum genera advehitur, non parva est concharum copia & varietas. Vidi in silice durissimo Bethunis adeo, quo vis apud nos fieruntur, tot conchulas totas lapideas, & conclusis valvulis integras, magnà ut curà & arte ex illis fuisse cæmento aliquo compatiás judicaretur.

Besides all which places and others mentioned by writers. I doubt not but in Italy, Germany, France, England and the Low-Countries there are many not taken notice of where these bodies might be found, were diligent search and observation made. That they have not been discovered or taken notice of in other parts of Europe and in Asia and Africa is certainly to be attributed to the negligence and rudenes of the people who mind nothing that is curious, or to the want of learned writers who should communicate the histories of them to the world.

I come now to give an account of the opinions of the best authors concerning the original and production of these stones.

The first and to me most probable opinion is, that they were original the shells or bones of living fishes and other animals bred in the sea. This was the general opinion of the antients, insomuch that Steno faith, it was never made a question among them, whether such bodies came from any place else but the sea. It hath of late times, and is now received and embraced by divers learned and ingenious philosophers, as in the precedent age by Fracastorius, and in the present by Nicolaus Steno and Mr. Robert Hook, after whom I need name no more to give it countenance and authority in the world. In his Micrographia, Observ. 17. He thus discourses concerning these bodies. Examining some of these very curiously figured bodies (found about Keinham, which are commonly thought to be stones formed by some extraordinary plastic virtue latent in the earth itself) I took notice of these particulars.

First, that these figured bodies were of very differing substances as to hardnes: some of clay, some marl, some soft stone, almost of the hardnes of those stones, which masons call fire-stone, others as hard as Portland stone, others as hard as marble, and some as hard as a flint or chryftal,
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Next, they were of very differing substances as to transparency and colour; some white, some almost black, some brown, some metallic, or like marcasites, some transparent like white marble, others like flaw’d chystal, some grey, some of divers colours, some radiated like those long petrified drops, which are commonly found at the Peak, and in other subterraneous caverns, which have a kind of pith in the middle.

Thirdly, that they were very different as to the manner of their outward figuration: for some of them seem’d to have been the substance that had filled the shell of some kind of shell-fish; others to have been the substance that had contained or enwrapped one of these shells, on both which the perfect impression either of the inside or outside of such shells seem’d to be left, but for the most part those impressions seemed to be made by an imperfect, or broken shell, the great end, or mouth of the shell being always wanting, and oftentimes half, and in some there were impressions, just as if there had been holes broken in the figurating, imprinting, or moulding-shell: some of them seem’d to be made by such a shell very much bruised or flaw’d, insomuch, that one would verily have thought, that very figured stone had been broken or bruised whilst a jelly as were, and so harden’d, but within the grain of the stone there appeared not any sign of any such bruise or breaking, but only on the very uttermost superficies.

Fourthly, they were very different as to their outward covering, some having the perfect shell both in figure, colour, and substance sticking on its surface, and adhering to it, but might very easily be separated from it, and like other common cockle, or scallop-shells, which some of them most accurately resembled, were very dissolvable in common vinegar; others of them, especially those serpentine or helical stones, were covered with, or retained the shining or pearl-coloured substance of the inside of the shell, which substance, on some parts of them was exceeding thin, and might very easily be rubbed off; on other parts it was pretty thick, and retained a white coat or flaky substance on the top, just like the sides of such shells: some of them had large pieces of
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of the shell very plainly sticking on to them, which were easily to be broken, or flaked off by degrees: they likewise some of them retained all along the surface of them, very pretty kind of futures, such as are observed in the skulls of several kinds of living creatures, which futures were most curiously shaped in the manner of leaves, and every one of them in the same shell exactly like one another; which I was able to discover plainly enough with my naked eye, but more perfectly and distinctly with my microscope: all these futures, I found by breaking some of the stones, to be the Termini, or boundings of certain diaphragms or partitions, which seemed to divide the cavity of the shell, into a multitude of very proportionate and regular cells or caverns: these diaphragms in many of them I found very perfect and compleat, of a very distinct substance from that which filled the cavities, and exactly of the same kind with that which covered the outside, being for the most part white, or mother-of-pearl coloured.

As for the cavities between those diaphragms, I found some of them fill’d with marl, and others with several kinds of stones, others for the most part hollow, only the whole cavity was usually covered over with a kind of tartareus petrified substance, which stuck about the sides, and was there shot into very curious regular figures, just as tartar, or other dissolved salts are observed to stick and chrysfallize about the sides of the containing vessels; or like those little diamonds, which I before observed to have covered the vaulted cavity of a flint; others had these cavities all lined with a metalline, or marcafte-like substance, which I could with a microscope as plainly see curiously and regularly figured, as I had done those in a flint.

From all which, and several other particulars which I observed, I cannot but think, that all these, and most other kinds of stony bodies which are found thus strangely figured, do owe their formation and figuration, not to any kind of plastick virtue inherent in the earth, but to the shells of certain shell-fishes, which, either by some deluge, inundation, earthquake, or some such other means, came to be thrown to that place, and there to be filled with
with some kind of mud or clay, or petrifying water, or some other substance, which in tract of time hath been settled together, and harden'd in those shelly moulds into those shaped substances we now find them; that the great and thin end of these shells, by that earthquake, or whatever other extraordinary cause it was that brought them thither, was broken off; and that many others were otherwise broken, bruised, and disfigured; that these shells, which are thus spiralled and separated with diaphragms, were some kind of Nautili, or porcelain-shells; and that others were shells of muscles, cockles, periwinkles, scallops, &c. of various sorts; that these shells in many, from the particular nature of the containing or inclosed earth, or some other cause, have, in tract of time, rotted and moulder'd away, and only left their impressions both on the containing and contained substances; and so left them pretty loose one within another, so that they may easily be separated by a knock or two of a hammer. That others of these shell-fishes, according to the nature of the substances, have, by a long continuance in that posture, been petrified, and turned into the nature of stone. That oftentimes the shell may be found with one kind of substance within, and quite another without, having perhaps been filled in one place, and afterwards translated to another, which I have very frequently observed in cockle, muscle, periwinkle, and other shells, which I have found by the sea-side. Nay further, that some parts of the same shell may be filled in one place, and some other caverns in another, and others in a third, or a fourth, or a fifth place, for so many differing substances have I found in one of the petrified shells, and perhaps all these differing from the encompassing earth or stone: the means how all which varieties may be caused, I think will not be difficult to conceive, to any one that has taken notice of those shells, which are commonly found on the sea-shore: and he, that shall thoroughly examine several kinds of such curiously form'd stones, will, I am very apt to think, find reason to suppose their generation or formation, to be ascribable to some such accidents as I have mentioned, and not to any plastic virtue. For it seems to me quite contrary to the infinite prudence of Nature, which is observable
Morally and Physiologically, observably in all its works and productions, to design every thing to a determinate end, and for the attaining that end makes use of such ways as are (as far as the knowledge of man has yet been able to reach) altogether consonant and most agreeable to man's reason, and of no way or means that doth contradict, or is contrary to human ratiocination; whence it has a long time been a general observation and maxim, that *Nature doth nothing in vain*: it seems, I say, contrary to that great wisdom of Nature, that these prettily shaped bodies should have all those curious figures and contrivances, which many of them are adorned and contrived with) generated or wrought by a *plastic virtue*, for no higher end than only to exhibit such a form; which he, that shall thoroughly consider all the circumstances of such kind of figured bodies, will, I think, have great reason to believe, tho' I confess one cannot be able presently to find out what Nature's designs are. Thus far Mr. Hook. And *Steno* agrees exactly with him, and is far more positive and confident; for (faith he) that these shells were once the parts of animals living in a fluid, tho' there never had been any testaceous marine creatures, the very view of the shell itself evinceth, as may be evident by the instance of bivalve cochle-shells. Concerning these shells, his observations and discourses are very consonant with Mr. *Hook's*. One or two particulars not yet mentioned, which may further confirm this opinion, I find in him, viz. (1.) That there was found a pearl-bearing shell in *Tuscany*, a pearl yet sticking to the shell. (2.) A piece of the great sea-nacre [*Pinna marina*] in which the silk-like substance within the shell being consumed, the colour of that substance did remain in that earthy matter which had filled the shell. (3.) That about the city of *Volterra* there are many beds of earth not stony, which do abound with true cochle-shells that have suffered no change at all, and yet they must needs have lain there above 3000 years; whence it is evident, that part of *Tuscany* was of old time covered with the sea; and why then might not as well all those other places where these petrified shells are found.

Against
Against this opinion lie two very considerable and material objections, which I shall here propound.

First, It will hence follow, that all the earth was once covered by the sea, and that for a considerable time: for there being found of these shells in the middle of Germany, at least 200 miles distant from any sea, as as myself can witness, nay, upon the highest mountains in Europe, even the Alps themselves, as may be proved by sufficient authority, the sea must needs have covered them, and consequently, the water keeping its level, all Europe and the world besides. Now that ever the water should have covered the earth to that heighth, as to exceed the tops of the highest mountains, and for a considerable time abode there, is hard to believe, nor can such an opinion be easily reconciled with the scripture. If it be said that these shells were brought in by the universal deluge in the time of Noah, when the mountains were covered. I answer, that that deluge proceeded from rain, which was more likely to carry shells down to the sea, than to bring any upwards from it. But because some argue from what the scripture faith, [The fountains of the great deep are broken up.] that the deluge proceeded partly from a breaking forth and overflowing of the sea, and consequently might bring in these shells: to that I answer, that had it been so, such a flood would have been more likely to scatter such shells, as it brought in indifferently all over the surface of the earth, than to lay them in great beds in particular places: such beds seem to have been the effect of those animals breeding there for some considerable time. If it be said, that those mountains where such shells are found might at first have been low places, and afterwards raised up by earthquakes, that seems not likely, because they are found upon so many mountains, unless it be said, that all mountains were at first so raised, and then the former difficulty will recur, and it will follow, that before the raising of the first mountains, the whole earth was covered by the sea. Besides, this hypothesis seems to me in itself improbable, for that tho' there be mention made in histories of some such mountains raised by earthquakes,
yet they are but very few, and of no considerable heighth or greatness, compared with those chains of high and vast mountains, the Alps, Pyrenees, Appennine, Taurus, Caucasus, Imaus, Hæmus, Atlas, &c. In general, since the most antient times recorded in history, the face of the earth hath suffer'd little change, the same mountains, islands, promontories, lakes, rivers still remaining, and very few added, loft, or removed. Whence it will follow, that if the mountains were not from the beginning, either the world is a great deal older than is imagin'd or believed, there being an incredible space of time requir'd to work such changes as raising all the mountains, according to the leisurely proceedings of Nature, in mutations of that kind, since the first records of history: or that in the primitive times, and soon after, the creation of the earth suffer'd far more concussions and mutations in its superficial part than afterward.

II. Among these petrified shells are many sorts, which are not at this day that we know of any where to be found; nay some proceed so far as to affirm, that there is not the like to any one of these supposed petrified shells to be found among our present shell-fishes. If it be said, that these species be lost out of the world: that is a supposition which philosophers hitherto have been unwilling to admit, esteeming the destruction of any one species to be a dismembering the universe and rendring it imperfect, whereas they think the divine providence is especially concerned to preserve and secure all the works of the creation. Yet granting that some few species might be lost, it is very unlikely that so many shoul'd, and still more unlikely that such as were so diffused all over Europe and found in so many places; but most of all that a whole Genus, of which there were so many several species, and those scattered in so many different and from each other remote places, should be so utterly extinct and gone, at least out of our seas, that there should not one in an age be found. Such are, for example, the Serpentine stones or Cornua Ammonis supposed originally to have been Nautili, of which I myself have seen five or six distinct species, and doubtless there are yet many more. Add hereunto the greatness of some of these shells, viz. the Cornua Ammonis, whereof
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whereof there are found of about a foot diameter, far exceeding the bulk of any shell-fish now breeding or living in our seas.

The second opinion is of those who imagine these bodies to have been the effects and products of some plastic power in the earth; and to have been formed after the manner of diamonds and other precious stones, or the crystals of coagulated salts, by shooting into such figures. Of these bodies my very ingenious and learned friend Mr. Martin Lister discourses in a Letter of his inserted in the Philosoph. Transa7. numb. 76. to this purpose, upon occasion of Mr. Steno's Prodromus. We will easily believe, that in some countries, and particularly along the shore of the Mediterranean sea, there may all manner of shell-fishes be found promiscuously included in rocks or earth, and at good distances too from the sea. But for our English inland quarries, which also abound with infinite numbers and great varieties of shells, I am apt to think there is no such matter as petrifying of shells in the busines7 (or as Steno explains himself, pag. 84. in the English version & alibi, that the substance of these shells, formerly belonging to animals, hath been dissolved or wafted by the penetrating force of juices, and that a stony substance is come in the place thereof) but that these coxle-like stones ever were as they are at present, Lapides sui generis, and never any part of an animal. That they are so at present is in effect confessed by Steno in the above cited page; and it is most certain, that our English quarry-shells (to continue that abusive name) have no parts of a different texture from the rock or quarry they are taken, that is, that there is no such thing as shell in these resemblances of shells, but that iron-stone cochles are all iron-stone, lime or marble all lime-stone and marble, spar or crystalline shells all spar, &c. and that they never were any part of an animal. My reason is, that quarries of different stone yield us quite different sorts or species of shells, not only one from another (as those cochle stones of the iron-stone quarries of Adderton in Yorkshire differ from those found in the lead-mines of the neighbouring mountains, and both these from that cochle-quarry of Wansford-bridge in Northamptonshire, and all three from those to be
be found in the quarries about Gunthorp and Beauvoir-
castle, &c.) but I dare boldly say from any thing in
Nature besides, that either the land, salt, or fresh waters
do yield us. ’Tis true that I have picked out of that
one quarry of Wansford very resemblances of Murices,
Tellinae, Turbinæ, Coelacea, &c. and yet I am not con-
vinc’d, when I particularly examined some of our En-
ghish shores for shells, as also the fresh waters and the
fields, that I did ever meet with any one of those spe-
cies of shells any where else but in their respective quar-
ries; whence I conclude them Lapides sui generis, and
that they were not cast in any animal mould whose
species or race is yet to be found in being at this day.
Thus far Mr. Lifter. The like argument also Ger-
pius Becanus ues to prove, that these bodies are not
petrified shells. Scallop-shells (faith he) are so rare up-
on the shores of Flanders, that they are brought thi-
ther by pilgrims from the coast of Gallicia in Spain,
and shown for strange things; and yet in the ditches
about Antwerp there is such plenty of them, that in
digging there they throw up heaps of them like little
mountains, so that he that would gather of them need
not take the pains to travel to Gallicia, or so much as to
the sea-shores. To these he adds another argument which
yet to me seems of little force. In some places about
Antwerp digging for water, they meet with in the earth
a cruff or layer of two foot thickness and in some parts
thinner, wholly made up of sea-shells, whereas there was
never found such a mass of shells upon any of the sea-
shores; so that no man can reasonably afford that they
were thrown up by the sea and there left, the waters
receding and forsaking them; for then without que-
tion we should hear of the like heaps or beds of them
found on the coasts of Holland, Zeoland, and Flanders.
But to this I answer, that the reason why at this day
there are not such beds of them to be found upon
the shores may be, because they are gathered up and
carried away by men, partly out of curiosity, partly to
burn for lime, or other ways to make use of. Be-
ides we know that in the bottom of the sea, these
shell-fishes many times lie in great beds, and there breed
in great abundance, and it is not altogether unlikely,
that

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that the sea might on occasion suddenly recede and de-
sert such beds, and they afterwards come to be bu-
ried in the earth.

But to argue further in defence of this opinion. There
are found in the earth many such like figured stones
which we know not whither to refer, as resembling
neither any part of an animal, nor of a plant: such
are those that naturalists call Lapides Lyncurii, Bele-
nites, Lapides Judaici, Trochites, Asterix and others,
to which if there be at present any shells, bones, fruits,
roots, &c. like, I am as yet wholly to seek for them.
And if there are now no such things in being, they
that defend the contrary opinion must have recourse
to that gratuitous supposition, that such species are lost
out of the world.

Besides I have been told by a person of good credit of
a stone of this nature resembling a cochle-shell found in
the stomach of a beef; where in all likelihood it must
be bred and shoot into that figure; which, if true, there
can be no reason to doubt, but those in the stone-quar-
rries and other places are so generated.

A third opinion there is, that some of these bodies are
really shells petrified, or the cases of such bodies or their
contents; and that others of them are stones of their own
kind resembling such shells, so shaped and figured by some
plastic power. That shells may be, and are sometimes
petrified (as are also bones and wood) cannot be denied;
and I myself have gather'd such upon the sea-shore; and
on the other hand, he that afferts, that there are bodies
naturally growing in the earth, which do imitate sea-
shells, delivers himself from the trouble of answering
the arguments which urge the contrary opinion. But
yet methinks this is but a shift and refuge to avoid
trouble, there not being sufficient ground to found such
da distinction. For my own part, I confess, I propend
to the first opinion, as being more consonant to the nature
of the thing, and could wish that all external arguments
and objections against it were rationally and solidly an-
swer'd.

The names of the professors in each faculty, and what
books they read, together with their exercises, the fol-
lowing Series Letcionum will acquaint the reader.

Cata-
Morale, and Physiological.

Catalogus Lecitionum atq; Exercitationum Academicarum quas incly-tae Norimbergenium Universitatis Altdorffinae Praefessores, cum Deo, post ferias Caniculares hujus Anni cio ioc lxii. cæptas usque ad proxime futuram Panegyrin Petro-Paulinam publice privatimq; continuabunt.


Observations Topographical, elis Nuzelii ab & in Sunders-


SS. THEOLOGIÆ PROFESSORES.

Johannes Weinmann D. Evangelii S. Johannis ad ναι

τος εδ, quâ hæstens usus est, methodo, ad finem us-

que, divinâ opitulante gratiâ, continuabit, & præter publicas disputationes, etiam privata exercitia, cum lectoria, tum disputatoria, ex libris Bibliæ et locis Theologicis partim insti
tuta, partim instituenda, frequentavit.

M. Lucas Fridericus Reinhartus Controversias ad textus Evangelicos Dominicales agitari solidas; tum Exegeticas, tum Dogmatics et Morales monstrat, et optimam senten
tiam, quâpete, confirmat.

M. Joh. Conradus Dürr Introduccionem aporisticam in libris Symbolicos Ecclesiæ Norimbergen sis intra vertentem hunc annum ad finem perducere allaborabit. Gnomologiam Aristotelicum simul cum interpretatione librorum Nicomachi
orum pertexet.

JURIS PROFESSORES.

Wilhelmus Ludwell D. à Tit. lib. 4. C. de Oblig. & Action. usque ad tit. de Ufur. insigniores & difficiliores le-

ges, adeoq; materiam obligationis, probationis et compensationis explicare, & si Deus vitam & valetudinem concesserit, intra annum absolvere conabitur. Adjœtis etiam iis qua ex jure Canonico, & Feudali huc pertinentes videbuntur.

Idem cœpta Collegia continuabit, & potentibus nova aper-

vist.
Moral, and Physiological.


Erneftus Cregel D. Absolutis libri IV. Institut. Imp. titulis XII. ultimis, de integro earum interpretationem aggrediar, & cum studiis, ea praeprimis, quae ad Theoriam spectant, in illis obscura adhuc illustraverim, titulos deincepis in Praxi frequentiores intra sexquiannum, cum Deo, enodabo.

Ad Publicum Item quod attinet, meae in eo sunt definæ cogitationes, ut illud juxta seriem Juris Civilis, Perfonarum scil. Rerum & Actionum ubi libro VII. ac VIII. Jurisprudentia Publicæ Georgii Baudelet finis est impotitus, quæ cæo tægis quam traedetur. Privatim quemadmodum explicando ac disputando accuratas Excellentissimi J.C. & fidelissimi olim mei Doctoris D. Joachimi Schobeli, &c. in Digesta Disputationes impresentiarum evoluo: ita pro virili, in alis tam privatibus Collegiis, quam publicis circularibusq; Excitiis qua disputaturis, qua audituris non deero.

MEDICINÆ PROFESSORES.


Observations Topographical,

Philosophiae Professores.


In Physicis decisionem breuem potiorum & usum pra reliquis habentium controversiarum, nuper inchoatam perpectet.


Georgius Matthias König proximum Syntagma de Viris literatis sūl θεόσ aufsicabitur. In Epistolâ ad Galatas etiam perget, eaq; fuitâ, ad Epistolam ad Ephesios se conferet.

M. Joh. Leonhardus Schwäger explanabit Ciceronis Brutum de claris Oratoribus, ejusque Oratorem, seu de perfecto Oratore ad M. Brutum: Characteres vero, quos habetnus sub explicacione textus Virgiliani sparsim ostendit, ac porro ostendet, in unum etiam simul collecit, uberrius; diducht, prorum exemplo excepturis, ad calamum dictabit. Utrumq; per vices ab ipso sicut horâ pomeridianâ tertii, atq; inßper ejus opera ad Exercitia Oratoria, tam publica quam privata, in profa pariter ac ligata petituris parata erit.

Moral, and Physiological.

Habebuntur præterea, ex Superiorum munificentia, sine Studiofiorum sumptibus, quævis hebdomade disputationes, quas vocant, circulares in Theologicâ, Juridicâ, Medicâ & Philosophicâ Facultate, necon singulis mensibus Exercitia Oratorum.

Sept. 4. We proceeded on our journey to Ratisbon, and passed through Nieumarkt, a little wall'd town belonging to the Duke of Bavaria.

5. We passed through Heinmav, a small wall'd town subject to the Duke of Neuburg; and, at night, passing the river Danube, by a fair stone bridge, we enter'd Ratisbon, or Regensburg, so called from the river Regen, which here falls into the Danube.

This city is large and well built (the houses being for the most part of stone) adorned with many fair palaces of noblemen, well wall'd about and fortified. The streets are but narrow. The roofs of the houses are not built so steep as at Augsburg, Nurenburch, &c. or as ours in England, but flattish after the Italian mode. The Diet of the Empire is usually held here, it being an imperial city, and govern'd by its own magistrates, though in the Duke of Bavaria's country. This city hath a bishop, who is of the Romish religion, but he hath little to do, all the magistrates and the greatest part of the inhabitants being Lutherans. Yet some cloisters there are of monks and nuns, and a college of Jesuits.

Upon the rocks, not far from Ratisbon, a little below the town on the other side the river, we found, besides many of the rarer sort of our English plants, Asclepias flore albo. Daucus montanus Apii folio major C. B. Api um montanum nigrum J. B. Caucahs Peucedani folio Ger, as I take it: It hath a fine leaf, a small root (which I believe yearly perif Citizens) reddifh stalks, an umbel of white flowers, to which succeed small round seeds with purple apices: An Daucus montanus Apii folio, flore luteo C. B? It hath winged leaves like to Bipennella, but larger, the several wings of each leaf being as large as and like unto the intire leaf of the said Bipennella; a great root, but not
Observations Topographical,

not hot in taste as the Burnet-faxifrages are; the stalk riseh up to the height of a man almost; the seeds are round, striate, cover'd with a hoary down, reddish toward the top, and of a hot spicy taste. Tithymalus verrucosus J. B. Stoebe major calyculis non splendentibus C. B. Hepaticum trifolium Lob. Flammula jovis; Cerinthe major flore luteo; Fraxinella; Cytisus supinus sylvetis. Ratifonensis flor. lut. ad extortum foliorum prodeuntibus Cat. Aldtdorf. Cytisus Gesneri cui flores fere spicati J. B. Euphrasia pratensis lutea C. B. which we first found not far from Heinmaw; Phalangium ramosum; Chamædrys vulgaris & Cham. folis laciniatis; After montanus luteus bir-suto folicis folio; After Austriacus 4 Cluf. i. e. Linaria aurea Tragi; After Atticus ilalorum flore purpureo Park. Oxyacantha five Berberis; Bugula cærulea Alpina; Oro-banche minor purpureis floriibus, five ramosa, in the corn-fields. Chondrilla cærulea J. B. Folia huic valde laciniate, glabra, glauca. Flores longis insident pediculis, dilutæ cæulei & ad ruborem inclinantes. Securidaca dumetorum major flore vario, siliquis articulatis C. B. which is common all over Germany. Veronica supina facie Teucrri praten sis no lefs common; Lepidium annuum growing among radifhes; and Fœnum Græcum, which I suppose was fown there.

Sept. ii. We hired a boat for Vienna: First, on our left hand as we went down the river, we pass'd by a little village and a caftle standing on a hill, called Thonoftan. About three miles and half below Regensberg we pass'd in fight of Wert, a caftle belonging to the bishop of Ratisbon, feated on a hill by a river called Wisent, which here runs into the Danube. This night we lodg'd at Straubing, a very handfome, pleafant, walled town, belonging to the Duke of Bavaria, five miles below Ra-tisbon.

Sept. 12. In the morning we paft Pogen, where is a church standing on a high hill. Four miles below Straubing. Straubing we row'd under a wooden bridge which there crosses the Danube. Here on the left hand as one goes down stands Dreckendorf, a walled town belonging to the Duke of Bavaria. A little further off we pass'd by the mouth of the river Iler. Then we had a prospect of Ofterhoven on our left hand, and not far thence a small village
village called Hofkirchen, and on the same side still a little

castle called Hilkersberg, where the shores along the river

grew to be rocky. This night we lodged at a pretty

little walled town built of stone, called Vilbouen, belong-
ing to Bavaria.

Sept. 13. At four miles distance from Vilbouen we came
to Passau, a considerable city for its strength and
greatness, formerly well built with many fair stone houses.

But about three quarters of a year before our being there,
a most dreadful fire burnt down, ruin'd, and destroy'd
almost the whole town, churches, publick buildings and
all. It is situate just at the confluence of the rivers
In and Danube, and subject to the archduke of Inpruck,
who, we were told, gave 50000 dollars towards the re-
building of it. Here is a bridge over the river In to a
town called Inflat. Hitherto the river Danube flowed
gently down, but below Passau it began to be fright-
ened by hills on both sides and to run with a swifter
stream. Seven miles from Passau we passed by Naybonse
castle, and this third night lodged at a pretty little vil-
lage belonging to the Emperor called Asch, standing on
the right side of the river.

Sept. 14. We had an open country again, no hills
being near the river. At four miles end we landed at
Linz, and viewed the city, which we found to be a ve-

ry elegant place, well built with stone houses flat roof'd
after the Italian fashion; having a large square Piazza
with two fountains in it, and on the highest part a fair
palace of the Emperor, whence there is a pleafant pros-
pect of the Danube and country adjacent. About three
miles below Linz we pass'd a pretty village on our
left hand, called Mathausen. Then we had a prospect
of a town on our right hand situate upon the river Enz
called Intz. Seven miles below Linz are hills again on
both sides the river. Hereabouts is a village called Greine,
where the earl of Lichtenstein hath a house situate on a
hill. Below Greine, on the left hand, is a little village,
where we pass a dangerous place in the river called Strom,
where the stream being frighten'd by hills on each hand
runs very swiftly, and besides is full of rocks: a little
further below a rock, which jets a good way out into the
river, we pass'd a violent whirl-pool called the Werbl.
At some distance further on the left hand stands a small village under a high hill, half whereof fell down about two years before our being there, which made so great a noise that it was heard two German miles off, at Ips, a little town we passed by on the right hand. We lodged this fourth night at a small village called Morbach, 11 miles from Linz.

Sept. 15. In the morning we went by a rich cloister called Melk on our right. At six miles distance from our lodging we passed a fair house of the earl of Dernstein’s on our left hand, and hereabouts had a prospect of Kitzwein a rich abbey strongly situate on a hill, attempted by the Swedes without success. About nine miles from Marbach we passed under a wooden bridge by a little walled town called Stein, where the Swedes (they told us) were notably beaten and driven out again after they had enter’d the town; which repulse they afterwards revenged, when they took the place, by plundering and spoiling it. Not far hence we landed to view Krembs, a considerable city seated on the side of a hill, well built, walled about and trenched towards the river. From hence we came into an open country, and the river being at liberty, the channel grew much wider. Six miles below Krembs we passed by a small walled town on the right hand called Deihl; then we had the prospect of Greitenstein, a castle situate on a hill at some distance from the river on the left hand; next we had a sight of Cernberg, a wall’d town in a plain not far from the Dannube; taken by the Swedes in the late wars and by them notably defended against the Emperor. Here and afterward at several other places we observed mills built upon two boats, the wheel lying between the boats, which are fixed at a convenient distance one from the other, and so the stream coming between the boats, and by reason it is streightened by degrees, running more swiftly, turns the wheel. One of the boats is by strong cables or chains at each end fasten’d to the bank, and so the boats mill and all rise and fall with the water. About a mile and half before we reach’d Vienna, we went by a fair rich abbey called Claisternaiberg, with a little wall’d town of the same name; and at the end of nineteen German miles, which, the swiftness of the current affiathiing us, we made this day.
day, we arrived at Vienna, the chief city of Austria, Vienna.
and at present the imperial seat, so called from the river Wien which runs into the Danube on the east side of the
town. It is for the bigness of it the most frequent and
full of people that we have yet seen beyond the seas. The
wall is not above four or five English miles in circuit, but
there are large suburbs at a little distance from the town,
those houses that were very near being lately pull'd down
to clear the wall and works for fear of a siege: the
Tures at the time of our being there having taken Neu-
hausen, and news coming that they were marching with
their whole army towards Presburg in Hungary, not above
forty English miles distant from Vienna. This city is
regularly and strongly fortified with a high and impene-
trable wall of earth faced with brick, a broad and deep
trench, into which they can (as they told us) when they
pleaft draw the water; baftions, half-moons and horn-
works, &c. that it is justly reputed one of the strongest
holds of Christendom. The inner wall, which was said
to be built with the ransom of Richard I. King of Eng-
land, is of little strength or consideration in comparison
with the new and outer one. The houses are sufficiently
tall and well built of stone, the roofs flatthif after the
Italian mode: the streets rather narrow than broad; the
markets well flored with all necessaries. Here we first
met with tortoifes to be sold, at the rate of six-pence
a piece: they are found in muddy ditches in these parts.
Here also we first took notice of the fruit of Sorbus legi-
tima; and first saw in the fish-markets the Silurus or
fisht-fifth, the greatest of all fresh-water fish that we have
seen, some of them weighing above 100 pound. The
Emperor's palace, the cathedral church, and other publick
buildings deserve remembrance, were it my design minute-
lly to describe places. The Emperor is of a mean ftature
and dark complexion, thin-vifaged, his hair black, his
under-lip thick and hanging down a little, much like his
effigies on his coin. As for plants we found here-about, Plants ob-
Osmorhizis spicata flore purpureo, Phyllyum vulgare; Kalii ferros a-
spinadosum, at this distance from the sea. Scabiosa foliis dis-bout Vien-
feitis, flore albo vel albo-viride Clus. Dorycnio congener na.
in great plenty. Marrubium album angustifolium prae-
grinum C. B. as it seemed to me. In the island of
Danubius
We hired a coach for Venice and began our journey thitherward, and this night lodged at a great village called Trayskerk four miles distant from Vienna: by the wayside we found store of Absinthium Austriacum tenuifolium Clus.

At four miles end we came to Neustat (Neapolis Auriaca they call it) well walled and trench’d about, of a square figure, mean bigness, handomely built, having freight streets and a fair square market-place. At three of the corners are mounts or bastions, and at the fourth a castle. In the lanes near this town I first found Asperula caerulea. Two miles beyond Neustat we began to leave the open country and to come among hills. We lodged this night at a village called Gluknitz, four miles distant from Neustat. The houses in these villages are for the most part covered with thingles of wood: the hills clothed with woods of pine.

After two miles riding we came to a village called Schadwyen or Shadwin, seated between the mountains and inclosed with a gate at each end. Here we alighted and our coachman hired ten oxen (which stood there ready for that purpose) to draw his coach up a steep ascent to the top of the hills which part Austria and Stiria. On the sides and top of this hill we found these plants, Libanotis Theophrasti minor Park. Cyclamen autumnale of two sorts. Tussilago Alpina folio rotundo. A sort of small Trachelium that I have not elsewhere seen. A small sort of Muscus clavatus, with leaves like juniper. Larix abundantly. Lysimachia lutea in alis foliorum florens. A kind of Glaux with a rough cod. Gentiana folio Acefopadiis abundantly, and many others that we had before met with. In this journey we also found Muscus denticulatus major in the shady lanes in many places: and in watery and springy places Alseme muscfa J. B. further on we came to a little wall’d place near the river Muscor, called Mertzuschlag. Hereabouts are many mills; and scithes and sickles made here: then we passed through a village called Langenwang, where stands a castle on a hill: after that another called Kriegla, where we crossed the river. This afternoon we passed through a pleasant valley.
valley among woody mountains, and at night took up our lodging at Kimberg, a large village fix long miles distant from Glocknitz.

We travelled along the same valley, and passed through a great village called Kapfuberg; besides many other villages, castles, and gentlemen's houses on the sides of the hills, which we rode near to; and at three miles end came to Pruck an der Mure, i. e. Pons Muræ, a fair town for this country, and walled about, having a large market-place with a fountain in it. Proceeding on in the same valley some two leagues further, we passed Lewben, a very neat, pleasant and well built town, better than we expected to have found any in this mountainous country. It hath a fair market-place with fountains. And we observed much iron lying in the streets, which is here made, and wherewith the inhabitants drive a great trade. Here we crossed the Mura twice, and soon after we were past Lewben we rode over a hill, and following the course of the said river among the mountains, at evening we came to a village called St. Michael, where we lodged. We saw in these parts many men and women with large swellings under their chins or on their throats, called in Latin or rather in Greek, Bronchocele, and by some in English, Bavarian Pokes. Some of them were single, others double and treble. This is a disease which these Alpine nations have of old been subject to. *Quis tumidum guttur miretur in Alpibus?* Yet among the Grifons, who live on the highest parts of the Alps, I do not remember to have seen any of these: I dare say there are not half so many thereabouts as in these countries. What should be the cause of this evil, whether the drinking of snow-water, or water infected with the virose steams and particles of mercury, or other minerals and metals, wherewith in all probability these mountains abound, is no easy matter to determine. For on the one hand, in some mountainous countries, where the snow lies as long as it doth here, and consequently their waters are little else than snow dissolved, we shall find very few infected with this disease: and on the other hand, as few in Hungary, Transylvania, and other countries abounding with mercury and other minerals, We must therefore suspend.
Observations Topographical,
till some ingenious physician of these countries, by long
and diligent observing what causes or occasions these tu-
mours, and likewise what prevents and cures them, in-
structs us better.
We also observed in these countries more idiots and
delirious persons than any where else; which we imputed
sometimes to the snow-water, sometimes to the inordinate
eating of cabbage, of which in all the market-towns we
saw monstrous heaps lying to be sold. But upon fur-
ther consideration I think with Palmarius, it ought
rather to be attributed to the mineral steams that infect
their waters, especially mercurial. For we see the va-
pour of quick-silver doth principally affect the brain and
nervous parts, begetting palfies and deliriums in painters,
gilders, miners and those that are much conversant
about it.

28. We travelled on by the river Mure's side to Knittle-
field, a walled town three miles from St. Michael, and
then proceeding along the same valley, we passed by
some noblemens houses and castles, and lodged at a vil-
lage upon the Mure, called St. Georgia, four miles from
Knittlefield.

29. We travelled on in the same valley by the river
Mure, till we came to Newmark, a little walled place,
four miles from St. Georgia. Then we followed the
course of another little river, which runs into the
Dravus about Volckmark, in a narrow valley between
high hills, and a mile from Newmark we came to a
considerable walled town called Freisach, in which are
four cloisters. A mile further we came to Heirt, in
Carinthia, where we lay this night.

30. We rode rocky ways thro' vallies to St. Veit, or Vit,
a walled town of some note, three miles distant from
Heirt. The Emperor hath a mint-house for coining
money here. Proceeding on three miles further we arrived
at Vilkirchen, which had been a market-town of note,
but about three years since a lamentable fire burnt it
down to the ground.

Octob. 1. We rode very rugged way among the mountains and
rocks, passing the whole length of a lake called Osff-
fuersee, and at the further end of it observed a strong
castle seated on a high hill, belonging to the earl of
Dietrich-
Dietrichstein, a Prince of the empire, who coins money. Dietrich-
Then we came down into a pleasant valley, and so Stein.
over the river Dravus, which is here navigable, and runs by the walls of Villach, a well built town, and one Villach.
of the chief of this country, three miles distant from Vilkerck.
A good distance from Villach we passed the Gulle, a considerable river falling into the Dravus; and had very rocky way among high mountains till we came to Orlejstein, a village where we lodged.

We travelled among high mountains very bad way to a village called Klein Tarvis, two miles, and proceeding still among the mountains, we came to the river Timent, which runs into the Adriatic sea; and lodged this night at Pontieba, the last town we passed Pontieba, in the Emperor's country, part of it is subject to the Emperor, called Pontieba Imperiale, and part to the Venetians, called Pontieba Veneta, where we took a bill of health for Venice. Between Klein Tarvis and Pontieba, we saw a herd of goats following the goat-herd like so many dogs: in other places we have seen sheep in that manner following their shepherd, which, no doubt, was usual in Judaea; for our Saviour, John 10. 4. comparing himself to a shepherd, and his disciples and servants to sheep, faith, And he went before his sheep, and they follow him, for they know his voice; but a stranger they will not follow, for they know not the voice of a stranger. Which would have seemed strange to the hearers, had the shepherds been wont only to drive their sheep, as with us they do.

We passed over the river Timent by a bridge that parts Carinthia from Friuli. About a German mile off we came to a little fort in a village called Clausen, where are two draw-bridges, which we were not permitted to pass, till we had delivered our bill of health. Hence we travelled along by the river, and observed timber-trees floated down the stream, and when the rocks stopped them, men with hooks put them off, and directed them into the force of the current. This is the manner all over the Alps, and other high mountains, they fell trees, and get them to any little current of water and expect a good shot of rain, and then float them down to the greater rivers. This day we passed Vensonga, a pretty Vensonga.
little walled town, and lodged at Hospitaletto, a large village, where we got quit of the mountains, and came into the plain country of Friuli.

4. We passed by Limonia, a walled town situate on the rising of a hill at the foot of the mountains. Some miles St. Daniele further we passed St. Daniele; then we forded the river Timent in several places. The river hereabouts in a time of rain, or when the snow melts on the mountains, spreads itself to a very great breadth, as appears by the empty channel. Soon after we had passed the river, we ascended a cliff, and enter’d the walls of a little town called Spilimberg, where were rows or cloisters on each side the street under the houses, which we after found in many of the towns of Lombardy; ten Italian miles further riding brought us to St. Avogio, a village where we refest this night.

5. We rode along the plains, and at ten miles end came to Saribe, a walled town, where the river Livenza divides itself and encompasseth the wall. From hence we drove on about two Dutch miles, and lodged at Conegliano, a walled town seated on the ridge of a hill; a place of good account, as is also Saribe.

All the way we travelled in Italy hitherto, we had little other bread than what was made of Sorghum, a grain, the blade whereof arises to seven or eight foot height, and is as great as one’s finger, bearing a large panicle on the top, the berry or seed being bigger than that of wheat, and of a dusky colour.

6. We rode a Dutch mile, and then ferried over the river Ananus, or Piaue, and at ten Italian miles further came to Treviso, a large town, the head of a province called Marca Trevisana, an important place for strength, but too near, and too obnoxious to Venice to be rich. From Treviso we rode thro’ a very fertile and well cultivated country to Mestre, a little town by the Lagune (so they call the flats about Venice, which are all covered with water when the tide is in) where we took boat for Venice.

Upon the mountains we passed over this voyage, we found a great number of plants we had not before met with, as Quinquefolium album majus caulescens C. B. Quinquefolium album majus alterum C. B. Teucrum Alpinum Cist
Moral, and Physiological.

Cifti flore; Epimedium vulgare; Linaria purpurea parva J. B. And not far from Pontieba on Italy side, upon the rocks, Ledum Alpinum-birsutum C. B. Ledum Alpinum birsutum minus, An Ciftus Austriacus myrtifolius? Auricula ursi; Sedum serra tum alterum folis longis angustis; Sedum Alpinum Minimum, folis cinereis, flore canado J. B. Siler montanum and many others. Helleborus niger verus plentifully all over the highest mountains. Scabiosa argentea angustifolia, in the channels of the torrents in Friuli, and Galega, by the rivers and ditches everywhere in Italy. In Marca Trevisana, some part of Friuli, and the greatest part of Lombardy, we observed the corn-fields to be so thick set with rows of trees, that if a man from an hill or high tower should look down upon the country at a distance, he would take it to be a wood. Against every tree is planted a vine, which runs up the tree, and the branches of the neighbouring vines they draw from tree to tree and tie together: so that their corn-fields are also woods and vineyards, the same land sufficing for all these productions, and not being exhausted with so much spending (as one would be apt to imagine) by reason of the depth and richness of its soil. Neither in this hot country doth the corn receive any prejudice from the shade or dropping of the trees (which in our colder climate would quite marr it) but rather advantage, there falling little rain in summer time, and the trees keeping off the scorching sun-beams, which else might dry up and wither it; the heat notwithstanding sufficing to bring the grain to perfect maturity. Whereas with us, all the sun we can give it is little enough, and the very grass which grows under the trees is sourre and crude: for that usually we have too little heat for our moisture, and they too much. This part of Italy hath been deservedly celebrated for fertility, and may justly, in my opinion, be styled the garden of Europe.
Observations Topographical.

OF

VENICE.

Venice is built upon certain little islands in the middle of the sea, or rather in the middle of certain flats or shallows cover'd all over with water at full sea, but about the city, when the tide is out, in many places bare, called by the Italians, Lagune. These Lagune are inclosed and separated from the main gulph, or Adriatic sea by a bank of earth (il Lito or Lido they call it) extending, according to Contarini, about 60 miles, according to Leander Albertus, and others (who come nearer the truth) but 35, and resemble the space contained in a bent bow, the bow being the shore of the firm land, and the Lido the string. The city stands at an equal distance from the firm land of Italy, and from the Lido, viz. five miles from each. This Lido serves as a good fence or rampart to secure the city and other included islands against the raging waves of the sea in stormy weather. It is discontinued by seven, say some, say others by five breaks or apertures, and those not very wide ones, which they call ports or havens, and by which the Lagune communicate with the gulph. Of these inlets, two only are deep enough to admit any vessels of considerable burthen or bulk, viz. those of Malamocco or Lio. Into, or not far from the Lagune, most of the great rivers of Italy empty themselves, e.g. Padus, now called Po, Athêss, now Adige, Meduacus major, now Brenta, Meduacus minor, now Bacchilione, Tiliaventum, now Taiamento, Licientia, now Livenza, Silis, now Sile, Anaffûs, now Piave; which, especially in time of floods, bring down with them from the mountains a great deal of earth and salt, which will, it's probable in process of time fill up the Lagune, and make
make dry land of them. For I believe, at the first building of Venice, no part of them lay bare at low water as now there doth. Gianatti faith, that antiently the city was ten miles distant from the firm land, the Lagune extending as far as Oriago, which, as some think, was so called quasi Ora lacus; and that all that space between Oriago and Fusina (where they now embark that go from Padua to Venice) had been added to the firm land, notwithstanding all the endeavours the Venetians could use.

This city was first founded, according to the best authors, about the time that Attila with his Hunnes invaded Italy, burning and destroying all before him; by some families who, seeing no end of these irruptions of barbarous nations, sought refuge for themselves in these defolate islands, in the year 456, or thereabouts. Others make the first beginning of it to have been before that time in the year 421. or 423. But tho' in the times of former irruptions, many of the neighbouring people fled hither to shelter themselves from the present storm, yet I believe they did not think of settling themselves here, or making these islands their fix'd habitation, and uniting themselves into one city, till the expedition of Attila. Whenever it began, it hath continued a virgin-city (having never been ravish'd nor attempted by any enemy) since its first foundation for at least 1200 years, which is more than any other city of that antiquity, so far as I have read or heard, can boast of. Yet is it not at present, nor ever was it fortified, or so much as wall'd about; neither indeed doth it need it, being sufficiently strong by its situation alone, which is such, that it is not likely for the future ever to be taken, unless the sea quite leave it, and the Lagune become dry land conjoin'd with the continent. For by sea great ships can come no nearer than the haven of Malamocco, and those apertures in the Lido, where boats and lesser vessels may enter, are defended by strong forts and castles: besides that, every tide the channel doth so vary, that, without the guidance of an expert pilot, they will not be able to find the way in, but be in danger of being stranded upon the flats.

This
Observations Topographical.

This city is in circuit, taking in the Giudecha, eight Italian miles. Viewing it from St. Mark's tower, we judged it to be about the bigness Amsterdam was then of. It is divided into two parts by the Grand Canale, which passes through the middle of it in the form of the letter S. It is also divided into six parts or regions, called thence Sestieri; three on one side the Canale, viz. Castello, St. Marco, and Canareio; and three on the other side, viz. San Paolo, Santa Croce, and Dorsobuio. It contains 70 parishes, though some make them 72; 67 monasteries, whereof 33 of friars, and 34 of nuns, according to a survey taken in the year 1581. Since which time, I believe, the number hath been increased. According to the same survey there were then in the city, of

<table>
<thead>
<tr>
<th>Noble</th>
<th>Men</th>
<th>1843</th>
<th>Artisans, Men</th>
<th>32887</th>
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<tbody>
<tr>
<td>Women</td>
<td>1659</td>
<td></td>
<td>Women</td>
<td>31617</td>
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<td></td>
<td>Boys</td>
<td>22765</td>
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<tr>
<td>Girls</td>
<td>1230</td>
<td></td>
<td>Girls</td>
<td>18227</td>
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<tr>
<td>Citizens</td>
<td>Men</td>
<td>2117</td>
<td>Beggars, Men</td>
<td>75</td>
</tr>
<tr>
<td>Women</td>
<td>1936</td>
<td></td>
<td>Women</td>
<td>112</td>
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<tr>
<td>Boys</td>
<td>1708</td>
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<td>Monks</td>
<td>945</td>
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<tr>
<td>Girls</td>
<td>1418</td>
<td></td>
<td>Nuns</td>
<td>2508</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>Priests</td>
<td>516</td>
</tr>
<tr>
<td>Maids</td>
<td></td>
<td></td>
<td>Poor of the Hospital</td>
<td>1290</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Jews</td>
<td>1043</td>
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</tbody>
</table>

The sum total is 134871. Sansofinus reckons the number of souls in his time to have been 180000, but, I suppose, he takes in Muran and the other islands, which in this survey are left out. I am not ignorant that several late writers make the present number of inhabitants to be at least 300000, but I believe they speak at random, and by conjecture, upon no good grounds; (as I have been often told, that there are in Paris a million and half of people, whereas it is well if there be half a million) there being no reason to think that the city is much increased since Sansofinus's time. I find the sum total of the number of males to exceed the total of the number of females in this survey by above 3500, which comes near to the account of the excess of males in England, given
given us by Capt. Graunt, in his Observations upon the
weekly bills of mortality in London. And I doubt not
but if exact observations were made in other places, there
would be found the like proportion between the number of
males and females born into the world in hot countries,
as in cold; so that from this topick, the Asiaticks have
no greater plea for multiplicity of wives, than the
Europeans. Little channels of water cross and divide
the city into many islets, and may rather be called the
streets of it, than those narrow lanes and alleys (Calle
they call them) thro' which you pass on foot from one
place to another. By these channels you may convey
yourself and goods from any one place in the city
to any other, by boat; which is the only way of
carriage, except mens shoulers, there being neither
coach nor litter, cart nor wain, horse nor as used, or
so much as to be seen here. For passage on foot, there
are built about 450 bridges cross the channels, most of
them of stone, and of one arch, among which, the
most famous is that over the Canal grande, called Ponte
di Rialto: and for passage by water, there are a great
number of Gondalo's and other boats; some say eight,
some ten, some twelve, nay, some fifteen thousand, but
I believe all is conjecture; and they were never numbered.

The buildings are generally tall and fair: the palaces
of noblemen thick set all over the city, but especially
upon the Canal grande, which, tho' not vast, are hand-
some and well built. The foundations of the houses
are great piles, or mafts, driven into the ground, as
at Amsterdam.

The arsenal is said to be three miles in circuit, they
that speak modestly allow it but two; well stored with
arms, ammunition, and all provisions for war. Here
the gallies are made and laid up, of which the republick
hath (they say) at least 200. Here also lies the famous
veffel called the Bucentoro, in which, upon Ascension-
day, yearly, the Duke, accompanied with the senators,
and attended by some thousands of Gondalo's bravely fet
out and adorned, goes forth as it were in solemn
proceffion some two or three miles to sea, and casting
thereinto a ring, faith, I espoyle thee in token of perpetual
dominion. Here are said to be kept 20000 pieces of
K
Observations Topographical,

ordnance great and small, and arms for above 250000 men. A great number [1550] of artificers, as shipwrights, carpenters, smiths, founders, &c. are constantly kept to work at the publick charge.

Of the other publick places and buildings of the city, as the piazza of St. Mark, the church of St. Mark, with the treasury; the tower of St. Mark; the palace of the Duke; the chamber of the great council; the private armory; the theatres for acting the opera, with the contrivances for moving the scenes, the Ponte di Rialto; the schools or halls for the fraternities; the mint-house, pillars, statues, and other ornaments of this city, I shall forbear to say any thing, but refer the reader to Sansovinus, Laffels, and others, who have minutely described those things.

Venice, according to the old epithet Venetia la ricca, hath been esteemed the richest city, not of Italy only, but of all Europe: and doubtlefs was fo before the passage to the East-Indies, by the Cape of Good-Hope, was discovered: when, besides a large share of Lombardy, the best country of Italy, Friuli, Istria and Dalmatia, the islands of Cyprus and Candia, Zant, Cephalonia and Corfu, with others in the Archipelago subject to them, they were chief, if not sole masters of the East-India trade; furnishing the greatest part of Europe with the commodities coming from thence, which were then brought by merchants to Alexandria in Egypt, and there by them brought up. So that then it was a proverb in Italy, Il bianco èl negro han fatto ricca la Venetia. White and black, i. e. cotton and pepper have made Venice rich. Since the los of that trade, and by the vast expences of long wars with the Turks, wherein they came off losers at last, having parted with first Cyprus, and lately Candia to them, their treasures, I believe, are well exhausted. Yet the riches of private persons must needs be great, the city having never been fack’d, nor having ever undergone any such change of government as that one considerable party of the people hath been oppress’d, and their goods confiscate. And tho’ the publick is not fo rich as it hath been, yet will it soon recover itself and grow wealthy again, upon the enjoyment of peace and free commerce. Tho’ the wings of this commonwealth have been a little clipp’d, yet hath it enough still remaining under its dominion to
to denominate it a potent state, viz. In Italy (1.) The Dogado, of which the city of Venice itself is the head. (2.) The city and territory of Padua called Padoano. (3.) Of Vicenza called Vicentino. (4.) Of Verona called Veronese. (5.) Of Brescia called Bresciano. (6.) Of Bergamo called Bergamasco. (7.) Of Crema called Cremanio. (8.) Marcia Trevisana, under which are comprehended Feltrino and Belluno the territories of the cities Feltrino and Belluno. [Leander Albertus reckons the territories of Verona, Vicenza, and Padua in Marcia Trevisana; and of Brescia, Bergamo, and Crema in Lombardy.] (9.) Friuli. (10.) Istria. (11.) The territory of Rouigo called Il Polisine de Rouigo, formerly belonging to the dukedom of Ferrara, the whole in length being extended 250 miles, and above half so much in breadth. Out of Italy they have a good part of Dalmatia, the islands of Zant, Cephalonia and Corfu, besides others of less account.

The ordinary annual revenues of this republick, according to our information, amount to about five millions and three hundred and twenty thousand Venetian ducates yearly. A ducat is somewhat less than a French crown. Of which

<table>
<thead>
<tr>
<th>Territory</th>
<th>Revenue</th>
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<tr>
<td>Venice itself</td>
<td>1400000</td>
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<tr>
<td>Brescia</td>
<td>1000000</td>
</tr>
<tr>
<td>Padua</td>
<td>140000</td>
</tr>
<tr>
<td>Vicenza</td>
<td>200000</td>
</tr>
<tr>
<td>Verona</td>
<td>230000</td>
</tr>
<tr>
<td>Bergamo</td>
<td>1400000</td>
</tr>
<tr>
<td>Crema</td>
<td>100000</td>
</tr>
<tr>
<td>Il Polisine de Rouigo</td>
<td>70000</td>
</tr>
<tr>
<td>Istria</td>
<td>1500000</td>
</tr>
<tr>
<td>Il Friuli</td>
<td>100000</td>
</tr>
<tr>
<td>Marcia Trevisana</td>
<td>190000</td>
</tr>
<tr>
<td>Ghiacci di mare</td>
<td>450000</td>
</tr>
<tr>
<td>La Zecca</td>
<td>150000</td>
</tr>
</tbody>
</table>

This city is well served with all provisions of victuals, especially fish and wild fowl. Fresh water they have none but what is brought from land; and rain water which they preserve in cisterns, and which serves well enough for the ordinary uses of the house. The air is
very sharp in winter-time by reason of its vicinity to the Alps. Venice is noted for the best treacle; the best both drinking and looking-glasses, made at Muran, a large burgo or town, about three miles in circuit, and divided in the middle by a broad channel, like Venice, in an island about a mile distant from the city, so that it may pass for a suburb of it: for paper, for turpentine, for needle-work laces called points; and if that be worth the mentioning, for courtzans. Here is also made soap, not inferior for goodness to that of Castile.

The gentlemen and citizens are kept close, seldom walking abroad unless it be to church, and then with an old woman at their heels to guard them. Most of the gentlemen and citizens of quality put their daughters, so soon as they come to seven or eight years of age, into some cloister of nuns, to be there educated; whence they are not taken out till they be married. The suiter seldom sees his mistress before they go to be married, or if he doth see her, it is only at the grate of the cloister without speaking to her, all things being transacted by the parents on each side, or by the mediation of an old woman.

The government is aristocratical, but among the gentlemen themselves, were there no citizens or subjects, it would be purely democratical. As for the Doge or Duke, though they call him Prince, yet they do but mock him, for he hath only the title and shew, nothing of the power or authority of a Prince. The form of government as it is exactly and particularly described by Contarini, Gianotti and Sansovenus out of him, because it is much talked of, I shall here briefly set down.

The government then of the commonwealth is chiefly in the great council; the senate or council of Pregadi; the college; the council of ten; and the Signoria.

Of the GREAT COUNCIL.

The Great Council is as it were the basis of the commonwealth in which the supreme power resides; and from which as well the senate as all the magistrates derive their authority. It is made up of all the gentlemen of the city who have passed the twenty fifth year of their age; the
The number of which is about 2500 in all. But yet before they can be admitted to give their suffrages in council they must before the † Auvogadori di Commune, by the oath of their fathers or mothers, or if they be dead, of their nearest kinsmen, prove that they have attained that age; and by the testimony of two witnesses, that they are the legitimate sons of such gentlemen as they profess or pretend themselves to be. But to satisfy the longing of such young men as desire to taste the sweetness of government sooner, there is a way for some of those who are but twenty years of age complete to get into the council, viz. Before the fourth of December, being St. Barbara's day, all such young men must, in the manner we have already mentioned, before the Auvogadori prove themselves to be full twenty years old, and the legitimate sons of gentlemen, Which don the secretary of the Auvogadori gives to each a schedule sealed by the three Auvogadori, signifying so much. These schedules they carry to the secretary of the Quarantia criminale, who writes the names of them who brought the schedules, each in a scroll by itself; and on the fourth of December carries all these scrolls before the Duke and Counsellors, in whose presence they are all put into one urn, and into another are put so many golden balls as are equal to the fifth part of the number of scrolls, if it be less than thirty; if it be more than thirty, there are yet put in but thirty balls, and so many silver ones as with the golden shall be equal to the number of the young men competitors. These being shaken together, the Duke out of the first urn draws a scroll and reads the name; then out of the other he takes a ball, which if it proves to be a golden one, such an one whose name was written in

† The Auvogadori di Commune are those who bring in all causes to the 40 criminal judges, called the Quarantia Criminale, to whom appeals are made in criminal causes from the sentences of inferior judges as well within the city as without. Those then that would appeal must first have recourse to the Auvogadori; who are all diligently to examine the cause, and consider whether it ought to be brought in, and if they all agree that it ought not, then he that would appeal hath no remedy, but to expect another set of Auvogadors; but if but one of them accepts it, it is enough to bring it in.
in the scroll is understood to be admitted into the council.
And so he proceeds, drawing out first a scroll and then
a ball, till all the golden balls are drawn out; and so
without more ado those thirty whose lot it is to have
the golden balls may go into the council and ballot: the
rest must stay till another year and then take their chance,
if they are not before come to the age of twenty five.
In troublesome times when the common-wealth wants
money, they have also conferred this honour upon such
as are under twenty five years for affisting the publick
with the gift or loan of a certain sum of money.

At one end of the great council chamber (or hall as they
call it, though it be an upper room) sits the Duke on a
tribunal elevated above the level of the chamber, with
three of the counsellors and one of the heads or chiefs of
the court called Quarantia criminale (Capi de Quaranta)
fitting on his right hand; and the other three counsellors,
and below them the other two chiefs of the Quarantia
on his left; and on benches on each side the tribunal,
which make right angles with the end, sit the great
chancellor and secretaries. The fashion of the hall and
benches on which the gentlemen sit, and the places of
the chief officers and magistrates, I shall omit, as being
hardly intelligible to such as have not seen the place, and
not very material to be understood.

The council is assembled every Sunday, and sometimes
oftener, by the tolling of a bell, which begins at noon
and ceases not till one of the clock; and elects the magis-
trates and officers in this manner: First of all the
electors or nominators are drawn by lot. After that
those that are nominated by such electors are balloted
in the council, and those that have above half the suffrages
of the gentlemen present are understood to be elected.

Now because there must be at least nine magistrates
created at every meeting of the council, therefore it is
necessary to make at least nine electors: and because some
some magistrates places may have but two competitors and
some four, and in some days are created of one sort, in
some of another, and in some of both together; when
there are only such created as can have but two com-
petitors (which seldom happens) then there need be
but two sets or companies of electors made: but when
any
any such are to be created as must have four competitors, then there are four sets of electors made, of nine in each set. While the bell tolls, all the gentlemen that can with convenience are to repair to the council, which being once assembled, the doors lock’d up and the keys brought and laid down at the Duke’s feet, none can afterwards be admitted to enter; except he be a counsellor, an Auvo-gador, one of the heads or chiefs of the council of ten (called Capi de Dieci) or a cenfor.

N. B. (1.) For the creation of magistrates there is no Quorum or determinate number of gentlemen required to be present to make a council; though it seldom happens the council-chamber not to be full. For other busines as the establisning new laws, determining any sentence, &c., the Quorum is 600, without which number nothing can be done. (2.) Unless there be four of the counsellors present, there can be neither officers created nor any other busines agitated in the great council.

The Duke, the chief magistrates and officers, and all the gentlemen being set down in their places; before the tribunal on which the Duke sits, in the plain of the council-chamber, are placed on a row three urns called Capelli, upon stands so high above the floor that no man can look into them, and yet for greater security they are also covered, only the two outermost have two holes in their covers to put in the hand to draw out the balls. The middlemost that stands over-against the Duke hath but one hole. In each of the two outermost urns are put about 800 balls made of copper and gilded over with silver (which I shall take leave to call silver balls, as those that are gilded with gold, golden balls, so that the whole number in both amounts to about 1500 or 1600, for so many gentlemen are commonly present at each meeting of the great council. Besides in these urns together with the silver are mingled sixty golden balls, thirty in each urn. In the middlemost urn are put sixty balls, whereof thirty six are golden and twenty four silver. Then the great chancellor (who is always a citizen and no gentleman) goeth to his place appointed for that purpose, and reads what magistrates are to be created that day, which done, he returns to the tribunal, and calling the Auvogadors, the Capi de Dieci, the cenfor and the
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old and new auditors, he administers to them an oath to observe the laws of the council, in which is contained, that all shall fit, that none shall change his bench at prohibited times; that none shall seek any magistracy by dishonest means, or favour and abet any other in so doing, &c. When they are sworn, they return to their places, and the three junior counsellors arising up, the eldest of them goes and sets him down over-against the middlemost urn, the next before that on the right hand of the Duke, and the youngest over-against that on the left. Then there are lots drawn what bench shall come first up to the Capello, (the whole council being divided into five benches of gentlemen) and what end of that bench, and what side of that end (for all the benches are double) in this manner. There are put into an urn ten silver balls, five of them marked with the five first figures or the characters of the numbers 1, 2, 3, 4, 5, and by each number is written such an end and such a side. The other five balls are marked with the same figures, but on each of them is written the contrary end and contrary side. So that if under the figure 1 in the first five be written, the end towards the Broil and the side towards St. George's; under the figure 1 in the other five is written, the end towards Castello and the side next St. Mark's. Then they draw out of the urn one of these balls, the figure and inscription whereof shews what bench and what end and side of that bench is to come first up to the Capello. Then they look into the urn and take out that ball which is marked with the same figure and the contrary end and side. After the same manner they draw out by lot another ball, and so a third, fourth, and fifth, calling up the benches in order, till all the electors are made. Of the bench that is called first, each one in order comes up to one of the exterior urns, and draws thereout a ball, which if it be silver, he puts it into another urn set on the floor at the foot of that out of which he drew it, and returns to his place, having obtained nothing; but if it be a golden one, he delivers it into the hand of that counsellor who sits by that urn, and goes presently to the middle urn, and thence also draws out a ball; which if it be silver, having presented it to the counsellor who sits before the urn, he returns to his place: but
but if it be gold, he delivers it likewise to the counsellor, and is understood to be one of the electors of the first set; and fits down on the bench on which the said counsellor fits (which stands across the Duke's tribunal) with his face toward the Duke, that none in the hall may by any nod or other sign recommend themselves to him. Then a secretary pronounces his name aloud, that all of his family or near to him by affinity may take notice of it. There he continues sitting till all the other eight of the first set of electors be in like manner by lot created. And if by chance two of one family are drawn in the first set, the second of them is referred for the second set or company, and he that is first taken for the second set comes in his room into the first. And then for that day none of that family nor any that are of near affinity to him can come any more to the Capello, because it is provided by the laws, that in all the four sets of electors which make up 36, there shall be no more than two of the same family; and that those two shall not be in the same set, so that the nine that are of the same set must be of nine several families. To the youngest of the nine of this first set is by one of the secretaries delivered a schedule sealed by the publick seal, wherein are written in order all the magistrates that are to be that day created. Then all the nine take an oath, to choose those whom they shall judge most fit to serve the common-wealth, and go forth the council-chamber into a private room appointed for them. In like manner are the other three sets of electors made, who being sworn do likewise take their schedules, and withdraw into their respective rooms. When all the four sets of electors are chosen and withdrawn, then any of the gentlemen in the council-chamber may change his bench as he pleases. [N.B. When there are only such magistracies to be disposed of as can have but two competitors, there are but two sets of electors made.] When the first set is withdrawn, they sit down, taking place according to their age. Then a secretary appointed for that purpose reads to them the laws and constitutions which they are obliged to observe in the choice of magistrates: after which he puts into an urn nine balls, marked with the nine numeral characters or figures, and each elector according to his age
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age draws out one till they be all drawn out. He, that
draws the ball marked 1, is understood to have the no-
mination of the competitor for the first magistrate's place
set down in the schedule, and he who draws that marked
2, to have the nomination of the second, and so in or-
der of the rest. When there are eleven magistrates to
be made in a day, he, that hath the nomination of
the first, nominates also the tenth, and he that hath
the second the eleventh. [N. B. One of these elec-
tors may nominate himself to any office: they may al-
so change their votes among themselves, as for exam-
ple, he that hath the nomination of the competitor for
the first place may change with him who hath the no-
mination for the second or third, &c. and so of any
other.] He then, who hath by lot obtained the no-
mination of a competitor for the first magistrate, names
one whom he pleases, who is balloted among the nine,
and if he hath two thirds of the suffrages, he is under-
fstood to be elected; if not, he names a second and so
a third, till he comes to propound one that gets two
thirds. His name that is so approved is by the secre-
tary set down in the schedule under the name of that
place to which he is nominated, with the name of
him who propounded him, and the set of electors he was
of; because if the nominated be to a place wherein
he is entrusted with the management of publick monies,
hethat nominates is surety for him, and is to make good
what he defrauds the common-wealth of. Then he that
hath the second voice names his man, who is balloted and
approved in like manner, &c. The same order of no-
mination and approbation is observed in the other three
sets of electors. Only in the third and fourth sets when
there are some of those places to be disposed of which
can have but two competitors, it's necessary that some of
the electors, to whose lot the nomination to such places
falls, nominate not at all; because the competitors to such
places are already nominated and approved in the two
first sets. Yet is not their being electors altogether use-
less and insignificant, because they have power to ballot
those that are nominated by the other electors. If any
difficulty arises among the electors about any person
nominated, v. g. whether he may be balloted or the
like,
Moral, and Physiological.

like, one of the *Auogadores* and one of the *Capi de Dieci* go into the room where those electors are and determine it.

The competitors being in this manner chosen, none of the electors returns any more into the council-chamber, unless he be one of the counsellors, or one of the *Capi di Dieci*, or of the *Auogadores*, or of the censors. The secretaries then of the several companies of electors present to the great chancellor the schedules in which are written the magistrates to be elected, and under every one the competitors for it. Now it may happen that one and the same gentleman may be chosen competitor for a magistracy by two or three, or all four of the sets of electors, and then, though he hath no competitor, he may be balloted, because he is understood to be competitor to himself. But if for one place there be chosen in each of the sets a competitor, then they look first whether he be not uncapable of such a place, either by reason he hath had some magistracy lately, and the time not yet expired that is required by the law before he be capable of another, or because some of his kindred is in an incompatible place, or because he is indebted to the publick or the like. Now if of four competitors three are found uncapable, the fourth remaining without a competitor cannot be balloted. But if one be elected in two sets and his two competitors uncapable of standing, yet may he be balloted, for the reason before alleged.

The great chancellor, having received the schedules, reads aloud the names of all the magistrates places with their competitors; and then beginning from the first he propounds the competitors for that, and first him that was nominated by the first set, and if he were nominated by any other of the sets, he mentions that also. And when he hath read the names of all the competitors for one place, they all that are nominated, and all of their family and near affinity go out of the council-chamber into a private room, where they stay till they have been all balloted, and the second place propounded with its competitors; and then they return again and ballot. As soon as they are withdrawn, the great chancellor, with a loud voice, puts all in mind, that both
by the divine and human law every one is obliged to favour him whom he judges to be best of all and fittest to serve the common-wealth in such place as they shall choose him to. Then he nominates the first competitor, and little boys, appointed for that purpose (having first deliver’d to every gentleman a ball) run about the chamber with balloting-boxes in their hands to gather the suffrages. The balls are made of linnen, that they may make no noise when they fall into the boxes. The boxes are made double, the one painted white, the other green. The white is marked with Si; i. e. Yea, into which they that accept put their balls; and the green with No, into which they that refuse the party propounded put theirs. The boxes are made in that manner with a hole in the side to thrust in the hand, that no man can see into which box you let fall the ball. These little boys, as they go along gathering the balls, repeat still aloud the name of the person that is then balloted. When they have gather’d up the balls, they carry them to the Duke’s tribunal, and put the Yea’s in a white vessel there standing, and the No’s in a green. The affirmative or Yea’s are told over by the counsellors sitting on the right hand of the Duke, and the negative or No’s by them sitting on the left; and if the S’s are less than half the whole number of suffrages, such a person hath lost it; but if they be more, he may obtain it; and therefore the number by which it exceeds the half is set down. In the mean time the other competitors are named and balloted in like manner; and at last he whose affirmative suffrages, or S’s, exceed the half by the greater number, is understood to be chosen to that place. The like method of proceeding is observ’d in the choice of the second, third, and all the rest of the magistrates for that day. When the balloting and counting is done, the great chancellor gives notice who are elected, commanding them to present themselves before the censors, who take an oath of them that they have not done any thing contrary to the laws to obtain those places; which done, the council is dismis’d. N.B. If none of the competitors for any place have above half the number of suffrages, there is none as yet understood to be chosen to that place.
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place. And because, by an antient law, the great council is to break up before sun-set, if it happens any of the competitors are not before that time come to the ballot, the names of such magistrates and officers as are chosen are read, and they that remain to be balloted lose the benefit of their nomination, because the next council day all is begun anew, and there are other competitors made. It is permitted to any stranger to be present at the meetings of the great council (as we were several times) to see the manner of proceeding there, and there is a particular bench appointed for them to sit on.

Of the PREGADI.

In the council of the Pregadi are debated and determined all the great and weighty affairs of the commonwealth. This council, in former times, consisted of no more than 60. Afterwards they began to add thereto sometimes 25, sometimes 20, insomuch that it was at last concluded, that there should be made an addition to it (Aggiunta they call it) of as many more. The cause of such additions was, I suppose, the greatness and importance of the affairs then to be considered and treated of that, so great a number of gentlemen being present at such consultations and debates, matters might be better disputed, and more thoroughly scan’d and examine’d. In the number of the 60 Pregadi, there can be but three of one and the same family; and if there be three in the Pregadi, there can be but two in the Giunta; if there be but two in the Pregadi, there may then be three in the Giunta. Besides the 120 we have mention’d, this council takes in also many other councils and magistrates, whereof some have suffrages and some have not, only to add reputation to them, they are permitted to be present, to hear the debates, and understand the affairs of the commonwealth. Those which enter into this council with power of balloting are, the Duke; the six counsellors; the council of ten; the avogadors; all the procurators of St. Mark, which in Sansovinus’s time were 24; the forty judges in criminal causes; the three counsellors that sit with them, called the Consigli-
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the two cenfors, who, after they have finisht their magistracy, have power to enter into the council and ballot; the three that are over the acts of the Sopracastaldi, who, after they have ended their office, have power for a time limited to enter into the council and ballot; the three Signori alle biave, that is, those who are to take care of bread-corn and of mills, to make provision thereof for the city, if need require, &c. the four Signori al sale, who take care of the making of salt, and farm out the excise of it; the three Camerlinghi di commune, who receive and disburse all the publick revenue, we might English them treasurers; the three Signori alle Ragioni vecchie, who are to disburse what is necessary for the entertainment of foreign princes and ambassadors coming to the city, and what else is appointed them by the common-wealth; the three alle Ragioni nuove, who are to exact what is due to the common-wealth of those who have farmed the publick custom and excise, and to punish them that are slack and run behind-hand; the three Provveditori di commune, who take care that ships be made of just bigness, and not freighted beyond their measure, oversee the high-ways and bridges, as also all the arts of the city, and the small schools or fraternities, for the Capi de Dieci are set over the great ones; the three that are over the arsenal; the three Provveditori sopra le Camere, who take account of the general collectors of the revenues of all the cities subject to the common-wealth; the three provveditors à Dieci Officii, who exact and gather up such monies of the publick customs or excise as are not fully and absolutely sifted and examined by the custom-officers, the three Catauieri, who have also to do with part of the publick revenue, as écheats to the commonwealth, in case a man dies intestate and without heirs; mulcts of such as are cast in a suit: they judge also concerning treasures found either at sea or land.

Those that enter into the council, and have no suffra-
ges, are the college, or company of the Savi; the provveditors sopra le Acque, who are to take care of the Laguna, and scouring the channels, &c. The Dieci Savii, who see that tithes be duly set out and paid, give possession, register bargains and sales, &c. The three officers of health,
health, who take care that the city be kept clean, and nothing noisome or offensive left in the streets, nothing that is corrupted, or that may cause sickness and infection bought and sold either by land or water; from these, mountebanks and physicians take licences, and they keep account of the number of whores who are licensed, and in time of any epidemic disease, they have absolute power of life and death. The three over the Datii, or publick customs and excise; the proveditors over the

of Alexandria; the twelve over that of Damascus, and the twelve over that of London.

The Pregadi were so called, as some think, because antiently they were assembled by publick ministers, and by them, as it were, prayed and intreated that they would come and consult of the affairs of the commonwealth. The pregadi, properly so called, are chosen by the great council, as the other magistrates are, in the manner before related. They begin so soon to choose them, that all of them may be elected by the beginning of October, at which time they enter upon their office. The Giunta, or other 60, are chosen both by the council of the old pregadi, and the great council in this manner. Upon Michaelmas-day the council of the old pregadi is assembled, wherein each one of those that have suffrages nominates the person whom he would have to be of the giunta. All the nominated are written down. The next day the great council is convened, and the names of all the persons nominated by the pregadi, having been first read, are put into an urn, and thence one by one drawn out by one of the secretaries, and ballotted by the council; and he that obtains above half of the suffrages, is reckoned to be one of the giunta. The other magistrates comprehended in this council, it matters not at what time they be created; because, when the pregadi enter upon their administration, those, who at present exercise such offices, are numbered among them as members of the council; and if their offices determine before the pregadi's, their successors enter in their places. Besides, those who assist the commonwealth in a time of need with their estates, lending such a sum of money as the law determines, have liberty granted them to be present in this council, and to understand
derstand the management of publick affairs (yet without power of ballotting) till such time as their monies be repaid, and sometimes longer. For the law prescribes them such a time to enjoy this honour, tho' their money be repaid them before. By this constitution, the commonwealth reaps a double benefit. First, it seldom wants money upon any exigent, many being willing to lend, that they may enjoy this privilege. Secondly, it trains up young men to the knowledge of state-affairs, and qualifies and enables them to manage publick business, when they shall be thereto called.

The pregadi are assembled as often as it pleases the college. A council is also granted to the magistrates when they would confirm any law, and to the avvegadors, when they have any difficult case to bring in to be determined. The time of their meeting is signified by the tolling of a bell; it is also a custom to send to give notice and invite them by publick serjeants or ministers. They cannot enter into any consultation about publick business, unless there be present four of the counsellors, and 60 at least of such as have suffrages. In this council are consultations had, and resolutions taken about peace and war, truces and agreements, and ways of providing money for the necessities and uses of the commonwealth. How these affairs are treated of, will appear when we shall come to speak of the college. Laws are also confirmed in this council, which are first considered by those magistrates, who are over that business to which such laws appertain. Such magistrates come first to the college, and there shew either the necessity or the benefit and utility of such laws as they would introduce; and if the college approves of them, then they are permitted to bring them into the council of pregadi; and if they pass there, then are they valid, and published by publick bando or proclamation; after which every one is obliged to take notice of them and observe them: and the magistrate that introduced them, is to see that they be put in execution. They use also sometimes to get their laws confirmed, not only in the council of pregadi, but also in the great council. The which thing (faith my Author)
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is I suppose principally in the power of him who brings in the law to do, and is usually done to gain more reputation, and add strength to the law. Besides, in the council of pregadi is chosen a captain of the Armata, in case the commonwealth hath occasion to make war by sea; and a provost of the camp when they make war by land: those three kinds of magistrates, which they call, i.e. Savii grandi, Savii di Terra ferma, & Savii di mare: which elections are made after this manner. Each one of the pregadi nominates one whom he pleases. All that are so nominated are ballotted, and he that obtains more than half the number of suffrages is understood to be chosen to that office or dignity. But because it may often happen that he who is judged fittest for such an office may be known to be unwilling to accept it, and no man, for fear of displeasing him, may dare publicly to nominate him; therefore to avoid that inconvenience, each of the pregadi writes down in a paper the name of him whom he would choose to such a place; which scrolls are all together put into an urn, and drawn out by the great chancellor one by one; and the names written therein being openly read, they are put to the ballot, and on him who hath more than half the suffrages is such office or dignity conferred. But when there is a captain of the Armata to be made, he that is in this manner chosen in the council of pregadi must be afterwards ballotted in the great council, and have competitors given him by the four sets of electors in manner before related, and he who hath most suffrages above the half is understood to be elected. The counsellors also, and the censors, are elected partly by the council of pregadi, and partly by the great council.

Of the COLLEGE.

The college is the third member of the commonwealth, and of great reputation. It is made up principally of three sets, or kinds of magistrates. First, those they call Savii grande. 2. Those they call Savii di terra ferma. And 3. Those they call Savii di mare.
The number of the Savii grandi is six; of each of the other, five; in all sixteen. And besides these of the signoria, that is, the Duke, the six counsellors, and the three heads or chiefs of the forty criminal judges, called Capi di Quaranta. The Savii of the sea, who are otherwise called Savii à gli ordini, take care of all maritime affairs, as well such as concern peace and war, as other matters. The savii of the land manage and govern land affairs, such as appertain to peace and war, and their especial charge is to keep account of all soldiers that are in the commonwealth's pay. The Savii grandi oversee and take care of both, as well at home as abroad. And their particular charge is to make provision both for peace and war, to write to and answer Princes letters, and finally to counsel and govern the whole commonwealth. It is to be noted, that anciently the Savii grandi did include the authority and administration of the savii of the land, whence the Savii grandi might intermeddle with the affairs belonging to the land, tho' not excluding the savii of the land. In the same manner the savii of the land included those of the sea, but were not included by them, and therefore, with the savii of the sea, could take into their consideration sea-affairs. So that the Savii grandi included both the savii of the land and the savii of the sea; the savii of the land only those of the sea. But in our times, and not many years since, the way of managing such affairs is a little altered. For that by law it is determined, that the authority and administration of the savii of the land shall be equal to that of the grand savii; only that of the savii of the sea remains in the same terms it was. In old time there were no other than the grand savii; afterward the naval power and command at sea being increased, it was found necessary to create a council for sea-affairs, or Savii di mare. The like happened afterward when the republick began to grow great on the land, the senate being constrained to create Savii di terra ferra, which was presently after that Treviso came under their dominion. Anciently, the Savii di mare were of greater reputation than those of the terra ferra, but after that the dominion of the commonwealth began to increase upon the land, they bent their counsels and endeavours that
that way, and so the Savi di mare lost their reputation, and those of the terra ferma gained it. These three kinds of magistrates are chosen by the council of pregadi, in the same manner as the proveditor of the camp. None can be made Savio grande, unless he be of mature age, and reputed of the greatest abilities. The Savii of the land are always men of reputation for prudence, but not so great as the Savii grandi: the Savii of the sea are still of less esteem than they. And at present this magistracy serves rather to give young-men occasion to exercise themselves in state-business, than for any other purpose, because in matters of moment the Savii grandi, and Savii di terra ferma, are always employed. Each of these companies of magistrates chuse one of themselves Proconsul, or provost, who is chief of that magistracy for one week; he propounds matters in the college, and records those things which are to be executed, which appertain to his magistracy. The manner of proceeding and transacting publick affairs in the college is this: every morning, two hours after sun-rising, the college is convened. [N. B. Whenever we speak of the college, we understand the three societies of magistrates before-mentioned, together with the Duke, the council-lors, and the three Capi de quaranta, that is, with the signoria, who have their places not only in this college, but also in the grand council, the council of pregadi, and the council of ten: so that nothing is debated without their presence and intervention.] The college being assembled, all those letters are read that were received since their last meeting: audience is given to publick orators and ambassadors, if any require it; and each of the three societies of Savii dispatch such business as appertains to them, and was propounded and recorded by their provost. If therefore there be any business to be debated, appertaining to the grand Savii, the Savii of the land and of the sea may be excluded: but if it be not of very great importance, they do not use to prohibit them to be present at such deliberations, but their part is only to hear and hold their peace: or if they do deliver their opinions, yet are they not noted down to be brought into the council of pregadi, but only the opinions of the grand Savii, the council-lors, the Capi
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de Quaranta, and the Duke. And to the end that the whole method and order of this administration may be the better understood by an example, let us suppose there is a consultation to be had about some affairs appertaining to the savio of the sea, they cannot exclude the savio of the land, and the grand savio, if they please to interpose and meddle with that affair. After consultation had thereupon, not only the savio of the sea, but they of the land, and the grand savio, the Duke also and the counsellors, and Capi di Quaranta, may deliver their opinions if they please, and according as they are of one or more different opinions, make one or several parties [by parties we mean nothing but propositions or sentences.] For that each savio and counsellor, much more the Duke, when they do not agree to the opinions of others, may each bring in a party (that is, propound his sentence or judgment about a business) alone.

All these parties are noted by a secretary, each one with the name of that savio, or other person that was the author of it. And because no matter belonging to the publick administration can be determined without the approbation and consent of the council of pregadi; therefore that council being assembled, the aforesaid magistrates come with their parties or propositions noted, and propound them in order. If the parties be more than one (as suppose four) they are all propounded together, but that is first read, the author whereof is the more honourable magistrate, and therefore those of the Duke and counsellors ought to precede the rest, those of the Savvi grandi, them of the savio of the land; and theirs those of the Savvi di mare. And if any of the three societies of savio, in matters appertaining to their charge, have taken several parties, that party ought first to be propounded, of which he is author, who in that society is most honourable. The parties being propounded, if any of the savio will speak against them, he ought to precede the rest of the pregadi, and among them first that savio who is of greatest authority. After that any of the pregadi hath liberty to do the same. After sufficient debate upon all the parties, they are all balloted together in this manner. Suppose the parties to be four,
then there are four secretaries come in, having each a white box in his hand: after them another secretary follows with a green box, and after him still another with a red box.

The first of the four goes from person to person, repeating the name of him that was author of the party first propounded: the second, third, and fourth in like manner repeating the names of the second, third, and fourth, and each one of the Pregadi puts his ballot into what box he pleases. So that if he approves not the first party, he puts his ballot in his box that gathers the suffrages for that party, that pleases him. If he approves none of the four, then he puts his ballot in the green box: but if the matter be not yet clear to him, and he be not fully satisfied about it, he puts his ballot into the red box that comes last, and is called the box of the Non fínceri, i.e. such as neither approve or reject. The suffrages being thus gathered, the ballots of each party are told over, and that which exceeds the half by most suffrages is understood to be confirmed and ratified; but if none come up to the half, then that which hath the least number of suffrages being laid aside, the other three are balloted after the same manner, with three boxes, and after them a green and a red one. If none of the three get half the number of suffrages, then that which hath fewest being again laid aside, the remaining two are balloted in like manner; and if neither of these satisfy the half, then that which hath the most suffrages is balloted alone: and if the suffrages for that exceed not the half, none of the parties balloted is understood to be confirmed: in which case new parties must be brought in, if the matter treated of be necessary, which may be done the same day, because the Duke, any one of the counsellors, Capí di Quaranta, or Saví may bring in new parties. Such a business may also be referred to another day.

But it seldom happens that of so many parties no one is approved. When none of them is confirmed, and the matter requires further debate, we shall declare what order is taken when we come to treat of the council of ten. But it is to be noted, that the first time all the parties are balloted together, it may happen that there are more than half the suffrages in the box of the Non fínceri.
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sinceri, i.e. such as suspend, being not clear in the point; and in such case none of the parties can be balloted, but the matter requiring new debate, new parties are to be brought in. And because it may happen that some one of the council of Pregadi may have upon some matter under consideration a proposition to make, which may be for the benefit and advantage of the commonwealth, which came not into the minds of the Savi or others who have power of propounding their judgments or opinions in council, that such advantage be not lost, it is ordained that such opinion or sentiment be communi-
cated to one of those who have power to propound, and
by him propounded to the council. But that none but the Savi and others before-mentioned should have liberty to bring in parties, it is ordained to avoid prolixity and confusion; it being also unlikely that what comes not into the thoughts and consideration of the college, in which are the wisest persons of the city, should be imagi-
gined or found out by other men. But granting this might sometimes happen, yet it would be so seldom, that no great account ought to be made of it; and so much the rather, because in every constitution the lesser convenience ought to give place to the greater. To every of these three societies of Savi, the same time of six months determines their office: but yet are not all the persons in each chosen at the same time. For the grand Savi are chosen at two several times, three at once; and from the choice of the first to the choice of the second intercedes three months time. The Savi of the land and the Savi of the sea are also chosen at two times, three the first time, and two the second, with the same interval between. To the grand Savi there is sometimes, great affairs requiring it, added an Aggiunta of three more, and these we call Savi straordinarii. One may be chosen into the council of Pregadi successively two or more years one after another.

Of the D U K E.

Of the antiquity of this magistrate, and what great power and authority he had in ancient times, and how afterwards it came to be moderated and diminished, I shall
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shall say nothing, only shew in what manner he is elected, and what authority he hath in our times. So soon as the former Duke is dead, the six counsellors enter into the palace with the three Capi de Quaranta, of whom we shall speak hereafter. The senior counsellor is understood to be vice-duke, and therefore he performs some business which belongs to the office of the Duke, as the sealing of ballottines for them that are to undertake any new office, &c. The letters which the Signoria writes to magistrates and commanders abroad go in the name of the Governatori. The counsellors once enter'd the palace go not thence till the new Duke be created. The palace-gates are also kept lock'd up, and only the wickets left open to enter in and go out at; and besides there is a guard; more for ancient usage than any necessity, for that there is no more alteration in the city upon the death of the Duke, than upon the death of any private gentleman, that is, none at all. * It's true indeed the magistrates do not proceed in the administration of their offices, before there be a new Duke created; but that is, because it's supposed they are all busied about the election. The body of the deceas'd Duke, being adorned with the ducal vestment, is brought down, and placed in a low room called the Sala de Pioveghi, where it remains three days; and there are twenty gentlemen appointed, who being clothed with scarlet accompany it when it is carried down, and sit round about it till night, returning again the next morning, and this they continue to do for three days. Then is the funeral celebrated with all the pomp and magnificence which the dignity of such a magistrate requires. The next day after the funeral the great council is convened, and given to understand by the great chancellor, that being to give beginning to the election of a new Duke, they are first to make choice of five correctors and three inquisitors. The vice-duke then standing up makes a speech to the council, and having commended the life, behaviour, and government of the Duke deceased, exhorts and stirs up every one to

* Nic. Graffius faith, that it is now by law ordained, that besides the Auvvadors some other magistrates shall also sit and administer justice. Annot. 27 in Gianot.
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make choice of a person to succeed him, that may be useful and honourable to the commonwealth. Then doth he cause the laws to be read, which prescribe the manner and order of electing the new Duke: and last of all the council proceed to elect the said five correctors and three inquisitors after the same manner they use in the choice of other magistrates.

The office of the inquisitors is diligently to examine the life and actions of the deceased Prince; and if they find that he hath in any thing erred or done amiss, they are obliged to accuse him; and look what punishment he hath deserved is inflicted on his heirs: but such punishments are never corporal, but only pecuniary mulcts. And such a cause, by reason it is a business of great importance, is not finally determin'd by the inquisitors, but agitated in the great council, and may also be examin'd in the Quarantia criminale. These inquisitors have a year's time to finish their inquisition in.

The office of the correctors is to see and consider well if any new law to be observed by the succeeding Prince is needful to be introduced; and if there have been any error discover'd in the administration of the precedent Duke that ought to be corrected. For the doing of which, so soon as they are created, they are brought into a certain chamber, where they meet so often till they be agreed upon what to them seems needful to be amended, or fit to be newly introduced; and this commonly takes up three or four days. When they have finish'd their considerations, they therewith acquaint the Signoria, who cause the great council to be convened, in the accustomed place and manner; whether the said correctors come, and there cause all such laws and corrections as they judge fit to be made, to be publickly recited; which being balloted one by one in the great council, are either confirmed or rejected. This done, the great council the day following is again called, to which meeting none can come but such as have passed the thirtieth year of their age. The doors being shut at the appointed time, all that are present in council are number'd over, and, in an urn, or Capello of that sort which have but one hole in their cover, are put 30 golden balls, marked with a certain note,
note, and as many silver ones as together with the golden are, equal to the number of the gentlemen present. After this the junior counsellor goes out into St. Mark's church, which is just by, and, having made his reverence to the altar, takes a little boy which he finds there, and brings him along with him into the council, who is to draw the ballots out of the urn for the gentlemen when they come up to the Capello, they not being permitted to draw them out themselves, to avoid fraud. This boy is called the Ballatino, and is he that in procession goes before the Duke, who is bound, so soon as the boy comes to be of convenient age, to make him one of the secretaries. The Ballatino being brought in before the Signoria, one counsellor, and one Capo de Quaranta, chosen by lot, go and set themselves down before the Capello. Then they draw lots which bench is to come up first. [N. B. Because there is but one Capello, the benches do not come up by two and two, as in the creation of magistrates, but one by one; and therefore there are put in ten lots into the urn, and drawn out as before, and the benches come up accordingly.] If one of those five benches on the side towards St George's be drawn, they are to begin to come up at that end that is toward the Brail; and if one of those five that are toward St. Mark's be drawn, they are to begin to come up at the end toward Capello. The lots being drawn, that gentleman that fits first, at that end of the bench which is to begin, arises and goes up to the Capello. Then the Ballatino, in his name, draws out a ball, which, if it be a silver one, he puts it in another Capello standing at the foot of that out of which he drew it, and he for whom it was drawn goes presently out of the council-chamber. But if it be gilded and mark'd, he delivers it to the counsellor sitting by, and the great chancellor pronounces aloud the name of him for whom it was drawn; who presently, between two secretaries, is carried into a room out of the council-chamber. Then all those who are of his family, his uncles, cousins, father-in-law, and they that are of near affinity to him are called, and, being come up to the tribunal, number'd by one of the secretaries, and so many silver balls taken out of the Capello as are equal to the sum of
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of them, and so they depart the council-chamber. In the same order all the rest of the benches are called by lot, till all the golden balls are drawn out of the Capello. And after those who have obtain’d them are withdrawn into the foremention’d room, the council is dismissed; and the 30 come all before the Signoria, and sit down on two benches there standing, half on the one, and half on the other. Then in a certain Capello there placed are put 21 silver balls, and 9 golden; and these thirty persons, being called according to the order they were chosen in, come up one by one to the Capello, and the Ballotine draws out a ballot for each one, till all the golden balls are drawn. Those then for whom the silver balls were drawn depart, and those nine who obtain’d the golden withdraw into the foremention’d room; where, when they are all come together, they are by the Signoria conducted into another room, where are set ready all necessary accommodations for them; and having given oath to make a good election, they continue there lock’d up together till they have chosen forty of forty different families: in which election they thus proceed. So soon as they are shut up, they draw lots among themselves who shall nominate first, who second, who third, &c. and accordingly in that order nominate. Those nominated are ballyoted among the nine, and if they have seven suffrages they are understood to be of the forty. The election being finish’d, they signify so much to the Signoria: the which the same day, or, if it be too late, the day following, cause the great council to be called; which when it is assembled, the great chancellor with two secretaries goes to the nine for the schedule in which the forty electors are written; and returning therewith into the council, by the command of the Signoria, reads over the names of them that are chosen; who, one by one, coming before the tribunal, are sent out of the council into a certain chamber; and if any one of the forty happens not to be present in council, one of the counsellors, and one Capo de Quavanta go to search him out, and, without giving him leave to speak to any body, bring him into the council-chamber, and afterwards into the room where his companions are withdrawn. When the forty are
all met together, the council is dismissed, and then, after the manner of the former thirty, these forty come before the Signoria, and being set upon the two benches in the middle, they are likewise by lot called up to the Capello, wherein are put 28 silver balls, and 12 golden. Those for whom the silver balls are drawn depart the hall; and those for whom the golden are brought by the Signoria either into the chamber where the former nine were, or into another as they please; where, having taken oath to make a good election, they are lock'd up, and by way of suffrage choose 25 of 25 several families, in the same manner as the nine chose the 40, to which election nine suffrages of the twelve are necessary.

The election being made, they acquaint the Signoria therewith; which, if the time permits, causes the great council to be assembled the same day; if not, the day following; and after the same manner the great chancellor reads the names of the 25; and those that are chosen, when they hear their names read, come up to the tribunal, and are sent out of the council into a room by themselves, as were the forty: and if any one be not present, he is searched out, and brought in likewise.

When all the 25 are met, the council is broken up, and the 25 come before the Signoria, and sitting down are called by lot, and come up to the Capello, into which are put 16 silver balls, and nine golden. Those for whom the Ballotine draws the silver balls depart; those that get the golden remain, and being lock'd up together, they do, in the same manner as the former 12, by 7 suffrages choose 45 of 45 several families, who afterwards being called by the Signoria into the great council, the present and absent being all come together, as we said before, the council is dismissed. And the 45 being set before the Signoria in form aforesaid, and called by lot, come up to the Capello; into which are put 34 silver balls, and 11 golden. Those for whom the silver balls are drawn go at their pleasure, those for whom the golden, remain; and having given oath to make a good election, they are shut up as the former, and by way of suffrage choose 41 of 50 many several families, of whom each must have 9 ballots, and these are the electors of the Duke. After these 41 are thus elected,
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elected, and in the great council pronounced, and also
all met in the room appointed, in manner aforesaid; first of all the mafs of the Holy Ghost is celebrated, then
every one of the electors promises by solemn oath to lay
aside all human passions, and to chuse for Duke him
whom to chuse in his conscience he shall judge to be
most for the interest and honour of the common-wealth,
as like to do it most credit and best service; and that
with the profoundest silence he will keep secret whatever
is done or said among them. After this they are lock'd
up together alone, without any other ministers or se-
cretaries, so close that no person can be admitted to see
them: and first of all among themselves of the anci-
enteft they chufe three heads or chiefs which they call
Priors; and also of the youngest among them they chufe
two who perform the office of secretaries. The priors sit
down, having before them a table, upon which are placed
two balloting boxes of that sort that are used in the
great council; in one of which are put 40 balls, mark-
ed with a certain mark, that no deceit may be used.
The rest of the 41 fit also down, each where he pleases.
The two secretaries make 41 schedules, and having folded
them up give to each person one, they take also the ballots
and distribute them to all. Then they are called one
by one before the three priors, and each one writes in
his schedule the name of him whom he would have to
be Duke, and leaves it upon the table. The two secretaries
note the names of them that are written in the
schedules, and by how many each one is named. [The
names in all the schedules seldom pass 6 or 8, because
there are never more who can be judged fit to be pro-
moted to such a dignity.] After which all the names
so noted are put into an urn, and thence by lot drawn
out. And he that is first drawn, if he be one of the
electors is presently sent out into the chamber of the
Quarantia, and there shut up; and liberty is then given
to any one of the electors to speak any thing he hath to
object against him, why he is not fit for so great a place.
And if any thing be by any one objected, it is set down
by the secretaries: and he being called in, all that hath
been spoken against him is read to him, and if he will
stand upon his defence he may make his answer; which
when
when he hath done he returns into the same chamber again. The same order is used till there be none left who will object any thing against him, or till he will defend himself no longer; after which he is presently balloted, and as soon as that is done all the electors go up before the priors, the eldest of which with a little staff numbers over those that are in the affirmative box, and also those that are in the negative; and if the affirmative amount to 25, the person balloted is understood to be chosen Duke; and there can be no other balloted. This order hath been since changed, and notwithstanding the first, or any other have come to 15 suffrages, yet have the rest been balloted; and he that hath obtained most suffrages hath been made Duke. But if the affirmative suffrages do not amount to 25, there is taken by lot another out of the urn, in which the names set down each with the number of its nominators were put, and the same order of proceeding observed till they come to one who gets 25 ballots. It may happen that none comes up to that number, in which case the electors continue shut up, and name and ballot the nominated so often, till one comes to get the foresaid number of suffrages. The Duke being on this wise created, many ceremonies are wont to be performed. First of all the 41 by the great chancellor send word to the Signoria who it is that is created Duke, who first of all go to congratulate him, and give him joy; and, if it be in the day time, cause all the bells to be rung. Then his kindred and friends come to visit him, and at the same time there is money coined with his name upon it. After which the 41 electors with the Duke go into St. Mark's church, and having done reverence to God, all mount up a scaffold, and the ancients of them tells the people (who by this time have filled the church) that they have chosen a Duke in the room of the deceased; and commending the election, shews him to the people, who in token of confirmation and joy give him loud acclamations. The Duke then speaks to the people, and encourages them to hope well of his government; which done, they go down the scaffold, and bring the Duke before the altar; where
by the procurators of the church, an oath is tender'd him to observe the laws, and a standard put into his hand by the vicar of the Primicerius of St. Mark's. After this, having made an offering at the altar, he comes to the door of the choir, where he is placed upon a little low moveable scaffold (Pergoletta they call it) accompanied by one that carries the standard, and by another of his near friends or relations, who carries a cup full of gold and silver money stamped with his name; and by the mariners of the arsenal he is drawn out of St. Mark's, and carried round about the Piazza, he that carries the cup, scattering money among the people as he goes along. When he hath rounded the Piazza, he enters in by the principal gate into the palace; where being arrived at the foot of the stairs, he goes off the Pergoletta to go up. In the midst of the stairs he finds the counsellors and Capi de Quaranta who there wait for him. When he is got up to the top of the stairs, the eldest counsellor puts upon his head the ducal cap; and thence he is led into the * Sala de Pioveghi, and after he hath sitten a while there in a seat appointed for that purpose, he is conducted by them to his lodgings, and the palace being resign'd to him, they all go to their own homes. His habit much differing from the common renders him venerable. On his head he wears a ducal cap, called il Corno, because it hath an Apex or horn arising above the top of it on the hinder part, and under that a white coif, with fed Duke's little frings, which from the ears hang down backward upon his neck. On his back a loose vest or mantle without sleeves so long that it draws upon the ground, of velvet, damask, scarlet, or any other rich cloth. When he goes abroad the bells of St. Mark's are rung: there are certain banners carried before him, and trumpets of an extraordinary greatness founded: then follows the cushion or pillow, and the seat of gold, and after that the Duke himself under an Umbrella, between two of the principal foreign ambassadors or agents then in town, and the others behind him. After him follow about 30 couple of the chief gentlemen, all in cloth of scarlet; and he, that hath the right hand in the first couple, carries a sword upright in his hand.

* To put him in mind of his mortality, because that is the place where the corps of the deca
The Duke cannot determine, nor so much as execute any the least business alone without the presence of the counsellors, who are in number six, one for each Seftiero. They are always chosen of the most honourable gentlemen of the city, the greatness and dignity of their office requiring it. They are not all six chosen at the same time, but by three and three; those for the three Seftieri on one side the great channel at one time, and those for the Seftieri on the other side at another. They are chosen by the great council, and are of the number of those magistrates that require four competitors: but the council of Pregadi for each of these makes one competitor, who is afterward balloted in the great council. So then when there is an election to be made of three counsellors, the great council is assembled, and after that the four sets of electors are made, and withdrawn into their several rooms, to make their elections after the order before set down, one of the secretaries gives notice to all who have votes in the council of Pregadi, that they withdraw into the chamber adjoining to the great council-chamber, where the council of Pregadi uses to meet. Where when they are all met, the Duke with the counsellors and Capi de Quaranta goes in to them; and it being by lot determined for what Seftiero a counsellor shall be first chosen, every one names him whom he would have to be counsellor. All the persons nominated are written down, and afterwards balloted; and he that hath more than half the number of suffrages is chosen competitor: and this manner of choosing in the council of Pregadi is called Scrutinio. The council of Pregadi and the Duke being returned into the great council, and the competitors made, they are all balloted after the manner forementioned, and he that hath most above half the number of suffrages is understood to be chosen counsellor. It may happen that in the great council one only may come to be nominated competitor, and sometimes the same that is chosen by the pregadi, in which case he ought to be balloted; notwithstanding that by the law none can be balloted without a competitor: because, being nominated in
in divers councils, he is understood to be competitor with himself, as hath been before intimated; and if he hath more than half the suffrages, he is chosen. [N. B. Where there are more competitors than one balloted for any place for which the pregadi chuse a competitor, it happens, for the most part, that he is chosen who was made competitor by the pregadi, because of the dignity and reputation of that council.] The six counsel-
lor's fit with the Duke, and with him administer all affairs, and dispatch especially all private business: as for example, give audience, read publick letters, grant privileges, and the like; which things cannot be done by the Duke, if there be not four counsellors present; and yet the counsellors may dispatch any the like business, though the Duke be not with them. They have power of propounding in the great council, the council of pregadi, and council of ten; which the Savi, who have power of propounding matters in the council of pregadi, and the Capi di Dieci, who have privilege of propounding in the council of ten, have not; so that the authority of the counsellors is greater than that of the Savi, or Capi di Dieci. [N. B. That any one counsellor, tho' no other concur with him, may propound in the council of pregadi, but not in the council of ten, unless three more concur with him in the same opinion.] This magistracy continues for a whole year, but is exercised but eight months; the other four months being spent in the Quarantia criminale, wherein three counsellors continually sit; who, during that time, are called Consiglieri de basso, i. e. lower counsellors. They may sit in this court either the first four months, or the last four, or the two first and two last. And therefore it is necessary that there be always nine counsellors, six who sit constantly with the Duke, and the three now mentioned: and when these are to go sit with the Duke, or go out of their office, three of those which sit with the Duke come down to sit in the Quarantia, or finish their office, and there are three new ones created. Moreover it is to be understood, that with the Duke and six counsellors do also sit three of the Quarantia criminale, i. e. the forty judges in criminal causes, whom they call Capi.
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Capi de Quaranta, who hold this dignity two months: so that by the Signoria is understood the Duke, the six counsellors, and the three Capi di Quaranta. Anciently the Duke, with his counsellors, was wont to be present at the judgments of the Quarantia; but Marcus Cornarus, who was made Duke in the year 1365, by reason of the multitude of business which daily increased in the common-wealth, left that care to those counsellors we have been speaking of. The three Capi de Quaranta fit with the Duke and counsellors, that as the Quarantia participates with the Signory, having three counsellors joined with them; so the Signory may partake of the Quarantia, the three Capi de Quaranta sitting with them. And so the Signory comes to intermeddle with the business of the Quarantia, and the Quarantia with the affairs of the Signory. And now to acquaint the reader with all the Duke's management. First, he with the counsellors intervenes in, and is part of the college, the council of pregadi, and the great council, as we have already signified. He is also present in the council of ten, and hath power of propounding in all these councils; so that no affairs can be treated of without his presence, tho' alone he cannot dispatch any business. Publick letters are written in his name, as also all privileges and publick writings, as tho' he were the author of them. All letters that come from foreign princes and ambassadours, and agents sent abroad by the common-wealth, are directed to him. When the favi of the land or sea, or other magistrates write letters to their proveditors, they subscribe them with the Duke's name thus, Dominicus Contarenus Dux Venetiarum. And this mode is observed in all other sorts of publick writings, as patents, privileges, obligations, laws, &c. The council of ten varies this form, and subscribes in two manners, for either the whole council writes, and then they subscribe Dominicus Contarenus Dux Venetiarum, &c. cum nostro Concilio Decem; and those that answer subscribe accordingly. Or only the heads or chiefs of the council of ten, called Capi di Dieci, write; and then the subscription is, Dominicus Contarenus Dux Venetiarum, &c. cum Capitibus Concilii Decem. And those that return answer subscribe
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scribe accordingly. Every eighth day, that is, on Wednesday weekly, the Duke is wont to go down and visit the courts of justice, making a tour round the two corridors, where the magistrates sit, stopping a while at each court, and stirring up and encouraging the judge or magistrate that presides there to administer justice impartially. And if there be any one that thinks he hath not right done him, he recommends himself to the Duke, acquainting him with his cause; and if the Duke judges that he is injured by false judgment, he presently commands that magistrate or judge to do him right; but if the contrary appears to him, he reproves him that thought himself aggrieved, and goes on in his visitation. Some Dukes have changed this order, not visiting always on the same day, that they might come upon the magistrates unexpected. Multitude of business sometimes constrainsthe Duke to intermit this usage for a week or two. All the money of the commonwealth is also stamped with the Duke's name, but not with his face or image. That he may be the better enabled (faith my Author) to maintain his port, and live with that magnificence such a place requires, he hath an allowance from the publick of 3500 ducats per an., a sorry revenue for one who hath the shew and title of Prince, being less than so many French crowns. And yet he is obliged to keep a family that may be honourable and suitable to such a dignity; and moreover to make four feasts yearly at four several times, viz. upon upon St. Stephen's day, St. Mark's day, Ascension day, and St. Vit's day: to which feasts it is the custom to invite all the gentlemen according to their ages. To the first, besides the counsellors, the Capi de Quaranta, the Auogadors, and the Capi de Dieci, are invited those that are of greatest age and gravity: to the second, those that are younger; and so to the third and fourth, still those that are younger and younger: besides which feasts, he is bound also to send to every gentleman that comes to the great council a present, which was formerly five wild ducks; but now a-days there is a sort of money coined for that purpose; upon one side thereof is the figure of St. Mark, reaching out a standard to the Duke,
on the other side the name of the Duke, and the year current of his dukeship, on this manner, Dominici Contarenii Venetiarum Principis munus, Anno IV.

The Council of TEN.

The council of ten, tho' it be a member of great importance, yet is it rather accessory or adjunctive, than principal, and seems to me much to resemble the dictator, that was wont to be created by the Romans in times of great and imminent danger; only differs in that the common-wealth is never without this magistracy. The authority thereof is equal to that of the council of pregadi, and the whole city; and therefore it may meddle with, and transact any state-affairs as it pleases, without appeal, or being accountable to any superior power. Tho' this power be not used by it, except only in cases of greatest importance, and which cannot otherwise be remedied or provided for: as for example, to consider about making war, concluding a peace, or other negotiation secretly, to send a provetor into the camp speedily: which things, if they should be first treated of in the college, and afterwards debated in the council of pregadi, they could not be managed and transacted with that secrecy, expedition, and other circumstances, as the time and conjuncture of affairs requires. When the college then intends to manage any business secretly, as suppose to conclude an agreement with any Prince or state, to attempt any thing on their enemies, or begin any new enterprise or design, which ought to be kept secret till the time of execution, then they cause letters to be written to such agents, or other persons as are to be employed in that business, with this inscription, Dominicus Contarenus Dux Venetiarum, &c. cum Concilio nostro Decem: and they superscribe their answers in like manner: and their letters are received by the Capi di Dieci, who bring them to the college; at which time the three Capi di Quarantia, and the Savii di mare, are excluded: and then they treat of the business, and debate it as long as is needful; yet not they alone, for the Capi di Dieci call the rest of the council of ten.
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sides at such consultations are present not only the Duke, the counsellors, and all the council of ten, but the grand Savii, and the Savii of the land, the giunta which consists of fifteen, the Auvogadors and nine of the procurators. * But all these have not power of giving suffrages, but only those ten of the council of X, the giunta, the Duke, and the six counsellors. The aggregate of all these, united with the council of X, is called the council of X with the giunta, which is not convened but on weighty occasions, to debate and manage great affairs, and such as appertain to the state of the whole city; which affairs might be treated of, and dispatched by the council of pregadi, but for the respects aforesaid are undertaken by this council. The council of X was erected, some say, after the death of Vitale Michaeli, to punish such as had plotted treason against the common-wealth. Others say it had its beginning in the time of Pietro Gradenigo. At first its authority was but small, but by little and little its reputation increased. It punishes, besides such as practice treason, or conspire against the common-wealth, those that coin counterfeit monies, those that commit sins against nature, as sodomy and bestiality. It also disposes of certain monies which are assigned to it by the chamberlains and other officers: it hath the command of certain gallies in the arsenal, marked with these two letters, C and X, signifying that such vessels are in the power of the Capi di Dieci. It also takes care of the artillery. When any of these things are to be considered of, then only those ten that are of the council of X, with the Duke and counsellors, are assembled; and this is called absolutely and simply, the council of X. The ten of this council are chosen in the great council, like the other magistrates, for one year; out of which are taken by lot every month three, who are called the heads, or chiefs of the ten [Capi di Dieci] and of these, one presides every week, which is.

* N. Creffus faith, That at present there are none of any sort added to the council of X, but this council consists only of the Duke, the six counsellors, and the Decemviri; and that this council doth not now meddle at all with peace and war, and the publick treasury, but only punish enormous offences, and especially rebellion and treason.
he; who in the great council-chamber takes place over-against the Duke. The office of these is to convoke the council of X, and propound their opinions therein; yet not singly, but all three together, or at least two; and they are obliged to call the council every eight days, and oftener if occasion require. Anciently there was no determinate time for assembling this council, but because every time it was convened, the whole city was moved and troubled, as judging that it was not without some great reason; therefore to avoid and prevent such disturbance and disquiet of mens minds, there was a time determined for its meeting. When they are to pass sentence upon any offender that is in their hands for the forementioned crimes, he cannot, either by himself or any other person, plead his cause or defend himself, but appears before the council and is examined, and there are notes taken of all he saith. And when the Capi di Dieci bring in such a cause into the council, either one of them must undertake his defence and plead for him, or else he cannot be defended at all. From the sentence of this council there is no appeal, neither can it be reversed or changed but by themselves or successors, if the matter be such as is capable of change. Those of this council, so soon as they go out of their office, may presently enter upon another. For all these places, the grand Savii, the savii of the land, and savii of the sea, the counsellors, the ten of this council, the Au-vogadors and cenfors give no impediment one to another; but so soon as a gentleman hath finished one of these offices, he may enter upon another. If it happens that any one, while he is exercising a lesser magistracy, be chosen to a greater, he may, if he pleases, relinquish the less, and take the greater.

The Procurators of St. M A R K.

The office of procurator is of great reputation in this city. Though it be not of the number of those which have to do with the administration and government of the commonwealth: yet is it honourable, because, as that of the Duke, it continues for life; and is besides ancient.
ancient, and hath maintained its reputation to the present times. There was never any gentleman of great esteem in the city, but he was adorned with this dignity: so that very few have been Dukes since this magistracy was ordained but they have before been procurators. Anci

ently there was but one procurator made, to take care of the church of St. Mark and its treasure; but after the death of Sebastian Ciani, he having left a great legacy to St. Mark's, the revenues whereof were to be distributed by the procurator; one person not sufficing for so much business, it was found necessary to create another; whose charge it should be to superintend and manage the legacy of Sebastian Ciani. Afterwards legacies being multiplied, in the year 1270, in the time of Rinieri Zeno, a third was thought fit to be created; and they did so divide the business among them, that one took care of the church, another of the legacies bequeathed by them that dwelt on this side the great channel; and the third of their legacies who dwelt on the other side of the great channel. In the same Duke's time there was a fourth created to be colleague with him that governed the church and its treasures. For the same reason two more were added when John Soranzo was Duke. Afterwards in the year 1423, when Francis Foscaro was made Duke there were three more created anew; so that then the whole number was nine; three of whom took care of the church and its treasures; three of the legacies of the three Sefieri on one side the great channel; and three of the legacies of the three Sefieri on the other side. In the year 1509, when the republick's armies were broken and routed at Addua by Lewis XII. King of France, they were constrained to creat fix for money, conferring that honour upon such as would lend the commonwealth such a certain sum. These procurators have power to compel heirs to perform the wills of the testators. They wear ducal habits, and carry servants about with them; and have the precedence of all other magistrates. In proclivities the counsellors and three Capit de Quaranta take place of them. They have either an habitation assigned them, or sixty ducats per annum allowed. They all enter into the council of pregadi, but not all into the council of ten, but only nine chosen by the said council, three for a pro-
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a procuracy. They are not capable of any other magistracy, except that of Savio grande and the Giunta of the council of X. When there is a captain of the Armatà, or a provector of the camp to be chosen, there is a law made in the pregadi, that any one that is procurator may obtain that dignity. They cannot go to the great council, but only in the election of the Duke; which licence is then granted them by an especial law. They were wont anciently upon all those days the great council met, during all the time the council sat, to continue in the court of the palace, and never to depart thence till the great council was risen; that if any unexpected or sudden accident should happen they might be ready to remedy or assist. And this perchance was the reason that it was forbidden them to go to the great council. But in our time this usance is not observed, because of that quiet and tranquillity the commonwealth enjoys: which is such, that no man thinks there can any accident happen in the city which shall require the presence of the procurators more in one place than in another. There is no magistracy or dignity in the city so much desired by the gentlemen as this of procurator: yet I think that it hath lost much of its ancient reputation. For whereas formerly it was not wont to be granted to any but ancient men, and of great repute; in our times we have seen many adorned therewith, who were neither of mature age, nor great esteem and credit.

Of the other officers and magistrates (whereof this republick hath good store) I shall say nothing, they belonging rather to the administration of justice and particular civil affairs, than the government of the commonwealth. Only it is worth the notice taking, that they have so many offices divided among the gentlemen, to busy and employ the greater number of them, that so, having something to entertain their time with, they may not be at leisure to think upon innovating in the government, or any way design and practice against the constitution of the commonwealth, to the disturbance of the peace.

The gentlemen while they are in the city wear black gowns with narrow sleeves, and caps; without which habit they never appear in the streets, or any publick place.
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place. In the Piazza of St. Mark, that side next the great council-chamber is appropriated to them to walk in, where no others mingle with them. This walk, or rather the company of gentlemen walking together there, they call the broil [Broglio.] The principal diversion of the gentlemen, citizens, and strangers is to walk in this Piazza.

The present citizens of what quality or estate soever have no share or interest at all in the government of the commonwealth. Probable it is, that when the great council was shut up (as they phrase it) that is, determined to such a number of families excluding all the rest, that all the citizens of any quality were therein comprehended; because before that time the government having been common to all, it is not likely the present establishment would have taken place without commotion and disturbance, if there had been a considerable number of citizens of fashion and interest left out. Formerly this honour hath been given to many citizens of eminent merit. Lately since the wars with the Turks in Candy for 100000 ducats any citizen might be created nobleman. By which means the state raised millions of ducats, there having been more than fourscore families advanced to that dignity.

They put not weapons into the citizens hands, but chuse rather to make use of mercenary soldiers in their wars.

There is no law that prohibits any citizen to be chosen to any place or office by the great council, nor doth there need it: for that they are as sure not to be chosen as though there were such a law, the interest of the nobility being as strong a bar to such a choice as a law would be. And yet Gianotti faith, that some have attained to be nominated and balloted in the great council.

The air, notwithstanding the situation of the city, is held to be very good and healthful, and (which is more) agreeable to people of all countries and tempers. We never enjoyed our health better, nor had better stomachs to our meat in any place beyond the seas than we had here.

Here we first saw the Ludicrwn, called by some Diabolus in carcere, from a little hollow glass-image made like the
the picture of the devil (tho' a glass bubble would serve the purpose as well, or better) which being put into a cylindrical glass-tube full of water, they could make ascend, descend, or rest in any part of the tube at pleasure. The manner thus, they prepared an icuncula or glass-bubble hollow and having in the heavier end of it a little hole of such a poise as just to ascend and swim in water, and having put it into a glass-tube flopp'd close or sealed at one end, and almost full of water, they clap their hand on the mouth of the tube, and press down the air upon the superficies of the water. The water, being thus press'd, presses upon the air in the icuncula, or bubble; which giving place, part of the water thrusts into it by the little hole. The bubble, thereupon becoming heavier, sinks in the water. Then taking up the hand, and removing the force, the air in the icuncula, or bubble, by its elastick power expands itself, and expelling the water again, the icuncula or bubble ascends; and so by proportioning the force, they can make it not only ascend and descend from top to bottom, but rest at what point of height or depth they please. Of this and other ludicrous experiments concerning the motion of these bubbles, I shall not think much here to set down what doctor Cornelius of Naples hath delivered in his Progymnasmata Physica, Epist. de Circumpulsione Platonica. I was (faith he) informed by Lud. Calsalius of an experiment invented at Florence, viz. Two glass-bubbles being put into a vessel of water were so alternately moved, that in cold water the one sank to the bottom, the other swam on the top; but putting in a little hot water they changed places, that at the bottom ascending up to the top, and that at the top sinking down to the bottom. Being taken with the novity of the thing, I applied my mind to consider what might be the physical reason of it, and soon found out how it might be effected, to wit, one of these glass-bubbles was perforated with a little hole on the heavier side, and blown so light as to swim in water: then some of the air being suck'd out, there was so much water let in in the room thereof, as to make the bubble sink in cold water, which upon filling the vessel with hot.
Observations Topographical,

hot water would mount up to the top. For the air in the bubble being rarefied or dilated by the heat of the water presently expels the water contained in the bubble, and so the bubble becoming lighter ascends. The other glass-bubble is imperforate and made of that poise as to swim in cold water and sink in hot.

He goes on. Sed cum in ejusmodi ludicris inventis occuremur, rumor ad aures nostras perpertur, versari in manibus viri cujusdam ingeniosi admirabile artificium, nempe vitreum tubum aquæ plenum, in quæ plures orbiculi vitrei sursum deorsumque ferebantur ad nutum ejus qui tubi stilum digito obturabat. Tum eò cogitationem intendi, ut quæ ratione id fieri posset affequeret: neque diu hæstaveram, cum intellexi orbiculos illos esse aliquanto leviiores aqua, & foramina habere, per quæ digiti pressu aqua intruderetur; aere intus contento in minus spatium coacto; ut proinde orbiculi graviores facti fundum penterent: at mihi digito laxato dum aer seco iterum ad debitam expansionem redigeret, aquam per foramen extrudi; atque idcirco orbiculos leviorem factos iterum sursum adjsurgere.

Quibus animadversis memoria mibi suscepsit ea, quæ a lias meditatus eram de impulsu aquæ in cavum orbis infra illam denseris, cujus supra facta est mentio. Quamvisbrem existimavi posse orbiculos perforatos sursum vel deorsum ferri, & in medio libratos detineri, absque ullo caloris autis frigori vi: Item sine ullo digiti manu suo pressu; sed tantum impulsu ipsius aquæ, quæ modò majorem modò minorem altitudinem supra dictos orbiculos affequeretur, hoc facilissimo modo.
Moral, and Physiological.

In tubum vitreum retortum ABCD a-
quae plenum immittantur orbiculi perforati
B, C, D, quae ita aquae tubo inclusae inna-
tent, ut minimi ponderis accessione fundum
petant; tum digito comprimente vel spiritu
adaeto, cogantur diisti orbiculi ad fundum
defcendere, tubusque ita inverteretur, ut illi
versus D ferantur. Quibus postis observa-
vimus dictos orbiculos per tubulum BCD as-
cendere & descendere pro ratione inclinationis
ipsius tubi. Etenim cùm recta AB horizon-
tii perpendiculariter insifti, globuli ex D de-
cendunt versus B; at contra cùm tubus ita
aptatur ut recta A B ad horizontem incline-
tur, tum idem orbiculi ex B ascendunt ver-
fus D.

At vero postis globulis, ut ferè semper con-
tingit, aliquo gravitatis excessu seque supera-
tibus, tunc poterimus multiformiter illos mo-
vore; namque alter peffum ibit dum reliqui
surgam ferantur; item alius quavis in loco
quis libratus pendebit; si scilicet organum
tantundem inclinamus, quantum ad opus re-
quiri experientiâ didicerimus.

Ratio cur hâc ita contingat manifesta
est ex iis, quae jam exposuimus de aqua, quae
in orbiculis eò copiosius intruditur, quo fuerit
altior, ut accidit cùm tubus AB ad horizontis planum ere-
ctum fuerit, nam ex inclinatione ipsius tubi aquæ altitudo
decrescit ac proinde ejus vis seu conatus fit minor.

Structuram vitrei tubi usus docebit: Id curandum est
potissimum, ut ejusdem crura AB, DB quodammodo pa-
rallela sint; altitudo autem BA altitudini BD tripula vel
quadrupla. Tubus equalem ubique habeat amplitudinem,
vel in crure BA, fit aliquanto amplior quàm in crure
BD.

Orbiculi a parte quæ pertusa est praøponderent, ut dum
in aqua librantur foramina deorsum vergant, &c.

A nobleman of this city shewed us a boy, who
had a faculty of charging his belly with wind, and dis-
charging it again backward at pleasure; which we saw
him
him perform. When he charged himself he lay upon his hands and knees, and put his head on the ground almost between his legs.

The fame nobleman shewed us the experiment, and gave us the receipt of a fulminating powder, which will do almost as well as that chargeable one made of gold. Take of salt of tartar one part, of common brimstone two parts, of nitre or salt-petre three parts; put these three all at once into a mortar, beat them fine and mingle them well together. Take of this powder and put it on a plate of iron, or in a fire-pan or other vessel, and hold it over a flame of fire, or a pan of charcoal: when the powder begins to melt, it will explode with a very smart crack like to *Aurum fulminans*. The fame, or the like fulminating powder, hath been since shewn us by Mr. Fisher of Sheffield. It is not unlikely that there may be several forts of powder made, which shall explode and fulminate after this fashion.

The fame gentleman also shew'd us the whole process of making *Venice-Sope*, which is very like and nothing inferior to *Castile-Sope*. It is made of the best oil olive, and a *lixivium* or lee. The *lixivium* is thus made: they take of the ashes of *Kali*, made in Spain, and in England known by the name of *Beriglia*, two thirds, of *Kelp*, i.e. the ashes of the ordinary sea-wreck one third. These they break into small pieces with a mallet or hammer, and mingle well together. This done, they put them into a mill, such as we grind apples in to make *cyder*, and grind them to powder, and then sift them. This powder they mingle with a little flaked lime, and make it up into pellets, which they put into letches or troughs, and pouring water upon them make the *lixivium*. The cauldrons wherein they boil their *sope* are very large. The bottom of them is a copper vessel, but the sides are made up of stone close cemented together, bound about with iron hoops, and inclosed in a cafe of wood. Into these cauldrons they put a great quantity of oil, it may be one third part of the measure, or more or less as they please: then they fill them up with the *lixivium*, and, putting fire under it, cause it to boil continually; as the *lixivium* boils away, fill filling it up with new, till all the oil be consumed or boiled out of it. For the oil
oil, uniting itself with the salt of the lixivium, rises continually up to the top in the form of a scum or froth, which by degrees grows thicker and thicker, and, by reason of the cold of the air, condenses into that body we call fope. This scum continues to rise so long as there is any oil remaining in the vessels; the cremor or coat of fope growing still thicker. Those that are practiced can tell by the smell when all the oil is boiled away. The lixivium they account strong enough so long as it will bear an egg. This lixivium they make of seawater; but they told us they might as well make it of fresh water. To expedite the making the lixivium, they take some of the boiling lixivium out of the cauldrons; to which purpose there is a pipe comes out of the cauldron in the region of the lixivium, whereby they let out the boiling lixivium into a trough; and this, together with cold water, they pour upon the ashes to promote the separation of the salt. When the oil is boil'd away, they let all cool, and, taking the cremor or crust of fope off the superfcies of the liquor, spread it upon a floor, and smooth it, and so let it dry in a bed of more than a brick's thickness. When it is dried they cut it long ways and cross ways into oblong parallelograms, or the figure of oblong bricks, there being nicks in the borders of the beds on purpose to direct the instruments to cut it. This done, they pare these pieces from any impurities that may adhere to them from the bottom of the bed (for the beds are all strowed with lime-dust to hinder the sticking of the fope to the floor) and run them over a plane, to smooth them. These large pieces they subdivide into lesser, and seal them with a seal.

The reason, why they mix Kelp with the Beriglia, is, because Beriglia alone would make the fope too soft, and Kelp alone too brittle.

To colour the fope green they take the juice of beet, a good quantity, and put it into the cauldron with the lixivium and oil. The Germans will have it thus colour'd; and perhaps the nitre which is in this juice may add some vigour to the fope.

The fire is continually kept burning, and so the liquor boiling till the operation be finish'd.
PADUA [Patavium] watered by the rivers Brenta and Bacchilio, is an ancient city, supposed to be built by Antenor after the taking of Troy by the Grecians. That Antenor came into these parts Livy (who was native of this city) witnessed in the very beginning of his history, in these words, *Jam primum omnium satis conflat, Trojâ captâ in caeteros saluit efl Trojanos, duobus Àenà Àntenorâque, \& vetufli jure hospittii, \& quia pacis reddendâque Helenae semper audores fuerant, onme jus beli Achilles abstiuiffis. Cæsibus deinde varis Àntenorem cum multitudine Henetium, qui seditione ex Paphlagonia pulsi \& sedes \& Ducem, Rege Pylæmene ad Trojan amissis, quærebant, venisse in intimum maris Adriatici sinum, Euganeisque, qui inter mare Alpesque incolentur, pulsis, Henetos Trojanosque eas tenuisse terras. And that he founded Padua Virgil faith expressly, Æn. 1.

Antenor potuit mediis elapsus Achiviis
Illyricos penetrare sinus, atque intima tutus
Regna Liburnorum \& fontem superare Timavi;
Unde per ora novem vaso cum murmure montis
It mare præruptum, \& pelago premit arva sonanti.
Hic tamen ille urbem Patavii, sedesque locavit
Teurorum, \& genti nomen dedit, armâque fixit.

And Martial uses this compellation to Valerius Flaccus the poet, a Paduan, Antenorei spes \& alunne laris. And yet some there be who will have Altinum to be the city of Antenor, and Padua to have been built by one Patavius, a King of the Veneti.

It was celebrated of old time for the chastity of its women, according to that of Martial, *Uda puella legas fìs* Pata-
Morale, and Physiological.

Patavina licet. After the decay of the Roman empire it was ruined and destroyed by Attila; restored again by Narses; then sack'd and burnt by the Lombards; and after various successes, in the time of the Emperor Otho I. it obtained its liberty, and was governed as a commonwealth by its own magistrates; till first Ezzellimus the tyrant, and not long after him the Carraresi made themselves lords of it; from whom the Venetians extorted it in the year 1405, though they pretend that the Paduans voluntarily delivered themselves up to them.

It is inclosed with two walls: the interior (called Antenor's wall, though of a far later make) is about three miles in circuit. The exterior of great strength with bastions and other fortifications, and a deep trench before it for the most part filled with water, about 6 miles in compass, built by the Venetians when Leonardo Loredano was Duke, in the time of the league of Cambrai, when the Pope, the Emperor, the Kings of France and Spain, the Dukes of Mantua and Ferrara joined themselves together against the Venetians; as appears by this inscription over the gate of All-Saints.

Hanc antiquissimam urbem literarum omnium Asylum, cujus agrum fertilitatis sēmen natura esse voluit, Antenor condidit; Senatus autem Venetus bis belli pro-pugnaculis ornavit, Leonardo Lauredano Duce Venetorum invictissimo, cujus Principatus varias fortunar vices excipiens quām gloriōse superavit.

It was stoutly defended by the Venetians against the Emperor Maximilian besieging of it with an army of 80000 men, Anno 1610. Though it be large in compass, yet is it neither rich nor populous; the number of the inhabitants, according to the largest reckoning, amounting to no more than 38000 souls, which I believe exceeds the just sum by at least 10000.

The territory of this city is a large plain or level, and the soil very rich and fertile; so that it is come to be a proverb, *Bononia la graffa, ma Padua la pasia, & Venetia la guasta.* Their bread is esteemed as good as it is cheap, according to that other proverb, Pan Padu-

* i.e. Bononia the fat, but Padua surpasses it, and Venice wastes it.
Observations Topographical,
doano, Vic Vicentino, Trippe Trevisane & Putana Venetiana. Bread of Padua, wine of Vicenza, tripes of Treviso, and courtezans of Venice are the best in their kinds. No wood is permitted to be planted for the space of one mile from the wall round about; that in case it should be besieged in a time of war, the enemy might find no shelter among the trees; and this is called the Wafe, and is referred only for corn. There are very few meadows or pastures near this town, which is the reason that milk is dear here. They make bread for the poor of Mayz, or Indian wheat (which they call formentone) and Sorgum, whereof they plant good store hereabout. The most considerable buildings in this city are, 1. The town-hall, 256 feet long, and 36 feet wide, according to Schottus; by some thought to be the largest room in Europe, but we judged it to be less than Westminister-Hall; underneath it are shops, so that you ascend many steps to go into it; it is called Palazzo della Ragione, because the courts of justice are held there. 2. The publick schools. 3. The church of St. Anthony, called the Santo. 4. The church of St. Justina with the Benedictine cloister. 5. The palace of the Arena, or amphitheatre. 6. The castle of the magazines of corn and ammunition. 7. The bridge called Ponte molino, where there are about 30 water-mills together, upon the river Brenta. 8. The palace called the court of the Capitaneo. 9. Antenor's tomb, as they would have us believe. The particular descriptions of all which places may be seen in Schottus and others. Near the domo we observed a fair building called Mons pietais, where there is a great bank or stock of money, some say 40000 crowns, for the use of poor men, who bringing a pawn, and depositing it here, may have money to the value of it, without any interest if it be a small sum; if a considerable sum, then they are to pay for it five per cent. which serves to defray the charges of clerks, and other minifters and attendants, &c. and if there be any surplusage, it is divided yearly among the poor, the stock still remaining intire. The like charitable foundations we observed in many other cities of Italy, and I could wish there were of them among us in England.

This city is most famous for its university, founded by the Emperor Frederick II. Anno 1220. for a full history.
Moral, and Physiological.

whereof I refer the reader to Thomasinus's Gymnasmum Patavium. I shall only add the Series Lectionum, whereby may be seen what professors there were in each faculty at the time of our being there, and what books they were to read.

In Nomine Domini nostri Jesu Christi Amen.


Ad Theologiam in Via S. Thomae.

Ad Theologiam in Via Scoti.
R. P. D. M. Matthaeus Ferchius Veglenfis.
Ad Lecturam Sacrae Scripturae.
R. P. D. Leo Matina Monachus Cazimenfis.
Ad Metaphysicam in Via S. Thomae.
O C E R V A T I O N S  T o p o g r a p h i c a l

Ad Metaphysicam in Via Scoti.

R. P. D. M. Antonius Cotonius Nicofienfis.

Ad Theoricam ordinariam Medicinæ.


Ad Practicam ordinariam Medicinæ.

Exc. D. Raymundus Jo. Fortis Veronesensis in primo loco.

Exc. D. Io. Franciscus Bonardus Patavinus in secundo loco Leg. de Febribus hora prima Pomeridiana.

Ad Philosohiam ordinariam.

Primus locus vacat.


Ad Anatom en ordinariam.


Ad Theoricam extraordinariam Medicinæ.


Ad Practicam extraordinariam Medicinæ.

Exc. D. Hieronymus Frigimelica Patavinus Comes in primo loco.

De Pulibus, & Urinis in Xenodochio diebus vacantibus.

Ex. D. Anglus Montagnana Patavinus in secundo loco.

Exc. D. Hilarius Spinellus Patavinus in tertio loco Leg. de Morbis particularibus à corde infra hora secunda matutina.

Ad Philosohiam extraordinariam.


R. & Exc. D. Valerianus Bonvicinus Ver, Canonicius Estensis in 2 loco.


Ad
Moral, and Physiological.

Ad Lecturam Philosophiae Moralis.

Ad Lecturam Meteorum, & Parvorum Naturalium Arist.

Locus vacat.

Ad Lecturam Chirurgiae ordinariam.

Ad Lecturam Simplicium.
Exc. D. Georgius a Turre Patavinius Interpretabitur Lib. VI. Dioscoridis, Ubi de Venenis, & Venenor. Curat. in horto incipiet docere die 2 Maii hora 22. Ídem ad offerentem Simplicium.
Ad Theoricae extraordinaries diebus vacantibus.
Ad Lecturam Tertii Libri Avicennae.

Ad Logican.

Primus Locus vacat.

Ad Mathematicam.
R. P. D. Stephanus de Angelis Venetus Leg. tertium Lib. Euclidis Elementorum.
Ad Humanitatem Graecam & Latinam.

Landus Monaghina Bidellus Generalis.
Observations Topographical.

In Christo Nomine Amen.

Otulus Excellentissimorum DD. Legentium in Publico Gymnasio Patavino, ad infrascriptas Lecturas, quas aggreg. Die 3 Novembris anni instantis 1663. & 1664. sub felicibus auspiciis Illustissimorum, & Excellentissimorum DD. Michaelis Mauroceni pro Serenissimo Dominio Veneto Praetoris, & Simeonis Contareni Praefecti Patavii; necnon Illustissimi, & Generosiissimi D. Comitis Pauli Bennassuti Vicentini, Almae Universitatis DD. Juristarum Pro-Rectoris, & Syndici Meritissimi.

Ad Lecturam Juris Canonici de mane.


Ad Lecturam Juris Canonici de serto.


Ad Lecturam Juris Cæsarei de mane.

Moral, and Physiological.

Ad Lecturam Juris Caesarei de servo.
Mag. & Exc. I. V. D. D. & Co. D. Jacobus Caimus
Utinenfis in primo loco. Exc. I. V. D. D. Antonius
Aloyfius Aldrighettus Pat. in paritate primi loci.
Exc. I. V. D. D. Jo. Francifcus Savonarola Patav-
nus in tertio loco Legent primam ff. Novi Partem.

Ad Lecturam Criminalium.
Exc. I. V. D. D. Joannes Galvanus Patavinus Ex-
ponet Rub. ff. ad L. Jul. de adult. & subinde alios
titulos.

Ad Lecturam Pandectarum.
Exc. I. V. D. D. Achilles Bonfiglius Patavinus Profeque-
tur explicationem libri prumi ff. Veteris, & incipiet à
titulo de Adoptionibus.

Ad Lecturam Codicis.
Exc. I. V. D. D. Joannes Capivaccæus Patavinus Inci-
priet à titulo de pactis, inde ad alios titul. procedet.

Ad Lecturam Institutionum.
loco. Exc. I. V. D. D. Nicolaus Gagliardus Tri-
dentinus in secundo loco. Exc. I. V. D. D. Ludov-
icus Juftachinus Patavinus in tertio loco Explicabunt
material ultimæ voluntatis, & incipient à tit. de testa-
tamentis ordinandis.

Ad Lecturam Feudorum.
Exc. I. V. D. D. Scipio Gonnemius Cyprius Tractabit
hoc anno de feudi origine, nomine, caufis, feu for-
ma, & constitutione ad varios feudal. lib. tit.

Ad Lecturam Authentiorum.
Exc. I. V. D. D. Toldus Bellini Constantini Pata-
vinus Explicabit authenticum five Novellam 39. de
Restitutionibus, & eaq. parit in i1. Menfe poft
Mortem Viri, Juncto Authentico 108. de Resti-
tutionibus, & 159. de Restitutione Fidei commif;
&c.

Vacat. Ad Lecturam de Regulis Juris.

Exc. I. V. D. D. Aloyfius Angeli Patavinus Legato-
rum tractatum profequetur.


N 3 The
The citizens and strangers here dare not stir abroad in the dark, for fear of the scholars and others, who walk up and down the streets most part of the night, armed with pistols and carbines. If any one comes within hearing, they cry *Che va li?* i. e. who goes there? and if they answer, they bid them turn back; which, if they do not suddenly do, they shoot at them. When two parties of these scholars meet, each man standing behind a pillar (for the streets have portico's or cloisters on each side) they shoot one at another. These *Martenalia nocturna*, as some call them, or *Che va li's*, are thought to have had their original from the accidental meeting and quarrelling of some scholars, who went to the same mistresses, or whores. A wonder it is to me, that the Venetians will suffer such misrule.

Here is a publick phisick-garden, well stored with simples, but more noted for its professors, men eminent for their skill in Botanics, viz. Aloysius Mundella, Aloysius Anguillara, Melchior Guilandinus, Jacobus Antonius Cortusius, Prosper Alpinus, Joannes Veslingius. The epitaph of which last, being so considerable a person, I shall here exhibit to the reader, as I found it on his monument in the church of St. Anthony.

Joanni Veslingio Mindano,  
Equiti.

*Naturæ verique scrutator solertissimo, qui sapientia*  
Atque exsticarium spirium studio Ægypto peragrata,  
Ab Veneto Senatu rei herbariae  
Et corporum Sectioni praefectus, eunm Latinitatis  
Et Graecæ eruditionis cultum mutis artibus circumfudit,  
Ut illic naturæ ludentis pompanæ amularetur;  
Hic spectaculi diritatem oratione deliniret,  
Ut quantum oculi patercatur tantum sibi placerent aures;  
Ad extremum laboribus factionis,  
Dum miseræ plebi gratuitam operarum commodat,  
Nexit contactus publicæ saluti vitam impendit.  

*XXX Mensis Aug. An. Chr. ccc xlix.*  
Æt. LI.
In the dormitory of the cloister of the Dominican friars we saw the cell of Albertus Magnus, over the door of which were inscribed these monkish verses.

*Quam legis Alberto Domus hæc fuit hospita magno,*
*Parva quidem, baud parvo sed tamen ampla viva.*
*Parvus erat subit parvae cum limina portæ,*
*Magnum at exiguæ sub lare factus erat.*
*Senserat hoc dixitque superba Ratisbona magnum*  
*Hospitem in hospitio dispère Padua colis;*  
*Archifacerdotis mitram magnósque penates*  
*Accipe Magne ratis, sic bona navis erit.*

*Post majora Deus referans palatia, Magne*  
*Dixit, habe magni magna theatra poli.*  
*Audít & magni propylææ petiviis Olympi,*  
*Nam majore capi limine magnus habet.*

*Deo ter maximó numíni:*  
*Alberto ter magno lumíni,*

Padua is governed by a podesta or mayor, who is chief in civil matters; and a Capitaneo or governor who is over the military; both elected and sent by the Venetians.

From Padua we made a by-journey to Albano, anciently Abona, some five miles distant, where we viewed the hot baths. The springs arise in a rocky hillock, consisting of a porous stone, and are so plentiful that one of them drives an over-shot mill. The water is so hot, that in one of the sources, the country-people usually scald their hogs to get off the hair. It contains a copious white salt which shoots upon the earth where the water runs. This the common people hereabout gather, and use with their meat, which yet hath not the true taste of common salt, but somewhat approaching to nitre or salt-armoniac. Besides it is so impregnated with stone, (which, by reason of the salt it contains actuated by the heat, it dissolves and imbibes in the stone quarries it passes through) that it suddenly precipitates it on the bottoms and sides of the channels wherein it runs, which become thereby as it were so many stone troughs; and on the mill-wheel it drives, which it so incrusts with

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N 4. a stone
a stone of a dark gray colour, that every other month they are fain to peck it off. That the waters which petrify do by running through stone-quarries wash off small ramenta or particles, and being in motion support them, and when they stand or settle in any place let them fall again, is more than probable, by what we see in daily experience, the hardest stones being worn and hollowed by a constant dropping of water upon them: much more will water be able to do this, when impregnated with salt, and that salt acted by heat. The waters of Albano are not made use of to drink, but only to bathe in, as at Aken, Baden, &c. though Schottus faith that they usually drink of one of the sources.

We travelled to Vicenza, a city less in circuit than Padua, as being but four miles round, but more populous, containing between thirty and forty thousand souls. It is encompassed with a brick-wall, but of no great strength. It stands upon the river Bacchilio, and is also watered by the Rero or Eretenus, beside two little brooks called Alichello and Seriola. It is full of nobility and gentry, being said to have 200 families worth 1500 crowns per annum each, and better. So that there is a proverb in Italy, Quanti ha Venetia de Ponti & Gondalieri, Tanti ha Vicenza de Conti & Cavalieri.

Of the several changes of government, which this city hath undergone I shall say nothing, but for that refer the reader to Schottus and Leander Albertus: only it is worth the notice taking, that when they were set at liberty, and absolved of their oaths of allegiance by Catharine reliet of Galeazzo Visconte first Duke of Milan, they did of their own accord deliver up themselves to the state of Venice, for which reason they enjoy great privileges and immunities. The theatre of the academy called the Olympici is a pretty building and deserves to be remember'd. The inhabitants of this city drive a great trade in breeding and feeding of silk-worms, and in winding, twisting, and dying of silk. The wines of this territory are very rich and gustful, especially that sort called Dolce e piccante.

† Such as are those of Poolhole in Derbyshire, Wokey-hole in Somersetshire, and other subterraneous grots as well in England as beyond the seas.
Hence we made an excursion of about six miles, to see the famous cave of Custoza, said by some to be seven miles in length; but more truly by Jo. Georgius Trissinus (who himself measured it, and gives an account of it in a letter to Leander Albertus) no more than 650 perches, which made about 4000 feet in length, 490 perches or 3000 foot in breadth, and about three miles in circuit. We took it to be nothing else but a cave left from the digging of stone; as the same Trissinus by sufficient arguments proves it to be. 1. Because the ancient buildings of Padua and Vicenza are of the same kind of stone. 2. Because to support the roof they have everywhere at distances sometimes greater, sometimes less, left huge pilasters of the quarry, of three perches square a piece; of which pilasters in the whole cave there are thought to be about 1000. 3. There are some great square pieces of stone cut round about, in order to taking them up and carrying them away. 4. There remain manifest prints and tracks of cart-wheels; whereas no man living can remember that ever cart went in there.

We observed many bats clinging to the roof and walls of this cave; and in some standing waters a kind of fish or rather insect, which they called Squilla Venetiana, i.e. venice-furrows, but they are of that sort which naturalists call Pulices marini or aquatici, i.e. sea-fleas or water-fleas.

At this village we saw the so much talked of ventiduct belonging to one Tridentus a nobleman of Vicenza, serving to cool the rooms of his palace in summer time. From a large high-roofed subterraneous grot or cave there are channels cut out of the rock to the palace. When they would have a cool air in any of the rooms, they shut up a gate in the cave, and open a door at the end of the channel, which lets in the fresco, every room having a hole in the wall or pavement to admit it. On a stone there is this inscription, Franciscus Tridentus Vicentius Jctus Hierosolymitani equitis gelidi venti flatum in caverna Cubola vocata spirantem in aedes proprias per hunc crypto-porticum deduxit, ad temperandum ardentem & aestivos calores, tum cohibendo tum relaxando, novo atque mirabili artificio per cubicula quaque ducendo, quae pro libitum suo refrigerare & calefacere valet:

\[ \text{ita} \]
Observations Topographical,

ita ut ejus Villa ingenio, diligentia, impensa ac aemulatione ornator effecta, inter regia ornamenta commoveri posset: Anno MDLX. Aetatis suæ XXII.

From Vicenza we journeyed to Verona, a fair, large populous city, pleasantly situate upon the river Athesis, which is here of a great breadth, over which there is one very fair stone-bridge esteemed the handsomest bridge in Europe, besides three others of less account. The city is seven miles in circuit, excluding the suburbs, which are very large too; and thought to contain 70000 souls. It is strong by situation, and extraordinary fortified with walls, bastions, towers, bulwarks, and deep ditches full of water drawn from the river Athesis round about, and strengthened with three castles; that of St. Peter, that of St. Felix, and —— so that it is look'd upon as impregnable. Here we saw several cabinets of collections of natural and artificial rarities. 1. That of seignior Mapheus Cusanus an apothecary, wherein were shewn us many ancient Egyptian idols, taken out of the mummies, divers sorts of petrified shells, petrified cheese, cinnamon, sponge and mushrooms. A jasper stone and an agate having chrystal within them. Stones having upon them the perfect impression or signature of the ribs and whole spines of fishes. A Catapulta of brass found 1656, about Trent. Several curious entaglia's or stones engraved with figures of heads, &c. An ancient Roman gold ring. A good collection of ancient Roman coins and medals, as well confiulary as imperial, besides modern medals. A stone called Oculus mandi, n. d. which when dry shews cloudy and opake, but when put into water, grows clear and transparent. An account of this stone may be seen in the History of the Royal Society, brought in by Dr. Goddard. Among his medals we observed a Maximinian and a Dioclesian, with this on the reverse inscribed, Verona Amphitheatrum.

2. That of seignior Muscardo, a gentleman of Verona, a civil and obliging person. He also hath a very good collection of ancient Roman medals, among which he shew'd us an Otho of gold, and told us that those of brass were all counterfeit, there having never been any found of that metal. Many sorts of lachrymal urns and lamps, great variety of shells and some fruits and parts of plants petrified,
petrified. Several exotic fruits and seeds: the ores of metals and minerals: gems and precious stones in their matrices as they grew: Lapis obsidianus and a kind of stone called Adarce. But because there is a description of this Museum published in Italian, I shall not descend to more particulars, but refer the reader thither.

3. The Museum of seignior Mario Sala an apothecary, containing only some reliques of Calceolarius’s Museum, printed many years ago.

The Amphitheatre of Verona, called now the Arena, is a very stately and capacious one, and seem’d to me when it was intire not to have been much inferior either for beauty or greatness to that of Titus at Rome. The outward wall or circle is all gone save a little piece, from whence we may make an estimate of the height and beauty of the whole. The remaining setting aside this exterior circle is kept in good repair by the Veronese; the Arena of it is thirty-four * pertiche long and twenty two and half broad, and compassed about by forty two rows of stone benches one above another, after the manner of stairs, upon which 23000 persons may fit commodiously. As it is imperfect it seem’d to us one of the most pleasent and goodly spectacles for a structure of that nature that ever was beheld. He that desires a more full and particular description of it may consult Schottus, and the antiquities of Verona written by Torellus Saraina a Veronese, as also Lipsius’s Book de Amphitheatris.

As for government and subjection this city underwent almost the same changes with Padua and Vicenza, and did also voluntarily deliver itself up to the Venetian government. Here are very good white wines, especially that sort they call Garganico. The air is clear and healthful, but must needs be sharp in winter time, being so near the high mountains: among which Baldus is famous for the great variety of choice simples growing thereon; of which Joan. Pona, an apothecary of Verona, hath written a particular catalogue and description. Which book, and thereupon the Paduan herbists making simple voyages yearly thither, hath gotten Baldus its reputation; for I am very confident that

* The length of a pertica or perch of this measure is somewhat more than six foot.

many
many hills about the *Alps* produce as great variety and as choice plants as that.

Not far from *Verona* is the *Lago di Garda*, antiently called *Lacus Benacus*, which furnishes the city with plenty of excellent fish, especially trouts, *Sardine*, and a certain fish of the trout kind, called *Carpione*, peculiar to this lake. Those we saw were not a foot long, of the fashion of a trout.

We travell'd from *Verona* to *Mantua* 24 miles, by the way passing through some large villages, but no considerable town. Six miles short of *Mantua*, at a place called *Marmirola*, we viewed an elegant palace of the Duke's, richly furnish'd and adorn'd with pictures and statues. The city of *Mantua* is of great antiquity, strong by situation, as standing in the middle of a lake, and well fortified. *Schottus* faith, that it is 4 miles in circuit, hath 8 gates, and about 50,000 fouls. It seemed to us a great city, but not answerably populous; having not yet recover'd itself of the losses it sustain'd when it was miserably sack'd by the Emperor *Ferdinand II*'s army in the year 1630. A little out of the city stands a pretty house of the Duke's, called *Palazzo del Te*, wherein there is a square room having the roof arched round in form of a *Cupola*, called the *Giant's hall*; so contrived, that if two stand in the opposite corners, one laying his ear to the wall may hear what the other whispers with his face to the corner, which he that stands in the middle of the room, or in the corner on the same side, shall not. The like room we were told there is in the Duke of *Parma*'s palace at *Caprarola*. Our whispering place in the cathedral church of *Gloucester* is of somewhat a different make. In a village near *Mantua* called *Ande*, now *Petula*, was born the Prince of Latine poets *P. Virgilius Maro*. In this city are two societies of *Virtuosi* (academies they call them) the one call themselves *Accesi*, the other *Timidi*.

This city hath, according to the fate of her neighbours, undergone several changes of government. In the year 1328. *Lewis Gonzaga*, by the favour of the people, made himself lord of it, from whom the present Duke is descended. In the year 1433. *John Francis Gonzaga* was created marquês of *Mantua*, by the Emperor
Moral, and Physiological.

The Duke’s yearly revenue is said to be 400,000 crowns, according to the account we had of it in particulars somewhat less, viz. the mills pay 4000 crowns per annum; the Jews (who are about 6000 in number, and wear no badge of distinction) give 20,000 crowns per annum; the rest of the citizens of Mantua 70,000 crowns. The country yields 60,000 pistoles; and Montferrat 13000, in all 386000 crowns the year. Yet is the present Prince, through ill husbandry not proportioning his expences to his income, become very poor; being indebted to the Venetians (as Leti faith) four millions of crowns. To advance his revenue, at the time of our being there, he was put to that pitiful shift of debasing his coin, so that none of his money would pass further than his own territory. His name was Carolus Gonzaga II. since dead; and his son Carolus Ferdinандus succeeds him in his estates. There are besides of this family four or five small princes, feudatory of the Empire, but sovereign lords, having jura Regalia in their petty states, viz. The Princes of 1. Novellara. 2. Bozolo. 3. Guastalla. 4. Sabionetta, in which the male line is failed. 5. Cañiglione. We were told that these princelets were obliged to attend the Duke of Mantua’s court three months in the year. The Duke’s council of state, or privy council, consists only of six of the chief nobility.

In these parts all the children of the common people have equal shares of their parents estates, at least their moveables. The wife, when her husband dies, carries her dowry back with her: if she dies first, then her children (if she leaves any) divide her dower equally among them. If she die childless, her dower is divided; half goes to her husband, and half to her next kindred. If a woman hath had children by one husband, and he dying, she marries again, and hath children by her second husband, her estate is divided into equal parts; one moiety goes to her first husband’s children, and the other to her second’s.
We took boat for Ferrara, which brought us first into the lake, then into the channel of the river Minicius, [which runs out of the Lago di Garda (called in Latin Lacus Benacus) at a strong fort of the Venetians called Peschiera, and, coming to Mantua, spreads itself into a lake of 5 miles long.] At 16 miles end we came to a bridge and sluice at a place called Governo, where we enter’d the river Po; going down stream we passed by Ostia, 10 miles distant from Governo; and 10 miles further down Massa, both on our left hand; and 7 miles below Massa came to Stellata, a large village on our right hand, under the Pope. Here the territory of Mantua ended. Eight miles beyond this place we left the river Po at a village called Il Ponte, and struck up an artificial channel of 4 miles long, which brought us freight to the gates of Ferrara.

This city is very considerable, as well for its greatness as its strength. It is said to be about 7 miles in compass, and, besides the advantage of its situation in a fenny level, it is strongly fortified with walls and bulwarks, and surrounded with a broad and deep trench full of water; so that I look upon it, for a city of that bigness, as the strongest in all Italy. It had formerly a Prince of its own, but is now, with all its territory, subject to the Pope. From Ferrara we went with the Proccacio or courier to Bologna, shifting our boat at a place called Mal-Albergo, some 17 miles from Ferrara, where we went up into a higher channel, viz. the Rhenus Bononiensis, and, passing through 9 locks or seslegni, we arrived at Bologna, distant by water from Ferrara 45 miles. A great part of the country we passed through between Ferrara and Bologna is a perfect level, and fenny ground, much like to the isle of Ely in England.

Bologna. Bononia is a large city, of a round figure, and yet 7 or 8 miles in circuit. The houses not tall, fair portico’s on each side the streets, convenient to walk in, as well in summer to defend one from the scorching beams of the sun, as in winter to shelter from the rain. Many gentlemen’s houses (palaces they call them) which make no great shew outwardly in the street, but within are very handsome and very convenient, having more in the recesses than they promise in the front. The number
The Series Lectionum of the University of the Jurists.

Classe Matutinae.

Primâ hora in pulsu Campanæ.


Ad Lecturam Decret. ordin. Legant de Constitutione usque ad Tit. de officiis. Delegat.

D. Franciscus Matthælianus.
D. Prosper Pollinus Metrop. Praepol.
D. Jo. Baptista Dulsus.
D. Petrus de Sandris.
D. Raphael Bertucerus S. Petronii Canonicius.
D. Constantius Scatellius.
D. Alexander de Domnis.
D. Abbas Cititus Maria Guidonus Metrop.
Observations Topographical,

Secundâ Horâ.


D. Franciscus Barbadorius emeritus.
D. Alfonfus Arnoldus S. Petronii Canon.
D. Matthæus Griffonius S. Petronii Canon.
D. Nicolaus Alle.
D. Jac. de Gottis.
D. Hippolytus Farnafarius Abbas.
D. Odoardus Guidonus.
D. Antonius Francavatia.

Tertiâ Horâ.

Ad Lecturam Summarum Rolandinae.
D. Carolus Dulphus.

Ad Lecturam Sexti & Clementinarum.
D. Co. Franciscus Ursius.
D. Carolus Gaggius.
D. Auguffinus de Balthaffaris.
D. Leonardus Bacchionus Caccaneus.
D. Christoph. Gulinellus.
D. Franciscus Guidonus.

Ad Lecturam de Maleficiis, Legant unicam de Ruptu Virginum.
D. Gasper Elephantucius.
D. Joseph Coltellinus.

Quarta Horâ.

Ad Lecturam de Verb. signific.

D. Christoph. Lucatellus.
D. Jo. Antonius Fantellus.
D. Hieronymus de S. Petro Metrop. Canon. abs. cum ref.
Moral, and Physiological.

Ad Lectionem repetit. part. Legant primo omnes Populi ss. de just. et jure, deinde legant de minoribus 25 annis.

D. Jo. Baptista de Aftis.
D. Calabrebius Pistorinus.
D. Hippol. Franc. Vinea abf. cum ref.
D. Dominicus Medices.
D. Hippol. Maria de Conventis.
D. Laurentius Simonius.

Ad Practicam Judiciario.

D. Paulus Zanius.
D. Johannes Calvus.

Ad Lectionem Pandectar.

D. Alexander Sanutus Pellicanus.

Classea Pomeridianae.

Prima Hora in pulsu Companae.

Ad Lectionem Instit. Legant tit. de usufructu, deinde transiant ad tit. de usucapionibus.

D. Joannes Mazzantus.
D. Clemens Leonius abf. cum reserv.
D. Franciscus Maria Burdocchius.
D. Horatius Battalia.
D. Jacobus Maria Ugolottus.
D. Gaspar Vincens Benna.
D. Camillus Bernardinus Albanus.
D. Joan. Antonius Ruinus.
D. Laurentius Placentus.
D. Prosper Cattalanus.

Secunda Hora.

Ad Lectionem ss. legant tit. de novi operis nunciati. deinde tit. de acquirend. Possis.
Observations Topographical,

Excellentissimus D. Cornelius Canalius emeritus.
D. Franciscus Munarius aetate f., Metrop. Canon.
S. P.
D. Joan. Baptista Farnasarius.
D. Carolus Antonius de Blafis.
D. Joseph Franchinus.

Tertia Hora.

Ad Lecturam Decret. Legant in causis incipiendo a Prima.
D. Hippolytus Nanius Elephantuccius.
D. Co. Annibal de Blanchis Metrop. Canonicus.
D. Felicianus Mollinus.
S. Clem. Hip.

Ad Lecturam C. lib. X.
D. Carolus de Landis.

Ad Lecturam Decretal. Legant de Regularibus & transfectibus ad Religionem.
D. Alexander Barberius.
D. Co. Hieronymus Bofchettus.

Ad Lecturam de regulis Juris.
D. Petrus de Mafiis.
D. Franciscus Maria Cuccus.

Quartâ Hora.

Ad Lecturam de feudis.
D. Jo. Baptista Giovagonius abf. cum reserv.
D. Julius Carcellerius.

Ad Lecturam Institut. Legant tit. de usifructu, deinde transfectant ad tit. de usucapionib.
D. Co. Ludovicus Marsilius abf. cum reserv.
D. Jacobus Daniolus.

D. Al-
Moral, and Physiological.

D. Albertus de Planis.
P. Abbas Petrus Hercules Abergettus abst. cum reserv.
D. Rochus Franc. Bonfiolus.
D. Gaspar Linder,
D. Fabius Bordacchius,
D. Hercules Maria Matthiolus.

Lecturae Universitatis.

Ad Lecturam Decretorum.

D.-- -- -- --

Ad Lecturam Sexti & Clementinarum.

D.-- -- -- --

Ad Lecturam Decret. extraord.

D.-- -- -- --

Ad Lecturam Decret. seu Infortiati ordinar.

D.-- -- -- --

Ad Lecturam Voluminis.

D.-- -- -- --

Ad Lecturam ff. novi seu C. extraordinar.

D.-- -- -- --

The Series Lectionum of the University of the Artists.

Classis Matutina.

Prima Hora in pulsu Campanæ.

Ad Lecturam Medicæ extraordinaram.

Illustriissimus Dominus Rector, vacat.

Ad Lecturam Chirurgicæ elegant de Ulceribus.

D. Jo. Auguft. Cuccus emeritus, Q. S. A.

D. Albertus de Fabris.

D. Alexander Guicciardinus.

Ad Anatomis.

D. Jo. Auguft. Cuccus emeritus, Q. S. A.

D. Albertus de Fabris.

O 2

D. Jo.
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D. Jo. Baptista Capponius
D. Carolus Galeratus,
D. Joan. de Laurentiis,

Ad Leéturam Simplicium Medicinalium.
D. Hyacinthus Ambrofius.
Ad Leéturam humanarum literarum.
D. Cosmus Gualdandus.

Ad Leéturam Logicae, Legant secundum librum Posteriorum.
D. Dominicus Maria Burgus.
D. Dominicus Clericus.
D. Aloyfius Magnus;

Secundá Hora.

Ad Theoricam Medicinæ ordinariam, Legant Aphorismos Hippocratis.
D. Petrus Jacobus Florenus.
D. Carolus Galleratus.
D. Joan. de Laurentiis.
D. Joan. Antonius Caffarius.

Ad Leéturam Logicae, Legant secundum lib. Posteriorum.
D. Secinius Orettus.
D. Carolus Ant. Siverius.
D. Andreas Banderia.
D. Marius Marianus.

Tertiá Hora.

Ad Praetiacam Medicinæ extraord. Legant 4 partem præmi Avicennæ.
D. Jacobus Accurtius.
D. Jo. Baptista Lingarus.
D. Vincentius Franchinus.
D. Florianus Bertellus.
D. Barthol. Raymundus.

Ad Philosophiam ordinariam, Legant Parva naturalia.
D. Fulvius Magnus.
Moral, and Physiological.

Ad Lecturam Metaphysicæ, Legant primum librum.
P. Mr. Laurentius de Fabris, Franciscus.

Ad Lecturam humanarum literarum.
D. Laurentius Grimaldus ab. cum referv.

Quartâ Horâ.

Ad Philosophiam moralem, Legant de Amicitia.

D. Ovidius Montalbanus.
D. Jacobus Servanus, S. Petronii Canonicus.

Ad Lecturam Logicae, Legant secundum lib. Posteriorum.
D. Raymundus Abellus.
D. Bartholomæus Ferrarius.

Ad Lecturam Humanarum litter.
D. Michael B. 
Ad Mechanicas.
D. Petrus Mengolus.

Ad Particulas Graecas Domi.
D.

Ad Arithmeticam Domi.
D. Simon Mengolus.
Ad Grammaticam Domi.
D. Nicolaus Banderia.
D. Bonaventura Rubens.

Classis Pomeridianæ.

Primâ Horâ in pulju Campanæ.

Ad Theoriam Medicinæ extraord. Legant primam partem Avicennæ.
D. Jo. Carol. Lancius Paltronus.
Observations Topographical

D. Angelus Antonius Livizanus.
D. Ludovicus Lodius.
D. Berlingerius de Solitis Syracusanus.

Ad Lecturam Sacrae Scripturae Legant ad Beneficium.
P. M. Ericus Marchettus Servita.

Secundâ Horâ.

Ad Practicam Medicinae ordin. Legant de Febribus.
D. Jo. Baptista Capponius.
D. Robertus Muratorius.
D. Marcellus Malpighius abs. cum referv.
D. Carolus Fracassatus.
D. Raymundus M. Pistorinus.

Ad Philosophiam extraord. Legant de Anima.
D. Cæfar Zoppius.
P. M. Vitalis Ferrarubeus Mon. Cassinus.
D. Petrus Maria Cianus.
P. M. Marc, Ant. Fabianus de Caritate.

Tertia Horâ.

Ad Lecturam Metaphysicae, Legant duodecimum librum.
D. Flavius Zinus.

Ad Philosophiam ordin. Legant de Cælo & mundo.
D. Franciscus Natalis.
D. Alexander Magnus.
D. Franciscus Gherardus.
D. Carolus Saxius.

Quartâ Horâ.

Ad Practicam Medicinae extraord. Legant ad beneficium.
P. Pompeius Bolognetus emeritus.
D. Carolus Riarius.
D. Franciscus Sacentus.
At Bononia we saw the formerly famous exercise of justing or tilting, which is there still used in carnival time. The combatants being mounted on horse-back, armed cap-a-pie, and adorned with huge plumes of feathers and scarfs, with lances in their hands, run one at another a full gallop, one on one side, and another on the other side of a low rail. They aim at one particular part (I think it is the eye) and he that comes nearest is the best jutter. We saw several lances broken, but no person dismounted, nor any hurt done.
Observations Topographical.

Here, by the favour of Dr. Ovidio Montalbanus, one of the professors, we had a sight of the Museum of Aldrovandus, which by his last will he left as a legacy to the city. It is kept in the cardinal legate’s palace, commonly called Palazzo del Confaloniero. Among many natural and artificial rarities therein preserved, we took more especial notice of ten volumes of the pictures of plants, and six of birds, beasts, and fishes, drawn exactly in colours by the hand.

The same Dr. Montalbanus very civilly brought us to the house of Jacobus Zenoni, an apothecary, a skilful herbarist, and a collector of rarities; who among other things shewed us three pieces of rock-chrystal, with drops of water inclosed in the middle of them, which we could plainly perceive when the chrystal was moved to and fro. He hath a garden well stored with simples, wherein we noted Arundo nasifos, five farcis, in ripis Rheni Bononienfis; Salannum Americanum fructu moli. Eys. Geranium trisie Cornuti; Scammonia Syriaca; Polytichum Alpinum inciso folio, coar virdi; Convolvulus Althaeæ folio non inciso; Pentaphyllum lucidum folio bispato, ab ipfo inventum prope Rhenum Bononienfeld; Malva Alpina folio lucinato; Jacobæa folio Betonicae, n. d. Abrotanum fæmina inodorum; Bardana de Congo; Helleborus niger trisfolius spincus; Cyclamen Baldenæ folio rotundo, flore odorato; Thlaspi folio Sampfuchi; item folio sedi; Dau- cus Creticus verus; Stackys Cretica Salviae folio; Clematis Smilaci Alpicae similis; verum non aspera; Clematis tetra- phylla Americana; Malva folio Betonicae, ab ipfo inventa; Labrum Veneris Indicum alisiffimum; Eraica Tanaceti folio; Genista Alpina fvee Spartium. Col. Adianthus nigrum ramum Canadense Cornut. Chamedryos spuriae species, ab ipfo inventa prope Rhenum fl. Bononienfeld; besides many others which had not yet put forth, it being early in the spring.

The same day we visited signior Gioseppi Bucemi, a chymist, who prepares the *Bononian stone, or Lapis Phosphorius, which, if exposed a while to the illuminated air, will imbibe the light, so that withdrawn into a dark room, and there look’d upon, it will appear like a

* The Lapis Phosphorius or shining stone.
burning coal; but in a short time gradually loses its shining, till again exposed to the light. The crude stone is like a kind of sparre, or fluur; it acquires this quality by being calcin'd (as he told us) in any small furnace, laying the pieces of stone upon an iron grate over a fire of wood. But we believe there is somewhat more of mystery in it; for some of us calcining part of the stone we purchased of him according to his direction, it sorted not to make it shine. The prepared stone in time loses its virtue, and ceases to shine, as we found by experience in those pieces we bought and brought along with us. Hereabout, and all along as we rode in Lombardy, we saw now in flower Aconitum hyemalis, called by some Anemone Bononienfum.

We left Bologna, and travelled to Modena, by the Feb. 22. way, about fifteen miles from Bol, passing by Castel-Castellofranco, a strong fort near a village called Villa Fracnae, Frano. built by Pope Urban VIII. on the frontier of Modena. Modena is twenty miles distant from Bononia, no great city, but for the bigness populous, being the place of the Duke's usual residence; which must needs draw company and business. It is encompassed about with a thick wall and a broad ditch, and tolerably well fortified with bastions and outworks. Here, as at Bononia, Padua, and several other cities in Lombardy and Friuli, are portico's or cloisters (rows they call them at Chester) on each side the streets to walk in. The houses are most built of brick, and but of mean height, as we observed them to be in all those cities where the streets were cloister'd on both sides, which we conjecture was the manner of building of the Goths or Lombards that invaded Italy, and settled themselves in these parts.

Here we saw the Duke's palace, which, tho' it be not vast, nor makes any great show outwardly; yet are the rooms within very elegant and richly adorned with gilding, hangings, and pictures of the best masters. What we most minded was the cabinet or museum, furnished with choice of natural rarities, jewels, ancient and modern coins and medals, ancient and modern entaglià's, curious turn'd works, dried plants pasted upon smooth boards whiten'd with cero's, which may be put in frames; and
Observations Topographical,

and hung about a room like pictures; and a great collection of designs of the best painters. Among other things we took notice of a human head petrified; a hen's egg, having on one side the signature of the sun, which I rather noted, because some years before Sir Thomas Brown of Norwich sent me the picture of one, having the perfect signature of a duck swimming upon it, which he assured me was natural. Most included in a piece of chrystal, silver in another. A fly plainly discernible in a piece of amber. A Chinese calendar written on wooden leaves. Almericus, father to the present Duke (who at our being there was a child of about three years old) made this collection, and was treating with Manfredus Septalius, canon at Milan, for his cabinet, so much talked of all over Italy; for which they told us he was to give 1000 pifloles; but before the bargain was concluded, the Duke died in the twenty-eighth year of his age.

The revenues of this Prince are said to be 350000 crowns per ann. his ordinary expenses not to exceed 180000.

In a mountain in this territory called Zibba, nigh Paiuli castle, some twenty-eight miles distant from Modena, is a fountain where Petroleum issues out of the earth. In another mountain called Monte Nicani, are found petrified coehles and other shells.

We began our journey to Parma, and at seven miles end forded the river Serchio, passing by a strong little town on our left hand, called Rubiera, and after eight miles more enter'd Reggio, a city almost as big as Modena, and of equal strength, subject to the same Prince, who is called Duke of Modena, and Reggio. It is more extended in length, and makes a fairer shew, having one broad and long street. Here there are many sculptors, who make pretty carved works in ivory and wood, for which this town is noted. Ten miles outward we passed a long bridge over the river Lenzo, and enter'd the Duke of Parma's country; and five miles more brought us to Parma, a larger city than Modena, of a round figure, well built of brick, tho' the houses be not tall. The streets broad and well paved, but no portico's...
Moral, and Physiological.

Portico's under the houses. In short it is a very pleasant and handsome town, but not so well fortified as many other cities in Italy.

We travelled to Piacenza. At six miles distance Feb. 26. from Parma we ferried over the river Taro. Nine miles further we came to a large Burgo called St. Donin. Eight miles beyond St. Donin we pass'd through a pretty little town called Fiorenzuola, and just without the town cross'd the river Arta; and, proceeding on still twelve miles, we came to Piacenza, a city, for bigness not inferior to Parma, and for strength superior (being well walled and trenched about, and having a strong citadel) but not so handsome and well built. The revenues of the Duke of Parma are said by some to be 500,000, by some but 400,000 crowns per ann. He keeps 3000 foot, and 1000 horse in constant pay; and can, upon occasion, raise 2000 foot, and 1000 horse more. Besides Parma and Piacenza, he holds in the state of the church the dukedom of Castro, and the county of Ronciglione, the first of which was pawned to the Pope, and, for want of payment of the money, forfeited to the church, concerning the restitution whereof there hath been such a stir of late. He holds also five cities in Abruzzo. The present Duke's name is Ramutius Farnesius.

We rode to Crema, 13 miles from Piacenza, passing 27. through Castigno, a large burgo in the state of Milan, two miles thence ferrying over the river Adda, and two miles further the river Serio, which runs into the Adda. Here we enter'd the Venetian territory, and at the end of other five miles arrived at Crema, no great city, but strongly Crema. fenced and fortified, and for the bigness populous; held with a good garrison of about 500 soldiers by the Venetians, as being a frontier place. It is situate in a fair and spacious plain, near the river Serio, and hath a large territory about it, called Cremasco. This city is famous for fine thread made by the nuns, and little brushes made of the roots of a kind of grass called Capriole, which I take to be Gramen Scoparium ischaemi paniculatis of Lelbel.
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29. We hired horses for Brescia, thirty miles distant from Brescia. Crema. By the way we rode through i. a little town called Ofanengo, about three miles from Crema. 2. Romangen, a great burgo with a small caftle, belonging to the King of Spain, some three miles from Ofanengo: and about four miles further onward 3. Soncin, a considerable wall'd town in the dutchy of Milan, which Schotius takes notice of as a very civil place to strangers, and mentions panem ex Amygdalis dulcis & lucernas praestantissimas ex ortichales made there. Near this town we ferried over the river Oy or Olius, and enter'd again into the Venetian territory. Two miles off this place we rode close by L'orzi nuovi, a small town, but one of the best fortified places we have seen, carefully guarded by a good garrison which the Venetians maintain there. Two miles from this fortress we pass'd a great village called L'orzi vecchii, then several villages the most considerable whereof was Logrado. Hereabout and at L'orzi nuovi, is great store of flax planted, and fine linnen cloth made. The country we rode through this day was full of villages and well peopled, divided into small fields, and those inclosed with hedges like our inclosed countries in England.

Brescia. The city of Brescia is less than Verona; but considering the bigness more populous, well built, having broad and straight streets, paved with stone in the middle, and with bricks set edge ways on each side, after the manner of the Holland cities; as are also the streets of Parma, Piacenza, and Crema. It is encompassed with two walls, the interior of old building more slight and weak, the exterior of good strength, and thickness, with a broad trench before it. The inhabitants are very busy and industrious, driving a great trade of making guns and other iron ware. The Brescian guns are much esteemed not only in Italy, but all over Europe, as well for the goodness of the iron and temper, as the excellency and neatness of the workmanship. The markets are well stored with all things necessary for human life. The territory of this city is in length from Moso near Mantua to Diauento in the upper end of Val Camonica 100 miles, in breadth from Limone upon the Lago di Garda to L'orzi nuovi fifty; fruitful of corn and wine. The hills...
Morale, and Physiological.

clothed with woods, and the vallies abundant in good pastures; so that there is excellent chees made here, and sent abroad to Venice and other parts of Italy. In the mountains are iron and copper mines, which yield great profit to the owners, and inrich the whole country. Few cities in Italy have so large and so rich a territory, so populous and full of towns and great villages. The city itself hath often changed lords and governments, and was for a long time miserably torn in pieces, and wafted by intefine quarrels and fightings between the factions of the Guelfs and Ghibellines. The Visconti of Milan made themselves masters of it and held it for many years. In the time of Philippus Maria, the citizens being much oppressed and aggrieved, and having often in vain sent ambassadors to him for redres, they finally delivered themselves up to the Venetians in the year 1426, who now keep in garrifon for the security of this city 800 soldiers, and 300 more in the castle, which stands on a rocky hill and commands the whole town. On the sides of this hill we found serpent stones or Cornua Ammonis, besides other petrified shells.

We travelled to Bergamo passig through 1. Hospita-Marchetta, a village seven miles distant from Brescia. 2. Cokai, a large village five miles further. 3. Palazzuolo, a great Palazzo village standing on a steep bank on each side the river Ollio. We had a full view of the Alps all along as we rode. Bergamo is feated upon the side of a hill, and is a city of good account for greatness and strength, encompassed about with high strong walls, and a broad dry ditch or trench. The streets are narrow, but the houses fair. Upon the top of the hill above the city stands the castle, which though it be but a small place is strongly situate, and commands the town. They told us that there was a vault under ground from the castle to the palace of the Capitaneo. Without the walls of the city are five large borghi or suburbs. 1. That of St. Leonardo below the hill, which hath fair streets, and is inhabited by rich merchants: 2. That of St. Antonio. 3. Of Sant' Caterina. 4. St. Thomaso or Borfa di pignole. These three stand at some little distance one from another, and some of them are walled about. 5. Borgo Canale or di S. Gotardo. This
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city seemed to us a busy and thriving place. In the church of the Augustines cloister lies buried Ambrosius Calepinus, a monk of that order, author of the known dictionary, without any monument or inscription: in the priors cell they shewed us his picture with this subscripted.

F. Ambrosius, dictus Calepinus, Comitis Truﬃardi Calepii primi vallis Calepiae feudatarii ﬁlius praetero suo Dictionarium usquam antea ab aliquo excogitato (vulgò Calepinum nominant) cum Heremitaniun hoc S. Augustini Monasterium, & Bergomum patriam suam egregie illustratis, omnibus literarum studioﬁs utilissimus queavit in Domino Anno salutis MDXI, ætatis suæ 71.

This city hath undergone almost the same changes of lords and government with Brescia, and did likewise voluntarily deliver itself up to the Venetians in the year 1428, under whose government it continued till the year 1509, when the Venetian army was routed, broken, and utterly defeated by Lewis XII King of France, in the Ghiera of the river Adda, and then it submitted to him and remained at his devotion so long as he held the duchy of Milan. In the Year 1512, the French being expelled Italy, it became subject to Maximilian Sforza Duke of Milan. By reason of some grievances it revolted from him and returned under the Venetians; but being besieged by Raimundus Cardona a Spaniard, viceroy of Naples, and captain of the league, with a great army, it was forced to surrender to the will of Maximilian, and to avoid pillaging to pay 40000 ducats of gold, whereas before it would not pay 10000, Anno 1514. In fine, Anno 1516, it again returned under the government of the Venetians, who continue to this day lords of it, and send thither a * Podefìa, a Capitaneo, a Camerlengo and a Castellano. The Italians have a proverb

*i.e. A mayor, a governor, a chamberlain, and a governor of the castle.
Moral, and Physiological.

of this city, Se Bergamo fosse in pian Sarebbe piu bel che non è Milan. If Bergamo itcoid in a plain it would be a fairer city than Milan.

N. B. After the forementioned rout and discomfiture of the Venetian army, not only Bergamo, but also Brescia, Verona, Vicenza, Padua, and the rest of the cities subject to them, save only Trevijo, readily submitted to the Emperor and King of France; notwithstanding they were well fortified, and had strength enough to resist: so that the Venetians utterly despaired of and wholly gave up for lost all they had on the firm land of Italy; but yet in a short time they recovered it all again.

From Bergamo we rode to Calonica, a village in the state of Milan, seated upon the river Adda, where we took water for the city of Milan.
Observations Topographical,

OF

MILAN

MILAN is one of the four principal cities of Italy; the other three being Rome, Venice, and Naples. It is called la grande, and well may it be so, being ten Italian miles in circuit: and yet (which is more) the figure of it approaches to a circle. It contains eleven collegiate churches, seventy one parishes, thirty convents of friars, eight of regular canons, and thirty six of nuns. The number of inhabitants of all sorts is said to be 30000, but I believe they who report it speak by guess and at random. All provisions for the belly are very plentiful and cheap here: so that it is a proverbial saying, Solo in Milano si mangia. They eat well only at Milan. The Domos or cathedral church is next to St. Peter's at Rome the greatest, most sumptuous and stately pile of building in Italy. It is 250 cubits long, and 130 broad, according to Schottus, and of an answerable height. A more particular description whereof may be seen in Schottus. The great hospitall is the largest and most magnificent, I think, in Europe, more like a stately cloister or Prince's palace than an hospital. There is one great square court, surrounded with a double portico, the one below, the other above stairs; besides four or five other smaller courts. The revenues of this house amount to more than 50000 crowns yearly; and there are maintained in it about 4000 poor, infirm, and sick persons. In this city are many fair and large monasteries, and a great number of churches [of all sorts 238] beautified with exquisite pictures and statues of the best masters, and furnished with rich altar-pieces, reliques, veils, and other ornaments: the particulars may be seen in Schottus and others. The library called Bibliotheca Ambrosiana is a handsome building furnished with store of good
good books, and free for all persons, as well strangers as citizens, to enter into and make use of. It was founded by cardinal Carolus Borromeus, of whom they have made a saint. The college, called Hermathenæum, is a stately building, having a handsome court, encompassed with a double portico or cloister, one above the other. The pillars of both portico's are double, the lowermost of the Ionic, the upper of the Tuscan order.

The castle of Milan is esteemed one of the principal fortresses of Europe, as well for its strength (having never been taken by force) as for its greatness and beauty. This castle, since its first building, hath been twice enlarged; for the ancient castle, built by the Visconti (which is now the palace of the governor, and before which is a court, having a round stone-tower at each corner;) the French taking in a great space of ground, inclosed with a square wall of a very great height and thickness, and a deep ditch. Upon the top of this wall one may walk under cover round about, and from thence have a fair prospect of the country, and the new fortifications of the castle, or the new line added by the Spaniards, being of a pentagonal figure, and having at each angle a bastion or mount, and between every two bastions an half moon. It is well furnished round about with great guns ready mounted. Within the castle is a water-mill, which they told us was driven by water which springs up within the castle-walls. Schottus faith, that the circuit of the whole fortress, besides the trenches, is 1600 paces. The garrison, at our being there, consisted of about 600 soldiers, and the Castellan, or governor's name, was Don Bal-thasar Markadel.

We saw the Museæum, or gallery of signior Fredus Septalius, son to Ludovicus Septalius the famous physician; wherein we took notice of a box with a multitude of looking-glasses, so disposed, as by mutual reflexion to multiply the object many times, so that one could see no end of them: the best in this kind that I have any where seen. A plain plate of glass with so many spherical protuberances wrought upon it, that if you look'd thro' it upon any object, you saw it so many times multiplied, as there were protuberances or segments.
Observations Topographical,

segments of spheres upon the plain of the glass. Likewise a *speculum* of the same fashion, by looking upon which through the former, you see your face so many times multiplied, as to be equal to the product of the sum of the protuberances of the one glass, multiplied into the sum of the protuberances of the other. Several concave burning *specula* of metal; and we saw the experiment of burning by reflection. Several engines counterfeiting a perpetual motion, of which, afterward we understood the intrigue. Several *automata*, and clocks of divers fashions, among the rest two of a cylindrical figure, which moved without weight or spring, only by being placed upon an inclining plain, their own weight was the spring of their motion. Pieces of amber with flies, grasshoppers, and bees inclosed in them. Pieces of chryystal with grass, moss, leaves, insects, &c. inclosed in them. A large piece of chryystal with a drop of water in it, and in that water a bubble of air, which, as you turned the stone, moved upwards. A little cornelian with a great quantity of water inclosed in it. Pictures made of feathers by the *Indians*. A great collection as well of ancient as modern coins and medals. Several *Entaglie*, *Camei*, & *Nicoli*. The *Pietra imboscata* of *Imperatus*, having the lively signatures of herbs and trees upon it. Of this sort is found plenty about Florence, where they polished them, and make cabinets of them. Perfumed knives. *Persian*, *Arabick*, *Chinesef*, and *Japonick* manuscripts; and a China kalendar in wood. Great variety of shells. Telescopes and microscopes of his own making. A large piece of the *minera*, or matrix of emeralds, with the stones growing in it. Many musical instruments, and divers sorts of pipes of his own invention. Ancient rings. *Indian* scepters and bills made of stone. Several things petrified. Chymical oils extracted by himself without fire. The skeleton of a mollie's head. Divers and very large rhinoceros's horns, gazell's horns, and an unicorn's horn. Curious pieces of turned work of ivory, very fine and subtil. Several pieces of past and colour'd glasses. Several pieces of most transparent chryystal-glass, excelling that of *Venice*, made and invented by himself. *Fictitious China*, or porcellane, of his own invention and making, hardly to be distinguished from
from the true. But there being a printed catalogue of this cabinet set out by the owner himself, I refer the reader thither for further satisfaction. In this city they work much in chryftal, making drinking-glaſſes and other vefſels, caſes for tweezers, ſeals, and an hundred pretty knacks of it: they also engrave figures upon it. They grind and poliſh it with a brass wheel, upon which they put the powder of Smiris mingled with water; and after, to smooth it, they use the powder of * Saffe-moft, which is a ſtone they find in the river ſaft by. This ſtone, by lying in the water, by degrees dies, from a heavy pebble firſt becoming light like a pumice, and afterward, if it lie longer in the water, crumbling to ſtucc. Moſt ordinary ſtones by lying in this water, or where the water ſometimes comes, will (as they told us) die in this manner, excepting the clear pellucid pebbles, which are immortal.

We left Milan, and began our journey to Turin. We March 10. rode all along upon the bank of the river Navilio, passing ſeveral small villages, leaving Biagrasfa, a town of some note, a little on our left hand, and lodged at Buſalora, twenty-two miles diſtant from Milan. Here, in the hedges, we found Fumaria bulboa flore purpureo & albo now in flower; as also Aristolochia rotunda in flower.

We paſsed thro' Novara, a ſtrong town belonging to the Spaniards, ten miles diſtant from Buſalora; and rode on ten miles further to Vercelli, belonging to the Duke of Savoy; a large town, but neither ſtrong nor well peopled. This town was delivered up by the Spaniards to the Duke, when Trin was reſtored to the Spaniards by the French. We were told that the citizens pay ten times more to the Duke, than they did to the Spaniards, and for that cauſe ſuch as are able leave the city, and remove to other places.

We travelled as far as a village called Sian, eighteen 12. miles paſsing by a large borgo called St. German.

Being ſtopp'd by the waters, we were conſtrained to stay all night at Chivas, no more than eight miles forward.

We got ſafe to Turin, paſsing by the way many 14. waters, two we ferried over, viz., Oro and Siura.

* i. e. Dead-ſtone.
Turin, anciently Augusta Taurinorum, seated upon the river Padus or Po, is no large city, but, by reason the Duke of Savoy usually keeps his court there, frequent and populous. The ancient buildings are not better than those of our English towns: but there is one long street of new buildings, tall and uniform; and about the midst of it a large square piazza, having on each side a fair cloister, very handsome and stately. At one end of this street is another piazza before the Duke's palace, a fair building, but not yet finished. Here is a citadel with five bastions, serving as well to bridle as defend the town. Here we met with some of the Protestants of the valleys of Lucern and Angrona, who told us, that, by the intercession of the cantons of Zurich and Bern, the Duke hath at present made an accord with them, permitting them still to enjoy the liberty of their religion. They dwell in fourteen pagi, or villages, have no town, are in number about 15,000 souls, and of them about 2,000 fighting men. These are divided into fourteen companies under so many captains, among whom, Jean Janneville is noted for a valiant man, and a good soldier. The Papists call these men Barbetti and Genevini. They are the only Protestants in Italy, and have maintained the purity of their religion all along these 1,200 years. They run over the mountains like Chamois, never shooting (if they themselves may be believ'd) but they hit. They boasted to us, that in the late war they had not lost above 40 or 50 men, and had killed 500 of the Duke's; nevertheless the Duke hath built a strong fortress at a place called La Torre, in the middle of them.

The city of Turin hath an university, and boasts to have been the first that brought the use of printing into Italy. All provisions are plentiful and cheap there, the country round about being very rich and fertile. Indeed the whole principality of Piemont is esteemed inferior to no part of Italy for pleasantry, and plenty of corn, cattle, wine, fruit, hemp, flax, metals, and almost every thing necessary for human life: and withal it is so populous, that the Italians use to say, that the Duke of Savoy hath only one city in Italy of 300 miles in compass. It hath
hath eight episcopal cities and 150 towns. The inhabitants are more given to husbandry than merchandize, so that the land is no where better cultivated than in Piemont. They are also very affectionate to their Prince, and for his honour and safety ready upon all occasions to venture their lives and fortunes. Let it be said that they are good soldiers, expert in warlike exercices, and so valiant that they will rather die than turn their backs. Of the riches of this country we may (faith he) take an estimate by the late wars which continued for twenty three years, during which time were maintained by the Duke in garrison, and in the field, between twenty five and thirty thousand soldiers, for the most part without any assistance or supplies of money or men from any other place but Piemont; which besides all this contributed to the Duke in fifteen years eleven millions. The same author faith, it is not in Piemont as in other countries, wherein there are some persons excessive rich, but the generality of the people extremely poor: but on the contrary the Piemontese are generally well to live, and there are very few among them of extraordinary estates.

As for the Duke he by all mens confection keeps a splendid and regal court, answerable to his title of Royal Highness. His annual revenue is said to be a million of gold: according to Leti 1800000 crowns; of which Piemont alone yields 1400000. He is able to bring into the field 30000 foot, and 5000 horfe, and yet leave enough at home to guard the country. The states which the Duke possesse in Italy are, the principality of Piemont, the marquifates of Saluzzes (which he had of the French in exchange for la Bresse) and of Asti; the dutchy of Astia; the counties or earldoms of Nizza, and of Vercelli.

The present Duke's name is Carolus Emanuel, son of Victor Amadeus: he was at the time of our being there about thirty years of age; and was then in mourning for his dutchess Francesca Borbona, and his mother Christiana di Francia, whom they call Madam Royal, who were lately dead. He hath two or three handsome palaces near the city, adorned with rich hangings, good pictures, and other furniture. 1. That called the Venery, or hunting palace lately built. 2. Millefoire. 3. Valentine.
The making of oil’d cloth for hoods, hat-cafes, and coats to fence off the rain, was first invented at Turin by one Giacomo Marigi, and is still held as a secret by them, though now it be done in other places as well as there.

Mar. 17. We took horses and a guide at Turin for Genoa, which we reach’d at three days end. About a mile below Turin we pass’d the river Po (which here begins to be navigable) by a bridge; and after we had rode about a mile further, by the river’s side, we mounted the hills under which the river hereabout runs, which are very steep and difficult to ascend. Not far from the foot of these mountains, in the woods wherewith they are cover’d, and, in the ditches by the way-side, I observed growing wild, * Dens caninus flore purpureo Ger. Leucojum bulbiflorum vulgare C. B. Dentaria aphylos Cluf, five Anhialatum Cordi. Doronicum vulgare J. B. Hepaticum Trifolium Lob. Hyacinthus botryodes 2 Cluf. This grew plentifully on the banks and borders of the corn-fields, and by the way-sides all along as we rode from Turin to Genoa. At five miles distance from Turin we pass’d through a pretty large town called Chier, where we took notice of a triumphal arch erected to Victor Amadeus, father to the present Duke of Savoy. About four miles further we pass’d by a walled town called Villa nova; and this first night lodged at Asle, a large town, but that seemed to us to be poor and decaying, twenty miles distant from Turin.

We proceeded on our journey as far as Nove, a pretty large town under the Genoese, 27 Piemont miles distant from Asle; I think they may well pass for 35 English. About 4 miles from Asle, upon the bank of the river Tanar (which is there very high) and on the sands under the bank we found great variety of petrified shells, as oysters, scallops, cockles, &c. As also those Tubili striati, called by some Antales, which Seignior Rofacco, a mountebank in Venice, first shewed us: Belemnites, and other rare sorts of stones. In the corn-fields we pass’d through

*i.e. Dog’s-tooth violet; common bulbous violet; the greater tooth-wort; common leopard’s bane; the lesser grape hyacinth, and hepatica, or noble liver-wort.
through we observed * Ornithogalum luteum C. B. in great plenty now in flower. This day we passed by a large village called Non, and another which had formerly been walled called Felizan: then Alexandria, a large town upon the river Tanar, of more strength than beauty; the buildings both publick and private being generally but mean. It was so called in honour of Pope Alexander III; because in his time it was peopled by the Milanese, whose city was then almost quite destroy'd and made desolate by the Emperor Frederick Barbarossa, for siding with the Pope against him. The river (which seemed to me as large as the Po at Turin) divides the city into two parts, which are joined together by a fair brick bridge. In our passage through the town we took notice of a triumphal arch erected to Philip IV. King of Spain upon his marriage.

We rode from Nove to Genoa 30 miles all over mountains. About 6 miles from Nove we passed through a handsome little walled town, called Gavi, where there is a strong castle on a hill over the town; and about 6 miles further onward, another elegant and well built town called Voltagio. From hence we ascended continually for about 7 or 8 miles till we came to the top of a very high hill, from whence we had a prospect of Genoa and the sea. Then we descended constantly till we came to the city. In all this way we met with and overtook mules and asses going to and returning from Genoa, to the number of 500 or 600 or more. Between Gavi and Voltagio we observed Dens caninus with a white flower; and all along on the mountains from Gavi to Genoa, Stoechas citrina altera tenuifolia five Italica J. B. as also Pfiillum majus semper virens, & sedis minoris species flore albo quadrifolio, now in flower. Petafites flore albo on the side of a mountain about 6 miles from Voltagio in the way to Genoa. Erica arborescens Monsbelienis flore purpurascente ramulis ternis J. B. by the way sides abundantly from

* i. e. Yellow flax of Bethlehem; Mr. Johnson, minister of Brignel, near Greta bridge in the north-riding of Yorkshire, hath found this growing plentifully in the skirts of the woods thereabouts, and flowering together with the wood-anemone.
Observations. Topographical.

Gavi to Genoa. It is a stately plant, the tallest of this kind, arising to the stature and bigness of broom hereabout; near Montpellier it is less.

We viewed Genoa, which for the building of it is certainly the most stately and, according to its epithet, superb city in all Italy. The houses are generally tall, scarce a mean house to be seen in town. The New-street answers the fame that goth of it. It is but short, consisting only of 8 or 10 palaces, built of marble, very sumptuous and magnificent, the meanest of them (as Cluverius faith) being able to receive and lodge the greatest Prince and his retinue. The only deformity of this city is the narrowness of the streets unanswerable to the tallness of the houses, and yet they are made so on purpose, partly to save ground, which here is precious; and partly to keep off the scorching beams of the sun in summer-time, for the convenience of walking cool; for which reason I have observed many of the ancient towns of Italy and Gallia Narbonensis to have their streets made very narrow. This city lies under the mountains exposed to the south, so that it needs must be very hot in summer, as witness the orange and olive-trees which grow so plentifully here, that they can afford those fruits at easy rates, and drive therewith a great trade, furnishing with oranges Florence and a good part of Tuscany, and sometimes sending them into England. It is built in form of a theatre, or crescent, encompassed with a double wall toward the land. The exterior or new wall of a great height and thickness passes over the top of mountains, and takes in a great deal of void ground.

The famous new mole, which now makes this a secure harbour, is said to have cost as much as the new wall: for a work of that nature I believe it is not to be parallel’d in the whole world. The manners of the inhabitants are not answerable to the beauty of their houses; they being noted among their own country men the Italians for proud, unfaithful, revengeful, uncivil to strangers, and horribly exacting. There goeth a proverbial saying of Genoa, that it hath, montagne senza alberi, mare senza pesce, buonelli senza fede, & donne senza vergogna, that is, Mountains without trees, a sea without fish, men without faith, and women without shame. The number of the inhabitants must needs
Moral, and Physiological.

needs be great, they having lost in the last great plague (as we were credibly informed) to the number of 80000 souls. The chief trade of the town is silks and velvets; they make also pretty turned works of coral.

The government of it according to the new laws made by the Pope's legate, and the Emperor's and King of Spain's Ambassadors, not long after the time of Andreas Doria, is on this wife. There is 1. a Duke, who continues in office 2 years. 2. Two Collegia; one of Governatori (as they term them) the other of Procuratori. The Governatori 12, the Procuratori 8, all elected, besides those that of course come in for their lives. 3. A greater Council of 400. 4. A lesser Council of 100. 5. A Seminary for the 2 Collegia of 120. The 2 Collegia of Governatori and Procuratori are as it were the chief senate, or privy council or house of lords; and are chosen twice a year, viz. about the middle of June, and about the middle of December, after this manner. All the Seminarium of 120 have their names together with their surnames and fathers names written in little scrolls of parchment, and put into an iron box, which is kept very securely under many locks. When the time of election comes, this box is brought forth before the Duke, the 2 Collegia, and the lesser council. Then a boy, who must be under ten years of age, puts his hand into the box, and draws out 5 scrolls, which are read, and the 3 first, if they be capable, are Governatori, the 2 last Procuratori. If a man be 100 miles off the city he is incapable of being elected for that time. Likewise two of the same family cannot be Procuratori or Governatori together. Therefore if the two first that are drawn out or the two second be of the same family, the first is Governator, and the second Procurator: if the two last be of the same family, the first drawn out is a Procurator, and the second is returned into the box again, and the boy draws out another. So that every six months five are chosen into the Collegia, and five go out, and every one stays in office two years. In the Collegium Procuratorum, besides the 8, are all those who have been Dukes, and are gone out of office, who (modò bene se gesserint) continue Procuratori during their lives.

To supply or make up the Seminarium 120, every year in the stead of those who are dead, made uncapable,
Observations Topographical,

ble, or chosen into the two Collegia, the leffer council chooses a double number, all which must have three suffrages of five. And out of these the greater council choose half by the major vote.

For choosing the councils, both greater and leffer, the leffer council, in presence of the Duke and two Collegia, choose 30 Electors (all which must be of the nobility) by three suffrages of five. These 30 choose both the greater and leffer council, but the leffer out of the number of the greater, by a like proportion of suffrages. The greater council is assembled upon important occasions, and, with the Duke and two Collegia, makes the supreme power: the leffer council takes care of the leffer and ordinary concerns of the city and commonwealth. Those who are capable of being chosen into the greater council must be 25 years of age; only the 30 electors may, if they please, or see it expedient, choose to the number of 60 who are but 22 years old. Of the leffer council the one half must be thirty years of age, the others at least 27, excepting doctors of law and physic, who, if they be well qualified, may be chosen two years younger. Those who are capable of being chosen into the Seminarium must be 40 years of age.

The choice of the Duke is in this manner. The great council being assembled, there are put into an urn 10 golden balls marked with 10 several letters.

One of these, being drawn out, is shewn to the conservators of the laws, who thereupon put into another urn, standing by the Duke's throne, 50 golden balls mark'd with the same letter*, and 50 silver balls. These being shaken together, the leffer council of 100, excluding the two Collegia, draw out each man a ball. He that draws out a golden ball shews it to the Censors, who fit by, and presently writes in a scroll of paper the name of him whom he thinks fit to nominate for Duke, and goes out of the council. When all the golden balls

* This is done to prevent fraud, for if the golden balls were either not marked at all, or with any sign or letter known before-hand, any one of the council might bring such a ball with him, and, taking it in his hand, make shew as if he drew it out of the urn.
are drawn out, the two *Collegia* bring them into order, and count them over, and, if the number of the nominated amount to 20, then they are propounded to the greater council, who out of them, by major vote, choose 15. Out of these 15 the lesser council choose six by three suffrages of five. Out of these six again by major vote the greater council choose the Duke. These suffrages are all occult, that is, given by putting of balls into balloting-boxes. If in the greater council for any person the negative and affirmative suffrages are equal, then five by lot are to be put out of the council, and the rest to ballot again. Many other provisions there are in case of equality or disagreement, &c. Nothing can be propounded in council but by the Duke, who, during the time of his regency, lives in the palace, and hath (according to Sanfovinus) a guard of 500 Switzers.

The office of St. George is (as far as I understand it) nothing but a company of bankers, which lend money to the common-wealth, for which they are allowed so much *per Cent*, and have assign'd to them the publick gabels and other revenues; and, for their further security, have also the island of Corsica engaged to them. This company choose yearly out of their own number eight protectors, who are to take care of and manage the affairs of all the creditors. Into this bank strangers usually put in money, and so become of the company, for which they receive yearly interest, proportionable to the improvement made of the whole stock of monies then in bank.

The publick revenue of this state is said by some to be 120,000 crowns *per Annum*, and yet scarce sufficient to defray the publick expences.

There are many private citizens here very rich. The republick is thought to be able to raise an army of 30,000 men, and to set out to sea 12 galleys and 20 ships of war. They hold good correspondence with all christian Princes and States, excepting the Duke of Savoy, by reason of his pretence to the city of Savona.

Upon the cliffs about the Pharos, or watch-tower, and near it we found these plants: *Trifolium bituminosum* Ger. *Jacobaea marina* Ger. *Conyza major* Monspeliensis odorata J. B. *Alaternus*; *Carduus galactites* J. B. *Thymum*
Observations Topographical,

mum vulgare rigidius folio cinereo J. B. Geranium folio Althaeæ C. B. Thlaspi Alysson dictum maritimum C. B. Lotus Libycæ Dalechampii; Lotus Pentaphyllos siliquosus villosus C. B. Smilax aspera; Adianthus fæve Capillus veneris J. B. Hyoscyamus albus Park. Haec species quàm in muris & rubibus circa Genuam frequentem vidimus, folia ha-bet breviorem, viridiorem, rotundiorum quam vulgaris niger; florem minorem in nonnullis totum luteum, in aliis plantis fundo obscurè purpureo. On the walls we observed stock-july-flowers growing plentifully, whether springing spontaneously, or of seed casually scatter'd out of gardens we cannot determine; likewise Globularia Monfpelienfum, and Genifla Hispanica on the rocks eastward of the city. Upon the shores we found caft up great plenty of the ballæ marinae sea-balls, which are little round lumps (some of them as big as tennis-balls) of Feftuces amass'd together, which we supposed to be cast out of fishes stomachs.

We went in a Feluca from Genoa to Porto Venere, and thence cross the bay of Spezzia to Lerici, where we took post horses, and rode that night to Maffa, passing through Sarzana, a strong town belonging to the Genoëse, and a frontier. Maffa is but a small city, yet hath it a Prince of its own, who is lord also of Carrara, whose chief revenues arise from the marble quarries. The Prince is by birth a Genoëse, of the family of Cybo. Over the town gate we observed this inscription, Albericus Cybo Malaspina Sacri Romanî imperii, civitatissime Maffæ princeps.

We rode on to Luca in a valley by the foot of hills over a great deal of moorish and boggy ground, thro' a country not well inhabited. We paffed through Pietra Santa, a town belonging to the Duke of Florence, but utterly disjoin'd from the rest of his state by the interpoſition of the territory of Luca. In this journey I observed the following plants. Scrophularia Urticeæ folio C. B. which I found also plentifully upon the walls of Pisa. Orchis macrophylla Col. between Maffa and Sarzana. Moly parvum caule triangulo ibid. Narcissus medio-luteus polyanthus Ger. among the corn plentifully all along as we rode, now in the flower. On the sides of the mountains between Maffa and Luca, Antirrhinum lutes poda;
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florae C. B. Tithymalum dendroides J. B. Lentiscus; Anagyris five Laburnum; Colutea vesicaria, Colutea scorpioides; [Ruta sylvetris maj. J. B. Laurus vulgaris; Tencreum: On ditch banks and in shadow places by the way side, Arisarum latifolium Clus. and Aristolochia longa. A sort of Dentaria aphylos with a purple flower, covering the ground with a thick tuft almost after the manner of Houfleek, having scarce any stalk.

Lotchnis surrecta folio angustifissimo, flore rubello, among flax. Ornithogalum vulgare Ger., among the corn plentifully. Cyclamen vernum, good store among shrubs upon the hills sides, now in flower. Myrteus minor vulgaris; Philyrea angustifolium; Philyrea 3 Clus. Genista Hispanica Ger. Upon the descent of the mountains, four miles distant from Luca, Hesperis sylvetris latifolia flore albo parvo Park. A kind of Althae hispita myositis with a very large flower. A shrub like to Guaiacum Patavinum, if not the same. A kind of Thalaspi monospermus with a white flower; Sedum minus semine bellato; an Sedum echinatum flore luteo J. B. in rupibus & aggeribus sepium. Althae foliiis bederaceis Rutec modo divisis Lob. Anemone tuberosa radice Ger. now in flower. Near Porta Venere, Althae folio cresso.

Luca is no great city, Sansovinus saith 2 miles round, (but I take it to be three or more) yet is it very populous, containing within its walls in Sansovinus's time about 34000 persons; which number I believe is now much increased by reason of the freedom and ease the subjects enjoy under this government above their neighbours of Tuscany. It is situate in a pleasant valley, well fortified, the walls and bulwarks both very strong and in good repair; the mounts and platforms stored with great guns; several half moons of earth without the walls: the walls themselves planted with rows of trees, and we permitted to walk them without scruple or question. The buildings of the city good; the churches though not great, yet as well kept and handomely adorned within side as a man shall see any; the streets cleanly and well paved; in a word, all things both within and without the city very trim and polite. Both citizens and countrymen are very courteous and well manner'd, and seem both by their habit and address, and the cheerfulness of their looks, to live
Observations Topographical.

live more freely and in better condition, and to have more spirit and courage than the other people of Italy. That they live more freely and in better circumstances than their neighbours, themselves are sensible, and thereupon so well affected to their governors, and studious to maintain their liberty, that upon giving them a token by making a fire upon one of the towers all the countrymen run presently to the city, so that in 2 or 3 hours time they can have ready 30000 men in arms: and withal they are so courageous and stout, that they seem to have no fear at all of the Duke of Tuscany their potent neighbour, but told us, that, if their governors would lead them, they would not fear to march up to the very gates of Florence.

That liberty doth naturally beget courage and valour, and on the contrary, slavery and oppression break and debafe mens spirits, is so clear in experience, that I need not go about to prove it. And yet were it not so, it is no wonder that men, who find themselves well at ease, and have something to lose, or are at least in a capacity of growing rich, if not already so, should be very loth to change their condition for a worse, and stoutly defend themselves against any that should endeavour to bring them under the yoke; whereas those that are oppressed and aggrieved having nothing to lose, and being already in as bad a condition as they are like to be under any other government, muft needs have little heart to fight for their Princes, and be indifferent which way things go.

The women are not so strictly guarded and confined as in other cities of Italy, but walk up and down more freely. They are many of them handsome and well favoured, and, notwithstanding their liberty, I think more modest than their neighbours: in their habit and attire they imitate somewhat the French fashions.

This city is very vigilant and careful to preserve its liberty: tho' they have three gates, they permit strangers to enter in and go out only at one, that so they may more easily know what number are in the city, for fear of a surprize. They permit none to walk about the streets so much as with a sword, unless he have licence from the Antiani.
The government is by a great council of 160, annually chosen out of the nobility (the commons having no interest or share therein) who must be all at least twenty-five years old, nine Antiani and a Gonfalonere. The Antiani and Gonfalonere are chosen anew every two months. These are called the Signoria, and must live in the palace during the time of their office and authority.

They have a guard of Switzers in the palace of about 80. The Gonfaloniere is the supreme officer, yet hath little advantage above the rest more than his title and precedency; and we were told, that during his office he is exempted from all taxes and gabels, which the noble-men pay equally with the commons. The city is divided into three parts called Terzieri, each Terziero hath its arms or banner called Gonfalone; whence the name Gonfaloniere. At the corners of each street are painted both the arms and name of the Terziero, and the bulwark they are to defend. Out of each Terziero are chosen by the council three Antiani.

The publick revenue is thought to be 100,000 crowns per Ann. The olives that grow in this territory are reputed the best in all Italy.
PISA was formerly, so long as it continued, a free-
state or common-wealth, a rich, populous, potent,
and flourishing city; but since it hath come under the
Florentine yoke, it is become poor, weak, and almost
defolate, notwithstanding all the endeavours the Dukes
of Tuscany have used to invite and draw people thither,
by founding an university, setting up an order of knight-
hood, and building an exchange for merchants there.
It is situate upon the river Arnus in a fenry level; so
that the air must needs be bad and unwholsome for
such as are not born there. The most remarkable
things we took notice of in this city were 1. The
church of the knights of St. Stephen, an order founded
by Cosmus, the first great Duke of Tuscany. 2. The
house of Bartolus, now made a college for students in
law and philosophy, and thereon this inscription, Fer-
динандо Medices magnus Dux Etr. III. bas ades quas
olim Bartolus Juris interpres celeberr. incoluit nunc renova-
tas & instructas adolescentibus qui ad Philosphorum &
Juris consultorum Scholas missi publico urbium atque op-
pidorum suorum sumptu separatim alabantur, publicae utili-
tati consulens addixit, legesque quibus in vitru, vestitu
vitâque simul degradâ uterentur tulit, Anno sæutis
MDLXXXV. 3. The domo or cathedral church, a
sumptuous building of marble, having all the doors of
brass curiously engraven; a double aisle on each side the
nave, and two rows of marble pillars, adorned with
stately altars and rare pictures; the walls are hung round
about with red velvet; the roof richly gilded. On each
side the high altar is a picture, and under it an inscrip-
tion explaining the history of it; which, because they
contain
Moral, and Physiological.

contain two of the notablest adventures and successes of this city, I thought it might not be amis here to infert.

I.

Templum hoc ut auctae potentiae ac religionis insigne monumentum posteris extaret, Pisani ex Saracenorum fpolis capti Panormo ædificatum ac Sanctorum reliquias e Palæstina usque aduersis auctum Gelafius II. P. M. solenni pompa confecravit, A. D. MCXIX.

II.

Pascale II. P. M. autore, Pisani classæ 300 triremum Petro Arch. Pis. duce Baleares infilas profigatis Saracenis in ditionem redigunt, Christianoque nominis adjungunt, captäque regia conjuge ac filio praecelarum victoriam illustri pioque triumpho exornarunt. A. D. 1115.

4. The Baptyferium, having in the middle a large marble font like the ciftern of a fountain, with water continually running into it. There is also a marble pulpit curiously carved. 5. The burying place, called the Camps Santo, because made of earth brought out of the Holy Land. The earth is said to consume a body in forty-eight hours: it is an oblong square, encompassed with a broad portico, paved with grave-stones, and the walls painted. 6. The Campanile, or steeple, a large round tower of a considerable height, so very much inclining, or seeming to incline or lean to one side, that one would think it could not long stand upright, but must needs fall that way. I suppose it was on purpose built so at first, one side being made perpendicular, and the other inclining, to deceive the sight, tho' some say it sank after it was built, and doth really incline. 7. The aqueduct, of above 5000 arches, begun by Cosmus, and finished by Ferdinand I. Great Duke of Tuscany, bringing water to the city from the mountains about five miles distant. This water is so good, that it is carried in flasks as far as Leghorn to sell. 8. The phylisk-garden, at our being there but meanly stored with simples.
From Pisa we went by boat to Leghorn [Livorno] called anciently Portus Liburnus, some ten or twelve miles distant. This town is not large, and but low built, yet very pleasant and uniform, having straight streets, and a spacious piazza in the middle. It stands in an open level, without mountain or hillock within five miles of it on any side. It is well fortified with walls and bastions, and a deep trench round, except on the sea-side; and secured with a good garrison, being one of the most considerable and important places in all Tuscany. Since the Great Duke made it a free port, it hath increased mightily in trading and riches, great numbers of merchants from all nations resorting hither, and most of the bargains for the commodities of the whole Levant being here driven. The greatest part of the inhabitants are strangers and Jews, which last are esteemed one third of the whole number of people, and thought to amount to 5000 persons and upward. Before these privileges granted to Leghorn, when it was thin of inhabitants, it was accounted a very bad air, and an unhealthful place, by reason of the fens and marshes adjoining: but now, since it is become populous, the multitude of fires (as is supposed) hath so corrected the air, that people enjoy their health as well, and live as long here, as in any other town or city of Italy.

Near the haven is a very magnificent statue of Ferdinand I. Great Duke, about the pedestal whereof are four brass statues of slaves chained, of a gigantick bulk and stature. The haven within the mole is but small, but here is good riding for ships without. The Great Duke in Lent time uses to make his residence in this town; here being great variety of good fish taken in the sea near hand, and to be sold at reasonable rates; all other provisions being dear enough. In Leghorn we saw workmen filing of marking-stones, called in Latin Lapis galastites & morochitus, in Italian Pietra lattaria; which they told us were found at Monte negro and thereabout, some five miles distant from Leghorn, and from hence transported into France, Spain, England, the Low-Countries; &c. Of the dust and filings of this stone they
they make the body of powder for hair, as the workmen informed us.

* Of plants we observed about Leghorn, Kali genticulatum majus, in the marishes by the sea-side: Abfynthium Seriphibum Gallicum; Polium montanum album C. B. Medica doliata spinosa; Medica cocleata spinosa; Med. marina, on the lands; Caliha arvensis C. B. Hyacinthus palustris vernus, floesulis fimbriatris albis; Hyacinthus comosus Ger. Lathykus flore coecino; Vicia luteo flore fylvestris; Ochrus five ervilia Dod. thefe three last among the corn; as also Gladiolus Narbonensis Lob. Telephium scorpioides Anguill. in arenosis: Phyteuma Monfpelienfium; Cichorium pratense vesicarium Col. Medica Scutellata J. B. Iris humilis violacea latifolia, & eadem flore albo, in rupibus ad mare: Herniaria hirfuta; Allii species, an Ampelo- prafium? Ferrum equinum Lob. Orchis macrophyllus Columnae; Trifolium fragiferum five vesicarium, floribus nitidis rubellis, floesulis vetut in umbella parva difpofitis; Chrysanthemum Bellidis folio Hort. Pat. inter fegetes: Buphthalmum Cotulae folio C. B. an Chrysanthem. Valentinum Clufii? Anthyllis leguminofa fio. purpureo. Cruciate minima muralis Col. Peplus minor J. B. Ageratum five Balsamita mas; a fort of Draba with a white flower; Hieracium perfoliatum; besides many which we had found in other places, as that fort of Dorycnium which J. Bauinus calls Trifolium album rectum hirfutum valde; Carduus Chrysanthemus Narbonensis, which Lobel calls Eryngium luteum Monfipelienfium; Heliotropium majus; Carduus felfitialis Ger. Cichereum pratenfe vurrucarium, in arvis paflim; Blattaria flore luteo; Convolvulus minimus fpicifolius Lob. Meliffa fylvest. hirfutor, minitus odorata; Dorycnio congener planta: Raphiftrum monoporermon; Ammi vulgaris; Paffiferna Tragi; Sideritis vulgaris; After luteus folii ad florem rigidis; Stoeebo major calcilis non splendentibus. Between Pifa and Legborn we noted Lee- coium bulbosum majus polyanthemum Ger. in the marfhes near Pifa plentifully; Artemofchia elematitis; After conyzoides nobis dictus; Afpafagrus altilis: Gramen supinum acuteatum J. B. Besides thefe, we observed some which grow wild in England, but more rarely, as Leucoium marimum majus folio fimuato; Orchis fuciflora galea &

* Plants observed about Legborn.
Observations Topographical.

alis herbidis: Hyacinthus stellaris vernus minor; Eranthemum fove flos Adonis; Trifolium pumilum sipinum flores longis albis P. B. Ferrum equinum Germanicum fili-quis in summitate C. B.

At Leghorn finding a good Dutch vessel ready to set sail for Naples, we put ourselves aboard her: the wind not favouring us, we spent five days in this passage before we reached our port. The captain of the ship told us that hereabouts, usually in the forenoon, the wind blows from the land, and, in the afternoon, from the sea; so that it is easterly in the forenoon, and westerly in the afternoon. We also observed in this voyage, that about sun-set the wind fell; so that soon after sun-set there was little or no wind stirring: and likewise several days about sun-rising we had but little wind. In our return backwards from Messina to Naples, and from Naples to Leghorn, we observed that the wind, for the most part, was contrary to us. And the seamen told us, that this was general in summer time. So that you have a much quicker passage from Leghorn to Naples, and thence to Messina, than backwards. We observed also that the wind follows the sun, so that every morning we could make some use of the wind to sail with, but in the afternoon none at all; which agrees exactly with our captain’s observation, the land lying eastward, and the sea west. Our captain also told us that, when they made a voyage from Holland to the West-Indies, they failed down the coast of Africa as far southward, as the place in the West-Indies whither they intended to go lay, and then steer’d directly westward; both the wind blowing constantly from the east, and the sea also running the same way. Which relation of his concurring with the general vogue of mariners, if true, doth much confirm the opinion of the diurnal motion of the earth. When they return backwards from thence into Holland, they go round about the bay of Mexico, and up a good way northward, and then strike over to Europe, the water being reflected, as he said, that way, and the wind also often blowing that way.

Naples lies by the sea-side under hills, in form of a theatre; for its figure and situation much like to Genoa, but
but somewhat bigger, and much more populous; so that before the last great plague (which swept away, as we were credibly informed, at least 120000 souls) one might well reckon the number of inhabitants to have been about three hundred thousand. The circuit of the walls is not above seven Italian miles, but it hath large suburbs. The town is well built of stone, the houses tall and massy; for the most part flat roofed, and covered with a kind of plaster, which fences out the rain, and endures the weather well. Notwithstanding this city lies so far south, and under hills, yet is not the heat extreme, but such as may well be endured, even in the middle of summer, they having for the most part, about noon-tide, a breeze of wind, which cools and refreshes much. Two or three hot days we had, but the rest temperate enough. They told us, that there used to be very little rain there in summer-time, howbeit at our being there (which was in the latter end of June, and beginning of July) it rained every other day; and sometimes so plentifully, that the water ran down like a river in the streets. When they have no rain, to cool the streets in the afternoon, they draw about a tun filled with cold water, and bored with several holes, whence the water gushes out as it goes along. The dialect of the common people is much different from the Tuscan, and not to be understood but by one who hath a long time conversed with them. This city is well served with all provisions, especially fruit, which is very cheap here. In this place we took first notice of the *Cucurbita anguina, Cucumis anguinus, Mala infana, & Linoncelle*, to be sold in market. *Macaroons* and *Vermicelli* (which are nothing but a kind of paste cut into the figure of worms or thongs) boil'd in broth or water, are a great dish here as well as at Messina, and as much esteemed by the vulgar, as frumenty by the country people in England. All the Neapolitans and Sicilians, and generally the Italians, drink their wine and water snowed; and you shall see many stalls in the streets where there is snowed water to be sold: many also you shall meet, with a barrel at their backs, and glusses in their hands, crying *Acqua*.  

*Q. 3*
Observations Topographical,

* Acqua ghiaiciata, or Acqua nevata. We were credibly informed that before the last great plague the very gabel upon snow was farmed at 25000 crowns per annum.

NB. To cool the water or wine they do not put the snow into it, but round about the vessel wherein it is contained: so they have a vessel containing the snow or ice, and into that they set the vessel containing the wine or water.

There are in this city an incredible number of monasteries or religious houses (as they call them.) Beltrano Descript. Neap. gives us a catalogue of 160 of all forts, whereof 121 of men and 39 of women; the number of the persons contained in them being 12421.

Four castles there are to secure and bridle the city withal, 1. Castel d’Ovo, built on a rock in the sea, having an artificial causey or mole leading to it from the shore. 2. Castel S. Elmo or S. Hermo standing on a hill above the city. 3. Castel novo by the water-side, near the haven where the gallys lie. 4. Torriane di Carmine, made use of by Maffaniello and Anese in the time of the rebellion. This is only a tower belonging to the Carmelites cloister.

The churches in this town are generally very handsome within side; many of them richly gilt and sumptuously adorned; some of them not only paved with marble of divers colours, but their walls incrusted all over with marble inlaid. Of all the cloisters I have anywhere seen that of the Carthusians, close adjoining to the castle S. Elmo, is the most splendid and magnificent, where there is a large square court compassed about with the fairest peristylum or cloister that I ever saw: all the pillars and all the pavement (of the portico I mean) being of marble of several colours well wrought, polished, and laid, and so cleanly and elegantly kept, that one cannot see a more pleasant spectacle of this nature. For my own part I was much taken with the sight of it. Here is a fair arsenal to build gallys in, now made but little use of. The publick granary deserves notice taking, it being the greatest and best furnished of any we have seen. They told us there was corn enough always in store to serve the whole

* i.e. Snowed water or iced water.
Moral, and Physiological.

city some years upon any exigency. There are great vaults made under ground to keep it in winter time, and large rooms above to keep it in summer. A great number of men they hire to turn all the beds of corn every day. The bakers of the town are obliged to take every month 25000 * tomoli out of this granary, that so there may be a succession of new corn yearly. This they paying a good rate for, is the reason why bread is dearer in Naples than otherwise it would be.


*A tomolo is a measure bigger than an English bushel.

Q. 4

LABRIA
Observations Topographical,


Every hearth (fires they call them) in this kingdom of Naples pays fifteen carolines the year to the King, which is about fix and fix pence or seven shillings English. The number of fires in the whole kingdom is 475727, besides 5804 which are exempt from payment. In which number are not comprehended the fires of the Albanese and Illyrians commonly called Slavonians who pay no more than eleven carolines the year, are numbered every year, and are permitted to remove from place to place in the kingdom. The number of these extraordinary fires is 4451. So then the whole sum of the hearth-money is 719095 ducats four carolines, from which deducting what is to be abated for places privileged and exempt from payment,
payment, that which comes clear into the King's treasury will be 654873 ducats, and six carolines.

The Adogo, or tax which feudatories pay to the King in lieu of personal service, amounts in the whole kingdom to 120568 ducats: they also pay reliefs after death one half of a year's revenue. Besides these, there are abundance more taxes and gabels paid by the subject; an account of all which in particular may be seen in Scipio Mazzella's Description of the Kingdom of Naples, written in Italian and printed 1601. So that one would think it were impossible for poor peasants to pick up so much money as they pay to the King only; and yet I believe the gabels and payments are since that time much increased. The whole sum of all the King's Entrata or revenue yearly accruing from this kingdom then was 2996937 ducats, 3 carolines, and 14 grains.

While we staid in this city we were present at the meeting of the Virtuosi or philosophic academy, which is held weekly on Wednesdays in the palace of that most civil and obliging, noble and virtuous person, the marquis D'Arena. There were of the academy but 15 or 16 admitted, but at the meeting were present at least three score. First there was shewed the experiment of the water's ascending above its level in slender tubes, upon which when they had discoursed a while, three of the society recited discourses they had studied and composed about particular subjects, which were appointed them to consider the week before: and after some objections against what was delivered and reasonings to and fro about it, the company was dismissed. A man could scarce hope to find such a knot of ingenious persons and of that latitude and freedom of judgment in so remote a part of Europe, and in the communion of such a church. They are well acquainted with writings of all the learned and ingenious men of the immediately preceding age, as Galileo, Cartes, Gaffendus, Harvey, Verulam; and of the present yet surviving, as Mr. Boyle, Sir George Ent, Dr. Glifin, Dr. Willis, Dr. Wharton, Mr. Hobbs, Mr. Hook, Monsieur Pecquet, &c. We were very much pleased and satisfied with the conversation and discourse of some of them. Amongst the rest Dr. Thomas Cornelius hath made himself known to the world by his writings. We
Observations Topographical.

April 24. We went by water to Pozzuolo, anciently Puteoli; there so soon as we were come into our inn many seamen and country people came about us, some bringing shells, others Hippocampi dried, others ancient medals and Entaglie, others pieces of coloured glass raked out of the sea, (as they told us) about Argenteria. Near this town are several arches of stone [13 peers] reaching a great way into the sea. Some are of opinion that this was the beginning of Caligula’s bridge over this bay, and that from the end of this pile as far as Baiae the rest of the bridge was made of vessels, locked together and fastened with anchors on each side. But more probable it is that this was intended for a mole or peer to secure the harbour, and for ships to lie behind, because upon every peer a great stone perforated stands jetting out to tie vessels unto. That it was an ancient Roman work the manner of the arches, the figure of the bricks, and the flatelines of it do sufficiently argue.

From Pozzuolo we passed over the gulf to Baiae, where are so many antiquities, that to discourse fully of them would require a volume alone. And others having written at large of them both in English and Latin, I shall not so much as mention any thing save only the sweating vault being one of the grots called the * Bagne de Tritoli. It is a long and narrow passage like the entry into some room, the upper part whereof is so hot, that a man cannot endure to walk upright, being then in danger to be stifled by the hot and suffocating vapour with which the upper part of the vault is filled: the lower part though not cold is yet tolerable. Indeed one would not think there could be so great a difference in so small a distance. He therefore that goes in there is necessitated to stoop low; for if you do but hold up your hand it sweats suddenly. We observed that of the lower part of this vault where it was cool the sides were a firm stone, but of the upper part where it was hot, a soft, friable, yet unctuous yellow clay. It seemed to us to have a mixture of sulphur and fixed salt deliquated in it, but we made no trial of it by fire or otherwise. Where this stratum or region of clay begins there precisely doth the heat begin; so that where the

* The baths of Tritoli.
Moral, and Physiological.

region of clay goes lower there you must stoop lower to avoid the heat. In this hot steam there is a watery vapour contained, as appears by the drops notwithstanding all the heat condened on the sides of the vault as on an alembick head.

As we returned we viewed the new mountain, called by some * Monte di cenere, raised by an earthquake, September 29, 1538, of about an hundred foot perpendicular altitude; though others make it much higher, according to Stephanus Piglius it is a mile ascent to the top, and four miles round at the foot. We judg'd it nothing near so great. The people say it bears nothing; nothing of any use or profit, I suppose they mean, else I am sure there grows heath, myrtle, mastich-tree, and other shrubs upon it. It is a spungy kind of earth, and makes a great sound under a man's feet that stamps upon it.

The same earthquake threw up so much earth, stones, and ashes, as quite filled up the Lacus Lucrinus, so that there is nothing now left of it but a fenny meadow.

In our return from Pozzuolo we viewed the mountain called Solfatara anciently Campi Phlegraei, which continually burns. On the top of the mountain is a large excavated oval place like an amphitheatere, in length 1500 foot, in breadth 1000; where the burning is. There are several holes or vents where the smoke issues out, as out of a furnace. We gather'd perfect flowers of sulphur to appearance, and salt-armoniack ficking to the mouths of these vents. If you thrust a sword, or any iron instrument, into one of the holes where the smoke comes out, and suddenly draw it back again, you shall see it all over bedewed or thick set with drops of water. Whence it is manifest that this smoke is not only a dry exhalation, but hath also a good quantity of the vapour of water mix'd with it. We observed that these flores of sulphur would not burn, nor easilily melt over the fire, by reason of the admixture of some heterogeneous body with them. The stones and earth of this mountain are crusted over with these flowers of brimstone, which they gather and distil brimstone out

* i.e. The mountain of ashes, or cinders.
of. As one walks here, the earth makes a noise as if if it were hollow underneath; and one may perfectly hear, as it were, the hissing and boiling of some melted mineral, metal, or other liquor, just under one's feet. One that should see this smoke, hear this noise, and feel the heat, would wonder that the mountain should not suddenly break out into a flame. This great hollow above was, I suppose, excavated partly by force of the burning, the earth sinking down, and partly by paring away the top to distil for brimstone.

_**Vesuvius.**_ Five miles distant from Naples is the mountain _Vesuvius_, so famous in all ages for its burning. The ground all about the sides of it we found cover'd with cinders and pumice-stones, which had been cast out in the time of the burnings. We observed also great channels, like gulls made by sudden torrents and land-floods, which they told us were made by water thrown out at the top of the mountain in the conflagrations. Toward the top grew very few plants. _Acetosa ovilla_ where nothing else was to be seen. A little lower grew _Colutea Scorpionides_, and some shrubs of _poplar_. Near the top the ascent was steep, and very toilsome to get up. Upon the very top is a great pit or hollow in form of an amphitheatre, of about a mile round, caused by the fire's blowing up the upper part of the mountain several times with great violence. There are still about the bottom of this great cavity some small _spiracula_ of smoke, but inconsiderable, and which seem'd not to threaten any future eruption.

We viewed the cave call'd _Grotta di cane_, near the _Lago Agnano_. This grot is narrow and short. Whatever others have written or said to the contrary, a man may, without any great prejudice, go into and continue in it a long time, even in the further end of it, as some of us did above an hour's space. The venenose vapour (whether it be purely sulphurous, or also arsenical) ascends not a foot from the ground; but so high as it ascends one feels his feet and legs hot. If you hold your head down near the ground where the vapour is, you shall presently find a fierce sulphurous twinge in your nose, just as if you held your head over burning brimstone, or more violent, which makes a man stagger at first stroke, and stifies before one be aware. We carried with
with us a dog, which, by holding his nose down, we almost kill’d suddenly; and then throwing him into the lake, to try whether that would recover him (as is generally believ’d) the dog being not lively enough to swim was there drowned. I believe if we had left him in the air he would have recover’d. We then put in a pullet, which was mortified immediately; next a frog, which held not out long; and last of all a serpent, which lived about half an hour. The steam, if you hold a candle where it comes, presently puts it out. I believe this vapour arises not only in this grot precisely, but also all hereabout, as I am confident would be found, were there other grots dug out of the hill near it.

† Going to this grot, we passed through the vault or artificial high-way wherewith the mountain Pausilypus is perforated, made by one Cocceius in 15 days. It is said to be a mile in length, but we judged it not above half an English mile. It is highest at each end, and lowest in the middle, and yet there about 12 foot high; broad enough for two carts meeting to pass one another. About the middle of the vault it is so dark (no light now coming in but at the ends) that those who meet cannot see one another; and therefore, left they should jutle, or fall foul one upon another, they that go toward the sea cry Alla marina, and they which go into the country cry Alla montagna; so each take their left hand, and pass commodiously. The ports may be seen from end to end, and any where in the mid-way; but in cloudy weather it is so dark in the middle that a man can scarce see his hands held up to the light. This road is much frequented; though the bottom be stone, yet is it very dusty. Near the end toward Naples we saw a window at the top. They that write of this grot mention two windows made by Alphonfus I. King of Naples; but we saw only this, which doth yield but little light.

* The plants, we took more especial notice of about Naples, were these, Trifolium corniculatum incanum maritinum majus; Lotus figulis Ornithopodii; Medica orbi-

† The grot or hole through mount Pausilypus.

* Plants observed about Naples.
Observations Topographical,
culata minor; Medica dolitata spinosa; faccea purpurea
maritima capitulo spinoso Neapolitana; Rhamnus primus
Cluf. Stecchis citrina altera temuflia five Italica J. B.
Linaria odorata Menfpeflula; Medica marina; In lito-
ribus arenofis paaffim. On the rocks about Baiae, Pu-
teoli, &c. Cytifis incanus, siliquis faleatis; Acanthus fa-
tivus; Laurus Tinus caerulea baccâ; Acacia altera tri-
folia Ger. Gnaphalium maritimum; Sonchus Creticus folis
laciniatis C. B. Chrifanthemi Cretici duo aut tres diffe-
rentiae; Faba Veterum ferratis folis Park. Moly parum
caulis triangulo; Centaurium luteum novum Col. Cerinfhe
minor flore luteo; Lychnis fylviris hirts Lob. Lychnis
montana viscosa alba latifolia C. B. Gramen tremulum
maximum; Lagopus maximus Ger. On the mountain
Vesuvius, or near to it, Helianthemum flore maculofo Col.
Trifolium bellatun C. B. Vicu feu Lathyrus glaminio
folio, flore cocceo; Colutea fcorpioidea; Lotus arbor; Ar-
butus; Linaria graunifon congeftis purpureis; Li-
naria purpurea magna J. B. Genifta Hispanica. As you
go up from the city to the cloiffer of the Camaldu-
lenfes, Martagon Cyminfiram Lob. Aristolochia rotunda;
Orbelus Sylvaticus Viciae folii C. B. Laurus; Chryfanth-
num Bellidis folio; Digitalis lutea vel pallida parvo flore
C. B. Hemionitis multifida; Herminium luteum glutinosum
five Colus jovis; Trifolium bituminofum, quo nihil frequen-
tius per totam Iitaliam, & Siciliam; Cytifis biflatus J. B.
whole woods of chefnut; Genifta Hispanica; Colutea tum
vesicaria tum fcorpioidea; Ferula Lob. Genifta tinctoria
Hispanica; Vicia floribus pallidò luteis ampliffimis; After
montanus luteus Salicis glabro folio; Millefolium odoratum;
Hesperis fylviris latifolia flu. albo parvo Park. Androfie-
mum fætividm five Tragium, Speculum veneris magus; Pan-
cratium Lob. In litore Neapolitano, Lotus corniculata
siliquis fingularibus vel binis, tenuis J. B. Tribulus ter-
refiris copiöfifimè; Hyoscyamus albus; funcus cyproideos
maritimum Ad. Lob. In arenofis maritimis Italicæ &
Sicilie frequens. Mala infana; Italis Melongena, Nea-
poli in foro olitorio venalia; Cucumis flexusfus anguinus
Lob. ibidem. Cucumeres Italis dicuntur Citrulli; Melones
aquatici cucumere. Cucurbita anguina Lob. Malus Lima-
nia fructu parvo, Limunelles dîeto, Neapoli & Meßinae.
Fructus nucleis caret, hoc est, raros nucleos habet.
In the night time we saw many fisher-boats out at sea, with a light at one end of them, to invite the fish to follow the boat, where stands a fellow with an instrument in his hand, like a mole-spear, ready to strike them.

In the same vessel which brought us to Naples, we April 29, began our voyage to Messina in Sicily, where we arrived May 2. We failed in sight of the Æolides, or Vulcane insulae, two of which, viz. Stromboli and Vulcans, do still burn; and Stromboli with that rage sometimes, that no man dares live upon it. As we passed by in the night time we saw it flame. It is difficult to enter in at the mouth of the strait by the Faro of Messina, because of the current, which runs here violently sometimes towards Calabria, sometimes toward Sicily: so that mariners, who have not often failed this strait, are forced to hire a pilot of Messina to conduct them in; who, for the most part, when they see any vessel coming, go out in boats to meet it, and offer their service to guide it into the harbour, for which they will be well paid; our captain being forced to give ten pieces of eight. The haven of Messina is very commodious and secure, compassed almost round with the city on one side, and a narrow languet or neck of land on the other, resembling a large fish-pond. The city makes a goodly shew, as one comes to it by sea, the houses all along the shore being built of free-stone, tall and uniform, and having a fair broad key before them. But the streets within are narrow, not well paved, nor the houses near so fair. So that it is a proverb, A Messana Assai polvere, pulse, & putane. At Messina you have dust, fleas, and whores scarce. This city pretends to be the principal and metropolis of Sicily [Regni caput] and will by no means give place to Palermo. The viceroy is obliged to reside eighteen months here, and eighteen at Palermo. They stand much upon their privileges granted them by Charles V. Emperor; and one privilege they have, not to shew their privileges. They contend earnestly to have the staple, or monopoly of silk here, and had lately obtained a grant thereof from Spain: but the Palermians, seeing how much this would redound to their prejudice, have got it reversed. It seems for-
merely all the silk made in Sicily was vended at Messina, but by degrees Palermo hath got part of this trade to itself, and now pleads prescription for it. There is a great emulation and enmity between the Palermitans and Messanesi, which involves the whole island; some cities taking part with one, and some with the other. The titles the Messanesi give their city, in their publick instruments and writings, are the noble and exemplary city of Messina. The inhabitants are none of the most civil, but extraordinarily proud, and ready to expel the viceroy if he displeases them. The King of Spain hath four castles in and about this city, and the citizens as many in their hands. The city gates stand open all night, so that it's free for any man to enter in and go out at pleasure. Their government among themselves is by six jurats; four of the gentry, and two of the citizens. They are chosen after this manner. Every year there is a certain number who do ambire magistratum, or (as they phrase it) concur to come in cap; sometimes more, sometimes fewer. The gentlemen choose by themselves, and the citizens by themselves. The names of all the gentlemen of above twenty-five years of age, and likewise of all the artificers and trademen, are written in little scrolls of paper, and those rolled up and cast upon a table. Then comes in the King's delegate, and takes up of each heap of these scrolls, to the number of thirty-six, and those are the electors. These electors are brought into a room, where are boxes set according to the number of competitors, and have balls given them blue and white; the blue affirmative, and the white negative; and they give to every one of the candidates their suffrages as they please. Those eight of the noblemen, and four of the citizens which have most suffrages are elected, and come in cap. Now on the first of May these twelve have their names written in little scrolls of paper put in a cap; and a little boy puts his hand in and takes out one by one, to the number of six; and those six are the jurats for that year. The jurats for the nobility, tho' they be the greater number, yet can they do nothing without the

* The government of Messina.
Moral, and Physiological.

concern of one of the *jurats* for the citizens. After all this fit for these *jurats* have but little power, nothing to do either in civil or criminal causes of any moment.

Of † plants, we found here on the beech or languet of land, between the haven of Messina and the *Fretum Siculum*. *Peucedanum majus italicum*; *Linaria angustifolia* flore luto, vulgari persimilis; *Sideritis verticillii* fynosis J. B. *Foenugrasso* *sylvestri* Tragi in quibusdam accedes planta J. B. Some call this plant *Vicia Sesamacea Apula*; I think it might be fitly titled *Glaux peregrina annua*; *Vicia maritima multis alba, Messanensis nobis dicta*; *Spina Solstitialis* flore conveniente, capitulis sessilibus; An Solstitialis mitior Apula Col. *? Thlaspi chypeatum hieracifolium majus Park. Trifolium heliactum C. B. Polygnum nivicum*; *Securidaca filiquis planis dentatis Ger. Tri* 
folium capitulis globosis fine pediculibus adnexis; In Anglia hanc speciem nuper invenimus. *Gramen tremulum maximum*; *Mellilotus Messanensis procumbens, folliculis flavicantibus, per maturitatem, rugosis, sublongitis, specie florum breviore, verum seminibus grandioribus quam Meliloti vulgaris: ?Gilips Narbonensis Lob. Graminis Alocosuccida* 
nova specie: *Ornithopodium majus*; *Anmii vulgaris; Cymimum sylvestre alterum Dioscoridis Italorum Lob. Sisirin-* 
trium majus Ger.

In other places, especially on the hills above the city; *Ricinus fove Palma Chri in* the hedges plentifully, both here and in other places of Sicily. *Tordylium fove Seelii Creticum minus Park. Convolvulus Althaeæ folio; Alsite* 
folio oblongo serrato, flore caeruleo J. B. *Valeriana Mexi* 
cana; *Arbutus; Sonchus lanaus Dalechampii; Geranium* 
cicuta folio, acu longissimâ C. B. *Lupinus sylvestris flore* 
caeruleo; *Lupinus flore luteo; Senecionis an Chrysanthemi* 
species folio Bellidis; *Calix Senecionis calicem exadie* 
retfert, verum *Flores curulum habet foliorum in margine ad* 
modum Jacobææ; *Plantula tenera est, radicem habens* 
fibrosum, folia Bellidis, *Lychnis parva, folio angusto, flore* 
rubello. Ab aliis facile distinguitur, quod calix floris longus fit & gracilis, ipsaque florum petala ad unguem pro- 
pé fissa velut Alstines, *Trifolium halicacabum fove vesica* 

† Plants growing about Messina.
Observations Topographical,

Cratægenon erectum flore vario ex albo & purpureo; Priori simillimum est, & in eo præcipuè differt, quod non sit adeò procerum, quod caule & aliquando etiam margines foliorum rubeant, quod flores minores fint & coloris diversi; cuculli v. g. rubent, Labia medio albent, ad margines rubore diluentur. Poffent hae plantæ ad Chriftas gali reduci; nos in catalogo ad Melampyra retulimus. Holosteum Plantaginì simile J. B. Gramen datylon geminà spicà; Åphodelus major ramofus flore albo J. B. After luteus folii ad florem rigidis C. B. Trachelium parvum, folio Bellidis subrondundo, Radix ei alba, fimplex, lignofa, annua. Caulis erectus, frigatus. Folia alternatim pofita, subrondunda, fine pediculis caulibus adnexa. Flores Trachelii. Trifolium album rectum hierutum valde J. B. Dorycii species; Medica orbiculara fruteti circa margines dentato, an Medica coronata Cherleri J. B. Lychnis ad Pseudomelanthium accesoens, glabra fere. Radice nititur alba, lignofa, unde & planta annua esse videtur. Caulis nunc fimplex ab cadem radice exurgit, nunc multiplex, vel saltum ab immo fratim ramofus, pro ratione foli in quo nafcitur, geniculatus. Folia ad genicula ex adverfo bina, viridia, longa, angufla, Graminis leucanthemi foliis nonnihil similia, raris pilis hirutâ. Flores in summatisibus caulis & ramorum pediculis longis insident, quinquesselii pallide purpurei, vice flaminum in medio habentes calicem & quinque foliolis in summo bifidis compositum, ut Lycnigis fylveffris flores. Periantium feu calix floris frigatus velut Pseudomelanthii. Semina nondum maturnerant. Absinthium arborefens; Paronychia five Alsinofilia incana J. B.
Moral, and Physiological.

Androscænium foetidum Park. i. e. Tragium; Acanthus fa- 
tivus; Sedum medium flore albo, apicibus flaminium lutes; 
Ferula Lob. Thapsia latifolia Hispanica Park. latifolia P. 
Lob. prope Pharon Meffan. abundat, item in arenosis ad 
moris litus, verfus meridiem, Agnus caftus ibidem; Ole-
ander, ad aquarum rivulos frequens; Sorbus vulgaris domesti-
ca; Myrtus angustifolia; Thymeæca Ger. Hierachum calic 
barbato Col. Chondrilla saccatilis vicsæ, caule viculis 
Alto Col. Acesta Ocynt floio Neapolitana 3nsgamé. Col. u-
bique in Sicilia; Scrophularia Rutæ canina dieta; Linæ 
altera botrydes montana Col. frequens in montofis; 
Aferis species, an Baccharis Col. ? Daucus 3 Dioceoridis 
Col. Carduaus Chrysanthemus Narbonensis Ger. Carduaus 
Chrysanthemus Dod. Carlina fylvestris vulgaris Cluf. Pyl-
lium vulgare; Kali majus femine coohleato; Lotus arbor; 
Cotinus Chaemæsphilo similis; Valeriana rubra Dod. Del-
phinium fylvestre; Anirrhinum luteum Ger. Colutea for-
pioide; ChryfoCOME capitidis conglobatis Ger. Aluine 
flato C. B. upon the rocks. Botrys vulgaris; Marrub-
bium album fatuum P. Castel. Lanaria fæve Struthium Dioceoridis 
Imperato J. B. upon the rocks. Botrys vulgaris; Marru-
bium album fatuum P. Castel. Acrana flore purpureo-rubente 
patulo C. B. Millefolium odoratum; Sedum echinatum vel-
stellatum flore albo J. B. Hyacinthus comosus Ger. An-
gallis caeruleo flore, in Sicilia & meridionali parte Italiæ 
non minus frequens est quam flore phænecio. Apar-
gus petraeus fæve Cerruda Ger. Smilax aspera; Anirrhini-
um minus flo. carneo feu pallido, rictu firiato; Arabæly-
lis, in Italy and Sicily molt common. Heliotropium ma-
jus; In barren fields and among rubbish every where. 
Blitum rubrum minus; Buglosp. angustifolium; Carduaus 
galaëtites J. B. i. e. luceographus tenuifolius Meffanensis 
P. Castel. Cerinbe slo. pallide luteo; Chondrilla viminea 
Lob. Cicer fativum; Plurimæ Afraguli, Lathyræ & Vi-
cæ species, quas tempore exclusi non fatis accuratè dif-
tinimus; Cymbalaria Italianæ; Cucumis aspinus; qui & 
hic & pluribus Italianæ, Melitaæ, Sicilianaque locis ruderatis 
frequens occurrat. Hyoscyamus abus major & minor, 
which fort only we found in Italy and Sicily; Funcus ac-
cutus maritimus capitulis rotundis C. B. Stoebe Salaman-
tica prima Clufi Park. Caucalis maritima supina echi-
nato magno fructu; Ad maris litus ubique tam in Sici-
liæ
Observations Topographical,

lia quàm in Italia, Nigella arvensis; Oxys lutea; Ger. Refeda major flore albo, Rhamnus falicis floio; i. e. OleÆfter Germanicus Cordi, ut vult P. Caftel. Satureia S. Juliæ Ger. Scrophularia urticae floio; Linearîa púffila procumbens latifolia, flore albo, ríchu luteo. Radix huic fimplex quidem, verum multis fbris majufculis ftpata, sublutea, annua. Cauliculi exinde emer下int plures in-firmi, rotundi, glauci. Fólia Polygono foliorum figurá fed minora, glauca, nunc bina ex adverfo nunc terna & interdum etiam quaterna simul ad eundem exortum, & proinde ramuli nunc finguli, nunc bini, nunc terni fimum. Flores longis pedicellis subnixi, albi, ríchu luteo, calcaribus tenuibus longiflimis; pars illa floris quæ eri-gitur, in medio fiffa in duas velut aurículas divi ditur. Florem quinque circumfante foliâ viridio pro calice. Postquam flòs evanuit dediculus ejus deor sumum incurvatur. Váculum feminale rotundum appareat, Anagallidis váculo simile; Verúm fi curiose fpectatur, duos habet lobos feminibus repletos pusillis, ruflis. Freqüens eft Mæsia in vineis & hortis. Quam primum femen maturecit váculum feminale dehifcit, adeò ut difficile fit ejus fé- mina colligere. Hýssopoides major flore grandìore; Me- lisae quædam species non descr. Títhymalus arboreus; Títhymalus floio longo glauco, caule rubro, feminibus verru- coxis; Téucrum arborescens lucidum; Iberis Cardamantica; Álaterhus; Elatine flore carulo; Cyperus paniculis squa-mosis; which I take to have been Trafi, but we re-garded not the root of it. Anthyllis leguminosa flore ru-bro; Erica ramulis per intervalla ternis, Chamæcistus annuus flore luteo. Urtica Romana, paffim; Securidaca mi-nor Ad. Lagopus altera angúflifolia Lob. Coronopus fo-líis acutis in margine dentatis.

And now that I have named fo many ftrangers, let no man imagine that there are no plants common to Sicily and England; for that is fo far from being true, that I believe there be but few plants growing in England but may somewhere or other be found in Si-cily. There is in this refpe(5l great difference between northern and southern countries, the southern having a vaff number of species which the northern mifs, whereas the northern have but few which are wanting in the south-ern. And the reafon is obvious, because there are pla-
Moral, and Physiological.

ces in southern countrys which agree with the northern in the temperature of the air; as for example, the sides and tops of mountains: but no places in the northern which have like temperature of air with the southern. From this experiment I have made in comparing England with Sicily, I am induced to believe, that there are scarce any two countries in this continent so far remote the one from the other, but they have some common plants; however it be thought there be none common to America and this continent; which I cannot but wonder at, and wish it were more diligently inquired into.

We hired a Feluca to carry us to Malta and back a-May 5, again. The first day being May 6. We had a brisk gale of wind, which brought us into Catania, 60 miles distant from Messina, by three of the clock afternoon. Here as in Spain we were fain to go into the market to buy all our provision of bread, meat, and drink ourselves. This is but a mean town, only some good cloisters there are in it. We heard much of St. Agatha their peculiar protefters. May 7. We proceeded as far as Syracuse, 40 miles by the way we had in prospect Augusta, famous Augusta, for the goodness of the wine there made, and sent abroad to Messina, Malta, and other places.

Syracuse that now is stands in a Peninsula, and is only Syracuse, that part of the ancient Syracuse called Nīqū. It is at present but a small city, indifferently well built, and thinly inhabited. It is fortified with very strong walls and bastions, especially towards the land. These works they told us were made by the Knights Hospitallers, when they were driven out of Rhodes by the Turks. They then intended to have settled themselves here, but the Emperor Charles V. not liking their company in Sicily, gave them Malta. About a mile and half from the present city we saw some ruins of the ancient Syracuse, among other things the ruder of an Amphitheatre. *We saw * The also what is commonly shewed to all strangers, the grot called at present called orecchio di Dionysio or Dionysius's ear, led Dionysius because it is hewn out of the rock in fashion of a man's ear. They fancy that Dionysius had a chamber above this cave or grot, wherein he fate and over-heard whatever was spoken, or but whispered in the grot below,
Observations

Topographical,

where he used to put suspected persons together in prison. The grot is cut out of the side of a high cliff or rock, and is itself very high, and goes a little winding, but is not long. In our return from Malta we entred into and viewed one of the ancient Catacombs, and of which there are several both here and in Malta. That we enter'd into was of St. Anthony's church. Herein were many vaulted or arched walks hewn out of the rock, and on each hand all along other vaults at right angles with them, the floor, or bottom of which lateral vaults, was some foot and half higher than the floor of the main walk, and all hewn into troughs or loculi, wherein they depository their dead bodies; in some of these were 20 loculi, in some more, in some less. In this caemeterium at intervals are round rooms or halls cupolo'd, where several of the forementioned walks meet: for the whole is a kind of maze or labyrinth, and very difficult to thread, being of a huge extent; so that I believe, there were many thousands of bodies laid up here. These cuniculi or vaulted walks are in many places earth'd, and stopp'd up by stones and rubbish fallen from the roof. They told us that the vault of St. Lucia reach'd as far as Catania, under ground, which though it be a monstrous untruth, yet we may hence gather, Multum esse quod vero superstit.

May 8.

The wind being contrary, we were forced to make use of our oars, and rowed as far as Capo Passaro, anciently called Promontorium Pachynum, forty miles distant from Syracuse. Upon the utmost point of land stands a little castle held by a garrison of about twenty men. This castle stands now in a little island, made so by the force of the sea, which not long since brake it off from the land. The wind being contrary, and blowing a stiff gale, made the sea so rough, that we dared not venture out, but were forced to rest here two nights. Howbeit we entertained our time pleasantly enough in searching out and describing of plants, which this little island afforded great variety of. v. g. Lotus filiqua quadrata Ger. Lotus filquis Ornithopodii; Lotus edulis Cre-
Morale, and Physiological.

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ticus Park. forte Lotopifum Belli, which we found also about Naples, tho' it be not there mentioned. Lentif-
cus; Chamaerhipes five Palma minor; Limonium folio
senuato Ger. Chrysanthenum Creticum Ger. After luteus
folis ad florem rigidis C. B. Medica magna turbinata J. B.
Auricula muris Camerariii, Medica dolhata spinosa; Gra-
phaliurn roseum Park. HedyBarum elyceatum minus flore
pures; Onobrychis fructu ecbinito minor C. B. Flores huic
parvi purpurei, fermen grande; Trifolium halicacabum five
vesicarium; Apbodelus major ramosus flore albo; Apb. lu-
teus, five Hafta regia; Asp. minor Cluf. Echium procum-
bens flore parvo caeruleo; ornithogalum spicatum Ger. Ja-
cea lutea capite spinosa; Carduus lacteus peregrinus Cam.
an potius Silybum majus annuum Park? Carduus galactites
J. B. Teucrum Boeicum Ger. Tragopogon perenne folis
angustis inanis, flores dilute canalis, an potius Scor-
nozera dicenda? Sanamunda tertia Cluf. Anonis viscosa,
spinis carenis lutea major C. B. Consolovulcus caeruleus minor;
folioloonglo Ger. Ammi vulgare & folis magis incisis; Medi-
car orbiculata major J. B. Tordylium majus; Scorpioides
Bupleuri folio; Crithmum spinosum five Passinaca marina;
Passerina Lob. Aparine semen Coriandri Saccharato; Tri-
folium stellatum C. B. Cerinthe flore luteo; Melissa pere-
grina flore albo, Cortex ramulorum antiquiorum (caules
enim perennant) cinereus, juniorum ruber. Caules qua-
drati. Folia bina ex adverso, quam Melissa minora,
pediculis fatis longis subnixa. Flores cucullati albi, cum
alia tamen ruboris mixtura. Vascula feminalia qualia
Moluccae levis feré, excépto quod in 5 lacinias dividan-
tur, duabus inferius, tribus superius fitis. Semina itidem
qualia Moluccae. Odor plantae gravis. Nigella arvensis;
Syfrinchiurn majus; Limonium parvum Narborenum oleysfo-
lium; Cichorea spinosa Cretica Pone; Daucus lucidus;
Asparagus petraeus five Corruda; Tragos five Uva marina
major herbariorum Lob. Beta Cretica spinosa Park. Tri-
folium capitulis glosneratis, gloseulis spinis; Linum yl-
vescre caeruleum; Caltha arvensis; Atraetlylis; Cruciata
minima muralis Col. Coronopus folis acutis in margine
dentatis, i. e. Plantaginí affinis Bibinella Siciliae hercula
J. B. Malva flo. carneo minore; Ex radice alba simplici
plures emittit caules humi procumbentes, hiisutos, superna
parte rubentes. Folia ima subrotunda, longis pediculis
annexa;
observations topographical,

annexa; quae in caulibus sunt in tres aut quinque lacinias dilincta, hirsuta & circa margines crenata. Flores parvi, quinquefolii, carneo. Semina qualia malvae vulgaris; Alaternus; Phyllyrea latifolia seu ferrata secunda Cluf. Glaux peregrina annua; Iva moschata Monspelienium; Asparagus sylvvestr. spinosus Cluf. Sedum minus luteum ramulis reflexis; Geranium procumbens Althaeæ folio.

May 10.

We put to sea again, but the wind still continuing contrary, and the sea very rough, when we were gotten about half over the channel; we were forced to return back again to the primo terreno of Sicily, viz. the castle of Puzallu. The greatness of the waves not permitting us to come a shore there, we rowed six miles further south, and put in at a little cove, called the harbour of Punto Cerciolo. The weather continuing foul, we were detained here three days, having no other shelter than a pitiful small hut or two, which the two centinels (who stand constantly at this point to watch and give notice to the country of the coming of Corsairs) had set up for themselves to creep into in stormy weather. We should have been glad of fresh straw to lie in, having nothing in our kennel but old short straw, so full of fleas, that we were not able to sleep in it. Our diet was the blood and flesh of sea tortoises that our seamen took by the way, and bread we brought along with us. Wine we got at a house about half a mile off our lodging, but when our bread failed, we were fain to send eight miles for more: fish or flesh we could get none. This stop gave us leisure enough to search the shores and neighbouring country for plants; of which we found, Panax Hercules majus Ger. Cinara sylvostis Ger. Ruta sylvostis; Limonium elegans Rauwolfii; Beta Cretica spinosa Park. Medica orbiculata fructu minore; Med. orbiculata elegans, fructu circum oras rugoso; Hypericum foliis parvis crispis seu simillis; Persicaria angustifolia montana Col. Siliqua albar seu Panis S. Joannis; Medica marina; Anonis lutea parva procumbens. In arenosis nacitur radice alba, longa, simplici, fibris nunc paucioribus nunc pluribus & majoribus donata; Folia ei parva, tripartita divisa, pediculis nullis, verum duæ inferiores partes cauli adjacent ut in Lotis fit, ac proinde hac planta

*Punto Cerciolo.*

The wind ceasing we put to sea again, and had May 13. very good passage over to Malta. By the way we saw our seamen take several tortoises on this manner: † When they espie a tortoise floating on the top of the water (as they can easily do at a good distance) with as little noise as they can possibly they bring their boat up close to him; then they either catch him with their hands and draw him up into the boat, or, if they cannot get near enough to do so, one leaps out of the boat into the sea, and turns the tortoise on his back, and then with ease drives him before him up to the boat; the tortoise being not able to turn himself, or swim away on his back. They say (and it is not unlikely) that the tortoise, while he floats thus upon the water, sleeps; which is the reason why they are so still, and make so little noise in bringing their boat up to him. One of these tortoises which they caught had two great

† The manner of taking tortoises.
Observations Topographical,

† Bernacle shells growing upon the back of a tortoise.

Plants observed I shall now let down what plants we found about Catania and Syracuse. About Catania, Scammonea Monspé about Ca-liace affinis Park. Plumbago Plinii; Agmus castus; which tania and two we observed also in many other places. Crucia Syracusa. marina, Anonis marina procumbens flore luteo, iam descripta; Sedum minimum non acre totum rubrum, flore hexapbylo purpureo. Upon mount Ætna we found Tragacantha C. B. Towards the top of the mountain we observed Barberry-trees growing plentifully, which is a rare shrub in hot countries, and which we found no where else in Italy or Sicily. At Messina they shewed us, for a rare plant, the common Gooseberry bush. About Syracuse, Thymum Cre-ticum Ger. Origanum flore albo, capitulis squammatis rotundis; Verbacum 4 Matthisioli. The same kind of Melissa we found about Messina, and have already described; Tew-erium Betricum; facey lutea capitulis spinosis; Lagepus qua-dam procumbens fisci longiore; Anonis purpureas minima supina non spinosa. Many others we might doubtless have found, had it been safe for us to have searched the rocks near this city.
OF

MALTA.

The island of Malta is twenty miles long, twelve miles broad, and sixty miles in circuit; distant from the primo terreno, or nearest part of Sicily, sixty miles; from the cape of Calipia, anciently called Promontorium Mercurii, the nearest point of the continent of Africa, 200 miles (as divers of the most skilful and experienced pilots did affirm to Abela for an undoubted truth) from the cape of Spartivento in Italy, but 190. So that upon account of vicinity, it is rather to be attributed to Europe than Africa; especially if we allow Sicily to have been of old time united to, and so part of the continent. The reason why others make it a member of Africa is, because the present inhabitants of the country speak a kind of Moresco or Arabick.

The old city, called Citta notabile, situate about the middle of the island, hath 35 degrees, 15 minutes of northern latitude, and the longest day there is of 14 hours, 52 minutes.

I am not ignorant that Heylin and others, who reckon this among the isles of Africa, place it nearer the coast of Barbary, assign it less latitude, and allow the longest day no more than 14 hours; but I do in these, and other particulars, follow the more accurate observations of Johannes Franciscus Abela, a learned man and native of this island, in his Malta illustrata, written in Italian and published in Malta, Anno 1646, in folio.

The whole island, from the shallowness of its soil, there being in few places above two foot depth of earth before you come to firm stone; and from the shallowness
Observations

Toowness of its situation, not much elevated above the level of the water, and having no considerable hill in it, seems to have been in the most ancient times nothing else but a great rock, wholly overwhelmed and covered with the sea; especially if we consider the multitude of sea shells of all sorts, sharks teeth, vertebrae of thornbacks, and other fish bones petrified, found all-over the island, even in the highest parts of it, and most remote from the shore. For, that these were formed by some plastick power in the stone-quaerries, being nothing else but the effects or productions of Nature sporting herself in imitation of the parts and shells of these animals, I can hardly be induced to believe; Nature (which indeed is nothing else but the ordinary power of God) not being so wanton and toyish, as to form such elegant figures without further end or design, than her own pastime and diversion. But a very likely thing it is, that the sea being shallow above this rock for some ages before it came to be uncovered, there should great beds of shell-fish harbour and breed in so convenient a place, and, the water leaving them, their shells remain and petrifly. I confess it's hard to imagine, how the carcases of so many sharks should come to be lodged here, as by the multitude of teeth that have been for so many years past, and are still daily digg'd up, we must needs grant; unless perchance they remain of the heads of such sharks as were caught and eaten by the fishermen, who it is likely, after the discovery of this rock, frequented here, and made it a station for fishing before it came to be inhabited.

To this difficulty, Mr. Steno returns answer in these particulars, 1. That such sharks, or sea-dogs, have each of them sixty teeth and more, and that all the time they live they breed new teeth. 2. That the sea, agitated by the winds, is wont to protrude those bodies it meets with towards some one place, and there heap them together.

3. That sharks swim in great troops or shoals, and consequently that the teeth of many of them may have been left in one place. 4. That in the Malta earth, besides these sharks teeth, are found also sundry cockle-shells; so that if the number of teeth should incline
Moral, and Physiological.

cline a man to ascribe their production to the earth, on the other hand, the make of the same teeth, and the abundance of them in every animal, and the earth like the bottom of the sea, and other marine bodies found in the same place, do favour the contrary opinion.
* The soil, notwithstanding the rockiness and shallowness of it, hath been by the ancients celebrated for fertility;

\[ Fertilis est Melite sterili vicina Cosyrae \]
\[ Insula. Ovid. Fast. \]

But undeservedly if we understand it of corn; for there is not much wheat sown here, and that we saw upon the grounds was but thin and slight. And though barley be their chief crop, and of which the country people make their bread; yet have they not near enough of that to serve the ordinary uses of the inhabitants; so that they are forc'd to fetch most of their bread-corn out of Sicily.

† The main commodities which the island yields, wherewith the inhabitants drive a good trade, and enrich themselves, are 1. Cumin-feed, which they call Cumino agro or sharp Cumin; of which are gathered about 3000 Cantares yearly; one Cantare being equal to 116 pound weight English. 2. Anise-feed, which they call Sweet-cumin, of which are gathered and transmitted into foreign parts 1000 Cantares yearly. These seeds are sold at 7, 8, or 9 crowns the Cantare: and we were told that the year before our being there [Ann. 1663.] were vended 7000 Cantares of both forts. 3. Cotton-wool, called in Latin Xylene or Gossipium, of which they send abroad yearly 14,000 Cantares in the husk.

They have of late begun to plant Indigo, which my author faith agrees with the soil, and likes and thrives there very well. He also mentions a sort of excrescence or moss or scurf, which the rocks about S. Maria el Aalia and other places on the north side of the island naturally put forth, called by the country people Vercella,

* The nature of the soil.

† The commodities of Malta.

which
Observations Topographical,

which they scrape off with an iron instrument, and having washed it with a certain liquor, and mingled it with other ingredients (he tells us not what that liquor or those ingredients are) they expose it to the sun, and use it do dye wool of a carnation colour. This kind of moss, called in Wales Kenkerig, and in England Cork or Arcel, is gathered and used for the same purpose in Wales and the North of England.

Malta hath been famous of old for a breed of little dogs called Catuli Melitæi, the race whereof is quite extinct: and now their cats are as much esteemed. The roses of Malta contend for sweetness with those of Pasflum; and the honey with that of Hybla or Hymettus: so that some suppose this island had its name Melita from Mel signifying honey.

The air is clear and healthful, and the people long lived. Not much rain falls here, yet sufficient to supply water to feed their springs; of which there are several in the high grounds, or small hills about the middle of the island. That these * springs proceed from rain-water only my Author doth very well prove, because they are found only at the foot of little hills, consisting of a certain porous stone which the Malteſe call Giorgiolenæ, or a chalky earth which easily imbibes the rain. And to speak in general, that all springs and running waters owe their rise and continuance to rain, seems to me more than probable; 1. Because I never yet saw any springing of running waters breaking out, either on the top of a hill or so near the top, but that there was earth enough above them to feed such springs, considering the condition of high mountains, which are almost constantly moistened with clouds, and on which the sunbeams have but little force: and yet I have made it part of my business in viewing the highest hills in England and Wales to examine this particular. Nor have I yet ever observed such springing and running waters in any plain, unless there were hills so near, that one might reasonably conclude they were fed by them. 2. Many springs quite fail in dry summers, and generally all abate considerably of their waters. I am

* The original of springs.
not ignorant that some make a distinction between failing springs and enduring springs, and would have the former to proceed from rain, and the latter from the sea; but I see no sufficient foundation for such a distinction, and do think that both the one and the other are to be attributed to rain; the failing and enduring being to be referred either to the different quantity and thickness of earth that feeds them; or to the different quality, the one more quickly the other more slowly transmitting the water, or some such like accident. 3. In clay grounds, into which the water sinks with difficulty, one shall seldom find any springs; but in sandy, gravelly, rocky, flomy or other grounds into which the rain can easily make its way one seldom fails of them. 4. They who would have fountains to arise from and be fed by the sea have not as yet given a satisfactory account of the ascent of water to the tops of mountains and its efflux there. For though water will creep up a filtre above its level, yet I question whether to so great an excess above its equilibrium with the air, whereas in pumps we see it will not rise above two or three and thirty foot; or if it should, whether it would there run out at the top of the filtre, we not having as yet heard of any experiment that will countenance such a thing. For the ascent and efflux of sap in trees I suspect may be owing to a higher principle than purely mechanical. As for the Sabulum Quellem or Arena bulliens of Helmst, I look upon it as an extravagant conceit of his; and yet some ground there is to believe, that there is a kind of earth lying up and down in veins, which doth like a filtre retain the water and carry or derive it along as it lies from place to place, till it brings it to the superficies of the earth, where it runs out. In other places there are subterraneous channels like the veins in animals, whereinto the water soaking into the earth is gathered, and wherein it runs as above ground out of smaller rivulets into greater streams; and where one of these veins opens in the superficies of the earth there is a spring greater or lesser according to the magnitude of the vein. Nor need we wonder that springs should endure the length of a dry summer; for in many forts of earth the water makes its way but slowly; since we see that in those troughs or leches, wherein
Observations Topographical, laundrefles put ashes, and thereupon water to make a lixivium, the water will be often many hours before it gets all through the ash, and the lech ceases to drop; and in many chymical preparations which arefiltred, its long before the liquor can free itself and wholly drain away from the earthy and seculent part.

Some attribute the original of fountains to watery vapours elevated by subterraneous fires, or at least by that generally diffused heat which miners find in the earth when they come to fifty or fixty fathoms under ground; and condenfed by the tops and fides of the mountains as by an alembick head, and fo diffilling down and breaking out where they find issue. And in reafon one would think, that generally the deeper one digs in the earth the colder one fhould find it, fith the urinators affirm that the deeper they dive in the fea the colder fhall they find the water. And yet were there fuch subterraneous heats, they are not fo great as that it is likely they fhould elevate vapours fo high, through fo thick a coat of earth, which it must be an intenfe heat indeed will carry them through, which heat none faie is found near the superficies of the earth.

Mr. Hook's account, viz. that falt water being heavier than freh, by reafon of its preponderancy it may drive up the freh as high above the surface of the fea as are the tops of montains before it comes to an equilibrium with it, is very ingenious, and would be moft likely, were there continued clofe channels from the bottom of the fea to the tops of mountains, not admitting the air, which I believe will not be found in many places. What is faid about † ebbing and flowing wells in confirmation of it adds no strength; for none of thofe ebbing and flowing wells that I have yet feen do at all obferve the motion of the fea, but reciprocate two or three times or oftener every hour, excepting one on the coast of South-wales in a sandy ground by the fea-fide not a quarter of a mile from the water, which obferves the tides; but it is no running water, nor doth it I believe arife above the level of the fea. I do therefore shrewdly fufpect for fabulous whatever hath been written of wells remote;

† Ebbing and flowing wells.
from the sea, which in their ebbing and flowing observe its motions. But for a reason of the ebbing and flowing of these wells I must confess I am hitherto at a great loss. Whereas some say, that rain sinks not above a foot or two deep into the earth, if they understand it of all earths it is manifestly false, for that we see in coal delphs, and other mines, in wet weather the miners are many times drownd' out (as they phrase it) though no water run down into the mouths of their pits or shafts; and in sandy and heathy grounds, in the greatest rains, little water runs off the land, as on Newmarket-heath, Gogmagog-hills, Salisbury-plain, &c. and therefore it must needs sink in: and out of the mouth of Pole-hole, near Buxton, in the Peak of Derby, and other caves in the sides of mountains, in rainy seasons, streams of water many times run out, where in dry weather and summer time there are none.

Neither is this opinion we defend any more repugnant to the scripture than the other. For whereas it is said, Eccles. 1. 7. All the rivers run into the sea, yet the sea is not full; unto the place from whence the rivers come thither they return again; we grant it to be most true; nay we think such a circulation absolutely necessary to the being of springs, only we assert it to be performed not under ground, but above: that is, the clouds take up water out of the sea, and pour it down again upon the earth; and from part thereof falling upon and soaking into the higher grounds arise the springs.

* But to return to Malta; the haven is very commodious and secure, divided into two by a little promontory or neck of land some 1500 canes long, and 380 broad, upon which the new city is built. Of these two that on the west side the city is called simpliciter and per Antonomasiam Marfa, that is, the haven, and is in length 1800 canes or poles, of ten palms the cane Roman measure, and is sub-divided into other creeks or sinus's. That on the east side, called Marfa moscetto, is as large as the other; in a little island within which is the Lazaretto; near it ships that come from infected places keep their quarantine.

* The haven.  
\* The
Observations: Topographical.

† The new city, called Valetta, is divided into twenty streets, eight in length and twelve in breadth, all straight. Though they be not paved, yet they need it not, the town being built upon a solid rock. They want no uniformity but being level, which, the place being uneven, up-hill and down-hill, will not admit. The houses are all of stone, flat-roofed and covered with plaster, which is sufficient here, there falling but little rain; tho' they be not tall, yet are they neat and pleasant. Upon the roofs of their houses in summer time the people set their beds, as at Aleppo, and sleep in the open air. The number of the inhabitants of all ages, according to a survey taken in the year 1632, was 10,744, the number of houses 1891, which sum I believe since that time much increased. Over the gate of this city leading to the land, called Porta reale, you have this inscription, giving an account of the first founding and building of it.

Fr. Jo. de Valetta sacrae Domus Hospitalis Hierosol. M. Magisfr, periculorum anno superiore a suis militibus populoque Melitaeo in obstdione Turcica perpefforum memur, de condenda nova urbe, eaque mæ- niis, arcibus & propygnaculis ad sufthinendam vim onnum propulsandöque inimici Turcæ impetus aut fal- tem reprimendö munienda, inito cum Proceribus con- filio, Die Jovis 28 Martii 1566, Deum omnipoten- tem Deiparamque virginem & numen tutelare D. Jo- annem Baptifiam Divosque caeteros multa precatus, ut faustum felixque Religioni Christianæ fieret, ac Ordni suo quod incepatabat bene cederet, prima urbis fun- damenta in monte ab incolis Sceberras vocato jeclty, eanque de suo nomine Valettae (datao pro insignibus in Parma miniata aureo leone) appellari voluit.

Fr. Antonius de Paula M. Mag. invictiss. Conditoris tan- tæque rei monumentum P. C. Anno ab Urbe Funda- data 68.

It is fortified with impregnable walls and bulwarks, especially toward the land, where one would think there are too many, and yet they are still adding more. Within the outmost wall, or between the two walls

† The new city called Valetta.
and outworks, they have inclosed a great space of void ground, whether with design to enlarge the city, filling that space with houses, or to receive the country people in case the enemy should land upon the island, I know not. All the walls and bulwarks are mined or vaulted underneath, that so, in case the besiegers should get upon them, they might be blown up and render’d useless. The charge of all these walls, castles, and fortifications would be intolerable, had they not stone at hand, and slaves to work. This city is well served with all provisions, there being every morning a market plentifully furnished with bread, flesh, fish, poultry, fruits, herbs, &c. of the best in their several kinds, and to be bought at easy rates.

The most considerable buildings in this city are, 1. The church of St. John Baptist, patron of the order, wherein are many chapels and altar-pieces richly gilded and adorned. Here lie buried the grand masters that have been since the order was translated hither in a vault under ground; several of them having in the church monuments with inscriptions. This church is not yet quite finished.

The castle of St. Elmo, which stood here before this city was built, on the utmost point of the promontory: a strong place but of no great capacity. Here we observed the like winding ascent to the top without any steps or stairs, as in the tower of St. Mark at Venice. Upon the top of this castle is constant watch and ward kept. When they descry any vessel coming toward the island, be it great or small, they set up a flag suitable to the bigness of the vessel; if two vessels two, if three, and so on according to their number; signifying also by the place where they set these flags, from what quarter, east, west, north, or south, such vessel or vessels come: so that the city is presently adviz’d what vessels and how many are near the port. In this castle are imprisoned such knights as have committed any misdemeanor, and held in restraint longer or less time, or further proceeded against according to the merit of their fault.

Before this castle are the Granaries, where the provisions of corn for the city are kept. These are nothing but caves hewn out of the rock in the form of a cupola, or ordinary bee-hive, having each a narrow mouth above.
OBSERVATIONS Topographical,

They are constantly stored with corn enough beforehand to serve the whole city for a year. They have also magazines or stores of wine, oil, and all other necessaries.

The Alberghs or halls of the eight several nations (Lingue they call them) of the order. The nations are French, Italian, German, English, Provencal, Auvergnais, Caffitian, and Aragonian. These Alberghs are most of them fair buildings like colleges; and in each of them is a publick hall, wherein the knights of each nation dine and sup as many as please; the others have their parts or demensium sent to their lodgings, or dispose otherwise of it as they see good. The seignior of each nation is superior of the Alberg, grand prior of his nation, of the great cross (Gran Croce they term it) and one of the privy council to the great master. These are distinguished from the rest by a great white cross upon their breasts, made of silk sewn into their garments. Here is an Alberg for the English nation, or rather a piece of ground inclosed, with the foundation of an Alberg, the walls being scarcely reared up. This ground, we are told, some of the citizens would have bought and built upon, but the grand master and council refused to sell it, not despairing, it seems, that one day our nation may be reduced again to the obedience of the Roman church.

The Armory [Sala di Arma] within the palace of the great master, consisting of two rooms; the one (which they call the hall) the fairest and largest room employed for such an use that we have any where seen; the other much lesser. In both together are kept arms for 30000 men, so intire, clean, bright, and fit for use, that we were much taken with the sight of them. Here are some of those little drakes that may be charged behind, a leather gun, and other curiosities, the like whereeto we have seen in several armories.

The Hospitall [Infermaria] a fair building, which they The Hospitall in enlarging. The sick persons are served by the hospital Nefe-knights, viz. such a number of knights are appointed to carry them their meat daily with cap in hand; which thing we saw them do in this manner. The meat was all brought into the middle of a great room where many of the sick lay. Then one of the knights (the steward I suppose he was) read the names of the sick.
Moral, and Physiological.

fick one by one out of the physician's bill, wherein was prescribed each sick person's diet. As he read a name the cook took his part whose name was read, and, dish- ing it up, deliver'd it to one of the knights, who car- ried it to his bed-side, where stood a stool cover'd with a napkin having bread and salt upon it. This duty their very name intimates to belong to them, viz. knights, i.e. servants of the hospital, and therefore we may be excused if we have been more particular and circum- stantial in describing the manner of it. If any of the order falls sick, he is not to stay in a private house, but presently repair hither, where he is most carefully tended, one or two knights being appointed to be always by him.

The Palace of the Great Master, where he hath seve- ral apartments for winter and summer. There is also a flable of good horses, in which, besides coach-horses and ordinary saddle-horses, are kept 40 or 50 great horses. A thing worth the noting in this island, where there is so great scarcity of horses, that knights and persons of quality ride upon no better than asses.

The Slaves Prison, a fair square building, where all the slaves in the city lodge every night so long as the prison gallies are abroad in Corfo. At the ringing of the Ave-Mary bell, which is just at sun-set, they are to repair thither. When the gallies are at home, those that belong to private persons are permitted to lodge in their masters houses. The number of slaves now in town was about 2000 belonging to the order, and 300 to private persons, besides those that were abroad in the gallies.

Besides this new city, there are three considerable towns distant from it only by the breadth of the haven. 1. The Isola (as they commonly call it) or town of Senglea, with the fort of St. Michael, seated in a Pen- insula made by two creeks running out of the principal haven. It contains 994 houses, and 4050 souls. For the stout resistance it made to the Turks in 1565, it obtain'd the name of * Città inviitita. 2. The Borgo (as they call it) i.e. Burgo del Castello à mare, built likewise on a little Lingua, or neck of land, between

* The invincible city.
Observations Topographical,

two creeks of the same haven, on the utmost cape where-
of stands the castle of St. Angelo, divided for greater strength
from the town by a ditch of water cut cross the Lingua.
This burgh contains 782 houses, and 3063 souls. For its
valour and fidelity in holding out so resolutely against the
Ottoman army besieging it, Anno 1565, it is deservedly
honour'd with the title of *Città vittoriofa. Between these
two burghs is a secure harbour, where the galleys and most
of the other vessels of the city lie; which, in time of dan-
ger, is shut up with a great iron chain. 3. Birmita,
rather a suburb of Senglea, than a distinct town: it con-
tains 642 fires, and 2778 souls.

May 25.
The old city.

We rode out to see some part of the country; passing
two great villages (Casales they name them) we came
to the old City, called anciently Melita, after the name
of the island, now Città notabile, a small place at pre-
fent, but well fortified, containing no more than 565
houses, and 2620 souls. It hath been formerly much
greater, and incomparably more populous. The new
City, as being more conveniently situate, daily draining
away, and withdrawing its inhabitants. Here they
shew'd us the pillar of St. Paul (as they call it) where
when he stood preaching (as they fondly believe, or at
least would persuade us) his voice was heard distinctly
all over the island. 2. The Grot of St. Paul. Here
out of a small cave is taken that white earth, called
Terra di S. Paolo, and, by some, Terra sigillata Meli-
tenfsis, which they seal and sell to strangers, attributing
thereto great virtues against all poison and infection.

This cavern, though there be continually great quan-
tities of earth taken out of it, according to their con-
ceived tradition, retains still the same dimensions, beco-
ming no greater than it was at first. That St. Paul
suffer'd shipwreck on the coast of this island, and win-
ter'd here, and not on that other Melita in the Adria-
tick sea on the coast of Dalmatia, now called Meleda,
I think it sufficiently proved and made clear by Clone-
rius, Abela, and others: but that, upon occasion of a viper
fastening on his arm, he changed all the serpents of the
island into stones, and endued the earth with an alexi-

* The victorious city.
pharmical quality to resist and expel poison, is a super-
stitious and ungrounded fancy.

From the old city we rode on to the Great Master's Belchette, where he hath a pretty little palace in form of a caffle, from the top whereof we had a good pro-
psect of the island. Here are a great number of gardens and orchards well furnish'd with all sorts of fruits and flowers, good water-works, and a grove of trees: in-
deed this palace wants nothing for convenience or de-
light. The palace is situate upon a little hill, and the gardens lie under it in a hollow or bottom, almost compassed about with rocks.

But to speak of the island in general, *Malta hath been inhabited by several nations, and often changed masters. The most ancient inhabitants are by Cleve-
rius taken to have been the Phæaces, mentioned by Homer, who were expelled by the Phœnicians. The Phœnici-
ans were most of them driven out by the Greeks. After this it changed masters rather than inhabitants, being first subdued and held by the Carthaginians; then for a long time by the Romans: after that the Goths came hither, who were driven out by the Eastern Emperors. Next the Saracens posses'd themselves of it. The Normans expelled them and got the dominion. Then the Ger-
mans, or Suevi, became lords of it; then the French; then the Aragonians, and Spaniards; and now last of all the order of the knights hospitaliers. The history of all which changes, if any man desire to be fully and particularly acquainted with, let him consult Abela. In all these changes, it followed for the most part the fortune of Sicily, as having little strength to resist any foreign power invading. It is now so well fortified and manned, that it would prove a very difficult matter for the greatest Prince or Potentate in the world to take it by force; having, when it was in far worse condition than now it is, resisted and baffled the arms of one of the greatest Emperors the Turks ever had.

† It is very populous, containing between thirty and forty great Caffales or villages, some of them above 500

* The several inhabitants and conquests of Malta.
† The number of the villages and people.
Observations Topographical,
houses, more like to great towns than villages, and twenty-
fix parih churches, bedefe those of Gozo. The number
of fighting men was said to be about 25000, but I believe
there are scarce so many, for, according to a survey
taken in the year 1632, the whole number of souls upon
the island, besides the knights, was about 5012; of
which we cannot reckon much above one fifth part to
be fighting men. And tho' since that time the number
of inhabitants be much increased, yet I think scarce
doubled.

The + language of the natives is a corrupt Arabic, or
Morisco, introduced by the Saracens, the ancient lan-
guage, before their coming in, probably having been
Greek, with a mixture of Punick: whence I think one
may reasonably conjecture that the Saracens did either
destroy or drive out the former inhabitants. Howbeit
the people can generally speak Italian, there being no
other language but that and Latin used in any of the
courts of Malta.

The great master of the order is now Prince and su-
preme governor of the whole island, which with Gozo
and the adjacent islets, after the loss of Rhodes, was
granted to this order by the Emperor Charles V. in the
year 1530. The government is managed with that
prudence and justice, that the island is now in a very
flourishing condition, the inhabitants enjoying a great
deal of freedom and secnrity; being also in their carriage
and conversation among themselves, and to strangers,
since the coming in of the order, very civil and cour-
teous, however formerly they have been branded for the
contrary; so that few subjects live more happily than
they do.

The great master when he goeth abroad is attended
by many of the knights, and two or three pages, of
which he keeps (as we were told) about twenty-four.
The knights of the order are always uncovered in the
presence of the great master, excepting those sixteen
which are of the Gran Croce: they take place, of what
birth or quality soever they are, according to their fe-

+ The language.

|| The great master, Prince of the island.
Moral, and Physiological.

iority from the time of their admission; so that there is never any difficulty or question about precedence. All the knights are of noble or genteel extraction, none being capable of admission but such as can prove their nobility for three or four descents. The great master wears a black short gown with hanging sleeves, the rest of the knights are habited as they please at home, but when they go in Curfo (as they call it) upon the galleys, they wear the proper habit belonging to their order. The number of knights was said to be between 2000 and 3000, of which, for the most part, reside in the city the major part, except when the galleys are abroad. The name of the great master, at our being there, was Nicolaus Cottoner of Majorca, and I suppose he is still living, not having since heard of his death.

The names of the great masters that have been since the order removed to Malta, are as follows:

43. Frater Philippus de Villiers Lisledam, a Frenchman, who brought the religion into Malta, Anno 1530, being the forty-third great master from the first institution of the order. He died Aug. 21, 1534.

44. Fr. Petrinus del Ponte, an Italian, the first that was chosen great master in Malta Aug. 26, 1534. He died November 17, 1535.

45. Fr. Desiderius di Tolono Santalilla, of Dauphiny, chosen in his absence November 22, 1535. He died Sept. 26, 1536, being on his way coming towards Malta, at Montpellier.

46. Fr. Joannes D'omedes, an Aragonian, elected Octob. 20, 1536, died Sept. 6, 1553.

47. Fr. Claudius della Sengle, a Frenchman, chosen while he was ambassador for the order at Rome, Sept. 11, 1553. He died Aug. 18, 1557.

48. Fr. Joannes di Valetta, a Gascoigner, elected Aug. 21, 1557. died Aug. 21, 1568. In his time Malta was invaded, and the city besieged by the Turks, who were notably repulsed.

49. Fr. Petrus de Monte, an Italian, elected Aug. 23, 1568, died Jan. 27, 1572.

50. Fr. Joannes L'evesque de la Cassiere, an Auvergnian, elected Jan. 30, 1572, died in Rome, Decemb. 21, 1581.
Observations Topographical,

51. Fr. Hugo Loubenx Verdalle, a Gascoigner, afterwards made cardinal, elected Jan. 12, 1581, died May 4, 1595.
52. Fr. Martinus Garzes, an Aragonian, elected May 8, 1595, died Feb. 7, 1601.
53. Fr. Aloysius de Wignacourt, a Frenchman, elected Feb. 10, 1601, died Sept. 14, 1622.
54. Fr. Lewis Mendez de Vasconcelos, a Portuguese, chosen Sept. 17, 1622, died March 7, 1623.
55. Fr. Antonius de Paula, a Gascoigner, chosen Mar. 10, 1623, died June 9, 1626.
56. Fr. Joannes Paulus Lascaris de Castellar of Nizza, elected June 11, 1636. He was living in the year 1647, when Malta illustrata was publish'd; and to him succeeded
57. Fr. Martinus de Redin, a Spaniard, in the year 1657.
58. Fr. Gaffant de Clermont of Dauphiny, in the year 1659, and died in the same year.
59. Raphael de Cotoner of Majorca, who died in the year 1663; he was brother to the present grand master.

About five miles distant from Malta westward, lies the island Gozo, called by the ancients Gaulos, twelve miles long, fix and a half broad, and about thirty in circuit. The soil like that of Sicily, very deep and fruitful of wheat and other grain. This island is mountainous, yet all cultivated, furnished with store of fresh springs. It maintains upon it 3000 persons, the number of houses being about 500. It was much more populous before the Turkish Armata most inhumanly wasted it, in the year 1565, carrying away prisoners 6000 persons.

In the stright betwixt Malta and Gozo, lies a little island called Comino, anciently, according to Chuerius, Hephaestia, about five miles in compass, and well cultivated; for the defence whereof, the great master Wignacourt caused a fort to be built, opposite to that on the other side the stright in Gozo, to secure the stright, and hinder any vessels passing between the islands without leave.

That
Moral, and Physiological.

That there is great plenty of shells and fish-bones petrified found in Malta, I have already intimated. I shall now therefore only name those which are not at all, or but rarely found with us in England.

1. *Glossopetrae*, which are nothing else but sharks teeth, of several shapes and sizes. These the Maltese call *serpents tongues*. 2. The vertebres of thornbacks and other cartilaginous fishes. 3. *Cats heads* (as they call them, from their likeness to a little skull.) 4. *Serpents eyes*, of several figures and colours. The most of them red and like to those they call *toadstones*; the exterior superficies being a segment of a spherical, and shining as if it were polished, so that they are commonly set in rings. I have seen great lumps or masses of these cemented together. That the † *toadstone* is nothing else but the jaw-tooth of a fish, called *Lupus marinus* by Schönfeldius, Dr. Merret, in his Pinax, hath first published to the world; and I doubt not but these have the same, or like original. 5. *Serpents teeth*, which are small, oblong, striate stones of a polite superficies, but no certain figure. Whither to refer these as yet, I know not, as neither 6, those they call *serpents eggs*, which are somewhat like the former, but not striate with lines. 7. *Bastions of St. Paul* [Baculi S. Pauli] having the resemblance of small snagged sticks. 8. *Petrified lentils*, because for colour, figure, and magnitude, somewhat like to that pulse. Besides, I found, among the stones I bought there, some exactly figured like the fore teeth of a man; and doubtless many other sorts by diligent search might be found, which have not as yet been named or taken notice of.

As for plants I found here very few sorts, but what I had before observed in Italy and Sicily, viz. *Cucumis aspinus*; *Hypericum tomentosum*; *Convolvula regalis peregrina parvo florio J. B. Cardunius laevis peregrinus Cam. There are but few trees growing upon the island, the greatest want they have, being of jewel, to supply which defect, they have of late begun to make use of

* The petrified shells in Malta, &c.
† What the *toadstone*, so called, is.
sea-wreck to burn in their ovens, prepared after a certain manner, invented by a peasant of Malta, for which he is highly commended by Abela, as a great benefactor to his country.

Here I first noted the custom of slitting up the nostrils of asses; because they, being naturally strait or small, suffice not to admit air enough to serve them when they travel or labour hard in these hot countries. For the hotter the country is, the more air is necessary for respiration and refreshment of the body; there being less of that menstruum which serves to nourish or continue fire, and consequently the vital heat of animals (which hath great likenesse thereto) in hot air than in cold; whence we see that fire burns furiously in cold weather, and but faintly in hot. Whether it be because the air is thinner in hot weather and hot countries, or because the reflected sun-beams spend and consume a good part of the forementioned menstruum, or from both these causes. That the air is thinner, and consequently the menstruum also more diffused in hot weather, is clear in experience. I need mention no other experiment to demonstrate it, than the air inclosed in the shank of an ordinary weather-glass, which in hot weather dilates itself, and in cold contracts very considerably. So then to give an account of the raging of fire in the coldest weather, we need not have recourse to the insignificant term of Antiperistasis; the true reason thereof being the density of the ambient and contiguous air containing plenty of that menstruum which nourishes the fire.

I omitted to mention the ancient Caemeteria, or subterraneous burying-places called Catacombe, of which there be many in Malta, because of these we have already had occasion to discourse in our description of Syracuse in Sicily.

That this island produces or nourishes no serpent or other venomous creature, the common people affirm; but because I find no mention hereof in Abela, I give little credit to their report: should it be true, it would be to me a great argument that this was not the island upon which St. Paul was cast when he suffered shipwreck, but rather that Melita before mentioned upon the coast of Dalmatia,
Moral, and Physiological.

Dalmatia, for which there is also some ground in the scripture, which faith Acts xxvii. 26.

For that St. Paul upon the viper's fastening on his hand did by his prayers obtain of God, that all the serpents in Malta should be turned into stones, and the island for the future wholly free from all venomous beasts, is a Monkish fancy, grounded upon the forementioned petrified fish-bones, which they fondly imagined were sometime parts of serpents: whereas in other places where plenty of such stones are found there is no lack of serpents. I confess it is difficult to imagine how serpents should come at first to breed here, if the whole island were once (as we conceive) a submarine rock cover'd with the sea; and there be no spontaneous generation of animals, as we also believe: because it can scarce be imagined that any man should on purpose bring over serpents hither, unless perchance to shew them for a curiosity. Whether there be venomous beasts or no I am sure there are venomous insects here, the very biting or stinging of the gnats (with which the city is much infest'd) being more virulent than in other places. For my part I do not remember that in England the biting of a gnat did ever cause a swelling, or leave a mark behind it in the skin of my face (though I know in some it doth) but there it both raised a swelling, and left a mark behind it that was not out for a month after. The Maltese easily defend themselves from the annoyance and bitings of this insect, keeping them out of their beds by large linen curtains lapping over one another. At first we were not aware of the trouble these animals were like to give us, and left our curtains open.

From Malta we returned the same way to Messina; staying a day at Catania; where we hired horses and took a soldier to guide us up Mount Etna, now called Mon-Ghibello. The top of which at Catania was told us to be 30 miles distant. We ascended for the most part all along from Catania, and we found the ground rich, and well cultivated, and the country well inhabited; for the flag and cinders cast out of the mountain, being in process of time dissoved by the weather, doth mightilyatten and enrich the soil. We rode up so high till we came to the conservatories of snow; and seeing the mountain
Observations about the inhabitants and customs of Sicily.

Observations about the inhabitants and customs of Sicily.

Observe above us all covered with snow, we did not, nor indeed could we ascend any higher. The trees hereabout had at this time scarce put out their leaves. As we went up we found in one place the ground cover'd for a quarter of a mile broad, and four or five miles in length, with cinders, which had been thrown forth by the mountain, and was certainly the relique of a huge stream of melted coals, iron, stones, and sulphur poured out in the time of the last eruption, nothing as yet growing among these stones and cinders. This mountain hath in former times thrown forth stones and flag as far as Catania itself, as we could manifestly see; but of all the eruptions that ever were I believe this last which happen'd [Anno 1669.] since our being there, was the greatest and most horrid; for a full description and exact account whereof I refer the reader to Borellus's learned treatise De Incendiiis Ætnae. This mountain is of a very great height, and we were told by credible persons, that one might see it at sea over the whole island any way one came thither. We could clearly discern the top of it as far as the island of Malta, which, in a right line, must needs be at least 100 miles distant. One thing we could not but wonder at, that there should be a ring of snow about the top of Ætna, but the highest top itself bare, without any snow upon it.

The inhabitants of Sicily are noted for churlish and uncivile to strangers, and I think not undeservedly. The Italians have a proverb, Omnes insulani mali, Sicilian autem pessimi. All islanders are bad, but the Sicilians worst of all. This island is confessedly a very ill place to travel in, by reason of the robbers and Banditti wherewith it is infested, thanks to the good government, which takes no more care to cleanse it of such vermin. These bandits will not be content with your money, but will also seize your person, and detain you prisoner in the mountains till you give them a good ransom for your deliverance.

We took notice of some laws and customs, proper to Sicily, during our stay here.

1. It is unlawful to carry out of this island in money more than ten crowns a person; if any one carries out more and be taken, all is forfeited. But the searchers are not
not so strict, but that if you give them a little money they will let you pass, especially if you be a stranger and traveller, without any searching at all.

2. It is unlawful to kill any calves in this island, so that no veal can be procured here. And yet at Malta they have veal enough, transported hence by stealth.

3. It is unlawful to take above one ounce of silver without weighing of it; so that if you buy any thing which comes to more, though your money be never so good, you shall see them pro forma put it in their scales.

4. No person under age [imberbis juvenis] may be received at any time in Sicily, unless he hath a patent and license to travel.

5. It is prohibited under pain of death to any man to carry pistols about him; but long guns they may and do all carry. The reason is because a pistol may easily be hid, and some murthered unawares.

6. All the money current in Sicily is coined at Messina.

After our return to Messina, May 27. We passed by boat over the Fretum to see Rhegio or Rhezo, ancient Rhegium, an old city, but now very mean and poor. All they have to boast of at present is their gardens well stowed with all sorts of the best fruits; their silk, of which plenty is made here and (if we may believe themselves) the best in Italy or Sicily: and St. Paul's pillar which burned, of which they have but a small fragment remaining. They told us many stories and legends of it, which we gave little heed to.

We rook boat and went as far as Scylla, to see the fishing of the Fesse Spada or sword-fish. The man-

The manner whereof is thus. On the top of cliffs by the seafarer of fide stand Speculatores (Huers our fisher-men call them) catching to espy the fish, who so soon as they see them, either by voice if they be near, or by known signs if at distance, give notice to the fishing-boats whereabouts the fish are. The boat presently makes towards the place; then one gets up to the top of a little mast in the boat, made with steps on purpose, and there stands to observe the motion of the fish and direct the rowers, who accordingly ply their oars. When they are come very near one, he upon the mast comes down, and taking the
the harping iron in his hand, if he can, strikes it into him. The fish, being wounded, plays up and down and wearies himself, and when he is faint and spent they draw him up into the boat: this is much like the whale-fishing. The harping iron is put on a staff or pole of wood. The point of it is sharp and hath beards on each side like a barbed arrow, so jointed that if you hold the point upward they clap close to the shaft, if downward they fall off from it on each side, so that they resist not the going in of the iron but only the drawing out. This fish is held a great dainty by the Messanese, as much longed for and as greedily bought up by them as Soland geese by the Scots; sold in Messina at first coming in for six pence English the pound. In May and the beginning of June it is taken on the coast of Calabria; about the latter end of June it comes over to the Sicilian side, and is taken about the Faro till August. There, because there be no rocks or cliffs hanging over the sea, they prepare a large boat or brigandine, and pitch up in it a tall mast with shores like the mast of a ship, on the top of which the Speculator or huer stands.

In the beginning of June yearly is celebrated at Messina a great festival called the feast of our Lady of the letter: it continues near a week’s time with great solemnity. During this time all the house-keepers hang out in all the streets a multitude of lamps, candles, and tapers, and set their windows as full of lights in paper-lanterns as they can hold, which burn all night, so that the streets are as lightsome almost by night as by day. Nay, the light was so great, that at a good distance from the town, as we came thither late at night, the reflexion thereof from the clouds and atmosphere appeared to us like the Aurora or Crepusculum, though we saw not the lights themselves, and it was no dark night, the moon as I remember shining. They call it the feast of our Lady of the letter, because it is held in memory of a letter written to them (as they say) by the Virgin Mary; which how silly and ungrounded a fiction it is, the pretended letter itself (of which also they confess themselves
Maria virgo Joachim filia Dei humilissima, Christi Jesu crucifixi mater, ex tribu Juda, stirpe David Messia- nensiibus omnibus salutem & Dei patris omnipotentis benedicitionem.

Vos omnes sive magnâ legatos ac nuncios per publicum documentum ad nos missse coniicat: Filium nostrum Dei genitum Deum & hominem esse fememini; & in coelum post suam resurrectionem ascendiisse, Pauli Apostoli electi prædicatione medianté viam veritatis agnostiçentes. Ob quod vos & ipsâm civitatem benedicimus, cujus perpetuum proteccionem nos esse volumus. Anno Filii nostri XII. Indicet. I. III Nonas Junei, Luna XXVII, Feria V. Ex Hierosolymis Maria virgo quæ supra hoc chirographum approbavit.

We departed from Messina, taking a Feluca for Na-June 6. ples. The first night we lodged at Tropia, a small town Tropia, in Calabria about 60 miles distant from Messina. Here we observed growing on the rocks near the town Zizi- phus fructu fruenda. Park. Conyza minor vera Ger. Androscæmum fasidum Park. i. e. Trogium; besides many others which we had before found in Sicily.

The second night we lay at St. Lucido, where we also observed the wild Fufube.

The third night we lay at Porto Nicolo, a little creek or cove not far from Scalea, where there is a small castle. Scalea. Here and at Scalea we observed the common Cypress tree; Lamium pergrinum fructu Scutellaria C. B. Rosmarini- num vulgare, quod in toto hoc litore in ripibus copiosè provenit: Sabina baccifera, called also Cedrus Lycia re- tusa Bellonii; Chondrilla rara purpurea, Crupina Belgari- num dista Park. Meun alterum Italicum quibusdam J. B. Caryophillus maximus ruber; the largest and fairest flowered wild Pink or July-flower, which I have any where seen, on the rocks at Scalea; Caryophyllus gramineo folio minimus; a sort of small Scorzonera, or Goat's-beard, Facea incana, tenuiter laciniata, capitulis Faceæ nigrae vulgæ-
Observations Topographical

This was afterward swewed us dried by Joan. Maria Ferro, an apothecary in Venice, to whom it was sent by the name of Perichymenun: Myrtus communis Italica C. B. Auricula urst; which we wonder'd to find here upon the rocks, being an Alpine plant, and which delights in colder places. Cusia poetica Lob. Not to mention Ferula equinum filica singulari C. B. Acanthium Illyricum; Polium monanthum album C. B. and some sorts of Securidaca, common elsewhere in Italy. Here also I first found that species of Campanula, which I have denominated minor, folio rotundo, flore ceruleo pentagono grandi. It hath a leaf like to the common Campanula minor rotundifolia, sometimes rough and hairy, sometimes smooth. Agnus castus in toto hoc litore in arenosis frequentissimus est.

The fourth night at a little place call'd Chlupo.

We lodg'd at Salerno, where we quitted our boat, and spent one day. Salerno, tho' the see of an archbishoprick, is at present but a mean city, having narrow streets. Whatever there hath been formerly, there is now neither university nor Schola Illustris in it, that we could hear of: scarce any footsteps of the old school remaining. In the cathedral church dedicated to St. Matthew, we observed the monuments of the famous Hildebrand, Hildebrand the Germans call him, the great introducer of the celibate of priests, and opposer of the Emperor, called Pope Gregory the VII. In the porch before the church lie many ancient Roman grave-stones, with inscriptions. As for plants we here noted, Barba Jovis frutex, on the rocks plentifully; Satureia durior J. B. Laurus Tinus caerulea bacca Lob. Cytisus glaber filica lata J. B. on the rocks, which plant it was not my hap to meet withal growing wild, any where else beyond the seas: Colutea minima five Coronilla Ger. Melissa syvostris birsator & minus odorata; Echium majus & asperius flore albo C. B. Thlaspi Candia Ger. Lamium peregirnum five Scutellaria; Sorbus domestica Lob. Peucedani facie pudilla planta Lob. Lotus arbor; Staphyloendron; Colus Jovis; Besides these many before set down, found in Sicily and other parts of Italy, viz. Antirrhinum majus purpureum; Lentiscus; Alaternus; Conyza major Monspeliensis odorata.
Morale, and Physiological.

odorata J. B. Ricinus five Palma Chriji; Scrophularia Ruta canina dicta; Stoechas citrina angustifolia; Genista Hispanica; Tithymalus arboreus Park. Valeriana rubra Dod. Ilex arborea J. B. Capparis; Scorpioides Bupleuri folio; Chrysanthemum Bellidis folio Hort. Pat. Teucrium majus vulgare Park. Colutea scorpioides; Chrysocomae capitulis conglobatis Ger. Caprificus; Trifolium bituminosum; Meum alterumItalicum; Cyclamen hederæ folio; Periclymenum persoliatum calidarum regionum Lob. Anagryis fætida; Smilax aspera; Asparagus sylvæstris five Corruda; Acanthus sativus; Dorycnium Montesellanum fruticosum J. B. Trifolium album rectum hirsutum valde J. B. Telephium scorpioides Ang. Lob. Martagon Chymiflarum Lob. Geranium Romanum versicolor five striatum Park. Monte Angelo, a mountain near this town, is a place noted for for variety of plants, but we had not time to search it.

From Salerno we travel’d by land to Naples, passing through La Cava, a pretty town, having portico’s on each side the streets; and Nocera, both episcopal see; Scafata; Torre d’Annunciata; Torre di Creco, considerable burghs.

We returned back from Naples to Leghorn by water, baulking Rome for the present, being deterr’d from going thither by the general vogue in Italy, that in the summer months, and, till the rains fall, it is very dangerous for him that is in Rome to go out thence, or him that is out to enter in there.

The first night we reach’d no further than Nisita, a little island in the mouth of the bay of Poszuolo, about five miles distant from Naples.

The second day we proceeded as far as Sperlonga, a little short of Terracina, anciently Anxur, about sixty miles.

The third day we pass’d by Monte Circello, or the Promontorium Circeium, where the famous enchantress Circe is reported to have dwelt. This promontory stands out a great way into the sea, so that at a distance we took it for an island. As we were just over-against the utmost point of it, we observ’d a great number of insects very like to Cicadae, and which we have not elsewhere seen, flying about in the air. Our boatmen called them Grönge. Divers of them we caught in our boat;
Observations Topographical.

Cicada; and yet we were at least two leagues distant from land. Possibly they might fly out a great way further to sea; for what reason we cannot easily imagine; perhaps only to sport themselves in the sun. Howbeit we do not remember to have seen any other land-insect falling out so far from land. And now that we have made mention of the Cicada, it may not be amis, by the way, to take notice of a common error committed in our English schools, in translating or rendering this word Cicada in English by Grasshopper, whereas a Cicada is a much different insect, of a rounder and shorter body, that sits commonly upon trees, and makes a noise five times five times louder than a Grasshopper, whose true name in Latin is Locusta, and not Cicada. Of these Cicadae there are great numbers in the hot countries, but none on this side the Alps and Cevennois. This night we lodged at Asiura, where yet remain some ruins of an ancient town, and the foundations of some buildings in the water.

Not far from hence, the fourth day, we passed the new town of Antio, and about a mile distant great ruins of the old town, and of a great mole for the haven; and this night lodg'd at a little tower called St. Michael, near the mouth of the river Tiber, not far from Ostia.

The 5th day we had a favourable gale of wind, which brought us to a little place called St. Stefano, not far from Orbetello. This day we passed in flight of Civita Vecchia and Porto Hercole, compassing Monte Argentario.

The 6th day there happen'd a great Boresto (as they term it) that is, a storm of thunder, lightening, and rain, accompanied with a violent wind, which continued all the forenoon; in the afternoon we rowed about 18 or 20 miles, and put in to a little cove or harbour under a tower called Calo di Fumo. On the sea-shore hereabout we found those opercula concharum, which some naturalists make to be stones, and call Umbilici marii. The Italians call them St. Lucy's eyes.

The 7th day we proceeded as far as the island Troia, when, the wind being contrary, we were forced to take up at a little harbour under the shelter of a small tower called Lo Melino.
The 8th day we pass'd Piombino, a walled town which hath a Prince of its own, Populonia P. Barreto, St. Vincentio, Castagneto, and Vada, and lodged at a tower called Castiglione.

The 9th day it having blown hard all night, notwithstanding there was no wind stirring in the morning, we found the sea very rough, yet, through the good providence of God, we got safe into Leghorn about noon.

The plants we took more especial notice of in this voyage were, Rosmarinum vulgar; Cedrus Lycia folio revutfo Bellonii; Barba Jovis frutex, on the rocks and cliffs by the sea-side in many places: Cruciata marina, on the sands at Aflura plentifully: Thlaspi capsulis sub-longis incanum J. B. ibid. Cichorium verrucarium seve Zacontha, at the mouth of Tiber, and about St. Stefano, plentifully: Lotus filiquosa lutea Monspelienfis J. B. besides another sort of Lotus, with a longer and flenderer seed: Aristilochia clematititis; A semper-virent shrub with a leaf like Oleander; Terebinthus; Paliurus; Thlaspi bicuscatum; Ambrosia vulgaris; which it was not our hap to meet with elsewhere in all our travels; Cirsi quædam species quæ jam defloruerat, at St. Stefano: Chamaæriphes seve Palma humilis about Orbetello and elsewhere on the cliffs of Etruria: Draba quædam filiquosa folis longis angustis incanis; Euphrasia pratensis lutea; Phillyrea angustifolia, in montosis propè maris litus in toto hoc tractu frequen-tissima; Phillyrea ferrata 2 Cluf. Colutea minima seve Coronilla Ger. In rupibus maritimis propè turrim Castig-
OF

FLORENCE.

FROM Leghorn we travelled through Pisa to Florence, a city which answers its name and epithet Fiorenza la Bella, Florence the fair. Yet for beauty in my opinion it must give place to Antwerp and some other cities in the Low Countries, only it excels them in multitude of large stone-palaces, scattered up and down the streets, such as are those of the Grand Duke both the old and the new called the Palazzo de Pitti, because purchased of them; of the Strozzi, the Salvati, &c. Many of the streets are freight, which adds no little to the beauty of them. They are all paved with great broad stones, like Luca or Collen in Germany: yet but narrow as in many other towns of Italy and Gallia Narbonensis to keep off the scorching beams of the sun in summer time, which reflected from these broad stones would else make them more than sufficiently hot. The paper-windows, and they too for the most part broken and tattered, do very much disgrace the fair stone-houses. The river Arno divides this city into two parts, which are joined together by 4 fair stone-bridges; one of which, called Ponte vecchio or the old bridge, hath on each side of it a row of goldsmiths-shops. All of them, but especially the two middlemost, are remarkable for the breadth and flatness of their arches. The circuit of the walls is said to be 6 Italian miles: but therein is comprehended a great deal of waste ground, [I mean not filled up with buildings] the gardens and walls of the Great Dukes's palace being at least a mile in compass; besides, on the other side the river, are some hundreds of acres of land taken up in vineyards and gardens belonging to private persons. The number of parishes
rishes taking in the 12 priorates is 44, the number of inhabitants according to Schottus 85,000 souls, and I believe he exceeds in his account, though some make them 90,000, and others 100,000. There are an incredible number of nunneries: Schottus faith 54; we were told 56; whereas there are but 24 monasteries of friars. But that which is most strange is the multitude of hospitals and alms-houses, of which there are said to be 37: one of which, viz. the Orphanotrophium maintains 900 persons, and hath 70,000 crowns yearly revenue.

This city is of no great strength, being encompassed only with an old-fashioned wall: but the Great Duke hath three castles or citadels in it, I think rather to bridle than defend it; one on the south-side, held by a good garrison, neatly kept and diligently watch'd, wherein are laid up arms for 30,000 men. Another is a small fortress in the Great Duke's garden, to which he may retire in case of any sudden danger or exigent: here they say his treasure, or a good part of it, is kept. The third we viewed not.

The churches in Florence, tho' they be not so richly Churches gilded as some we have seen, yet, for their architecture, in Florence, they excel most, especially the Domo, or church of St. The Domo Maria Florida, which, in some men's opinion, is the completest structure that ever was set upon the earth. The pilasters that support the nave or body of the church stand at so great a distance, and are withal so very slender, that they do not obscure the isles, but at one view you enjoy the whole church. Besides the cupola, tho' the first and pattern of all the rest, is the largest and tallest of any in Italy, excepting that of St. Peter's, in Rome: under which is the choir, of an octagonal figure. The walls of this church are crusted over on the outside with marble of several colours, cut into small pieces and variously chequer'd; which, though the Italians now despise and count but a toy, yet makes a pretty gaudy shew. Within this church, beyond the the choir, are four inscriptions; one concerns the building of the church, and is as follows.
Observations Topographical.

I.

Anno a Christi ortu 1280 Florentini magnis divitiis partis, & rebus domi forisque commodè constitutis cum urbe mænibus auxiissent, pulcherrimisque ædificis publicè decorantes, ut Rem Divinam quoque optimè ordinarent, & posteris insignis magnificentiae ac Religionis suæ exemplum proderent, hoc augustissimum templum in Dei honorem ejusque matris semper Virginis Marie instituerunt, & Pontificio Legato Cardinalis præfecte, primiûque lapidem ponente summa cum omnium laetitia ac devotione incœberunt VI. Id. Septembris.

The second concerns the dedication or consecration of this church by Pope Eugenius IV, and runs thus.

2.

Ob insignem magnificentiam Civitatis & Templi Eugenius PP. IIII. omni solemnitate adhibita dedicavit 25 Martii 1436. Cujus dedicationis gratiæ Pons lignæus insignis magnificentiæ & ornatus usque est ab Ecclesiæ Sanctæ Mariæ Novella ubi PP. inhabitabant usque ad hanc Ecclesiæ, &c.

The third concerns the union of the Greek and Roman churches in these words.

3.

Ad perpetuam rei memoriam;


The fourth concerns the translation or removal of the body of Zenobius from the church of S. Laurence hither by archbishop Andreas his successor.

Some monuments also I observed in this church; the inscriptions whereof they being of considerable persons it may not be amis here to set down. Of Marsilius Ficinus,
Of Jottus a good architect, and the first reviver of painting in Italy; though Vassari in his lives of painters makes Cimabue to have been the first reviver, and to have taught Giotto and others. The verses of his epitaph were made by Ang. Politian, and are as follows.

Ille ego sum per quem Pictura extincta revixit;
Cui quâm rectâ manus tam fuit & facilis.
Naturæ deerat nostræ quod defuit arti;
Plus nulli licuit pingere nec meliùs.
Miraris turrim egregiam sacro ære sonantem:
Hæc quoque ad modulo crevit ad astra meo.
Denique sum Jottus, quid opus fuit ista referre?
Hoc nomen longi carminis inflar erit.

Obiit Anno 1336. Concives posuere B. M. 1490.

Of Philippo Brunelleschi, a famous architect, who designed the cupola of this church, and also that of St. Lawrence's,

Quantum Philippus Architectus arte Dædalea valuerit
cum hujus celeberrimi templi mira testudo, tum plures
machineæ divino ingenio ab eo adinventæ documento
esse possunt. Quapropter ob eximias animi sui dotes
singularisque virtutes XV. Kal. Maias 1446. ejus
B. M. corpus in hac humo supposita grata Patriæ
sepeliri suffit.
Observations Topographical.

In this church on the north wall is the picture of an English knight on horseback; Joannes Acutus they write him, and therefore some think that his name was Sir John Sharp; I incline rather to their opinion who suppose his name to have been Sir John Hawkwood, especially seeing Guicciardine writes him Acutus and not Acutus. Whatever his name were he was a valiant man and an eminent captain.

Here is also a painted table hung up in memory of Dante, the famous Italian poet, who was native of this city, but lived in exile and was buried at Ravenna. On the frame of this table are these verses inscribed,

Quae cœlim cecinit mediumque imumque tribunal,
Lufravitque animo cuncta poeta sio,
Dextis adei Dantes, sua quem Florentia sepe
Senit confiis ac pietate patrem.
Nil potuit tanto mors seca nocere poeta,
Quem vivum virtus, carmen, imago facit.

The in the church of Santa Croce is the monument of Michael Angelo Buonarota, the famous architect, sculptor, and painter. Above stands his effigies; and under that is a coffin, and under the coffin three statues sitting of rare workmanship, worth their weight in silver, which signify painting, sculpture, and architecture. Below this inscription,

Michaeli Angelo Bonarotio,
E vetusta Simoniorum familia,
Sculptori, Pictori & Architecito,
Famâ omnibus notissimo.
Leonardus patruo amantissimo & de se optimè merito
translatis Rondâ ejus officius; atque in hoc templo
Major. suor. Sepulchro conditis, cobortante Sereniss.
Cosimo Med. Magno Etruriae Duce P. C. Anno
Sal. ccc to Lxx.

In the church of the Annunziata besides several others is the monument of John Bologna, a man well known in Italy. It stands in a chapel behind the choir built by himself, and is thus inscribed,

Johannes
In the church of St. Mark is a small monument for a great person, viz. Joannes Picus Mirandulanus, with this inscription.


In the church of St. Mark is a monument for a great person, viz. Joannes Picus Mirandulanus, with this inscription.

Johannes j acet h ic Mirandula, cætera norunt
Et Tagus & Ganges, forfan & Antipodes.
Ob. An. Sal. MCCCCLXXIII, vixit An. XXXII.

Hieronymus Benivenius, nè disjunctus post mortem locus
ossa separet quorum animos in vita conjunxit amor.
bac humo supposita poni curavit.
Ob. An. MDXXXII. vixit An. LXXXIX. Men. VI.

In the cloister of St. Laurence by the church door is the monument of Paulus Jovius thus inscribed,

Paulo Jovio Novocomensi Episc. Nucerino
Historiarum sui temporis Scriptori
Sepulchrum quod sibi testamento decreverat
Posteri ejus integra fide posuerunt;
Indulgencia maximorum optimorumque Gosmi
Et Francisci Etruriae Ducum.
Anno MDLXXXIII.

In the Baptisterium or church of St. John, supposed to have been anciently a temple of Mars; of an octagonal figure, and having three pair of brass doors artificially cast or engraved with curious figures in metto relief, is a fair monument of Pope John XXIII, who was deposed in the council of Constance, with this inscription,

Johannes quondam Papa XXIII us obiit Florentiae Anno
Domini MCCCCXVIII. XI. Kalendas Januarii.
Observations Topographical,

In the church of St. Laurence are interred several of the Great Duke's family. And to this church belongs the famous chapel of St. Lorenzo, built by the Great Dukes, which, when finished, is like to be, for its bigness, the most sumptuous, rich, and magnificent structure in the world. This chapel is of an octagonal figure, and the roof of it a large cupola. The inside of it is incrusted over with several sorts of precious stones, I may call them, for they are all above the rate of marble, viz. jasper of several kinds and colours, agate, Lapis Lazuli, touchstone, &c. all polished and resplendent, inlaid and wrought into various figures. Of this octagon one side is left void for the high altar, for which there is a sumptuous tabernacle preparing, that now stands in the Great Duke's gallery. The side opposite to the altar is for the door. On the rest of the sides are to be placed statues and monuments for such as have been Great Dukes. The first, beginning on the left hand as you enter in, intended (as we conjectured) for Alexander, who was only Duke of Florence, is not yet made up. The rest have on the top the names, and underneath, in a niche, the effigies of the Great Dukes, some in stone, and some in brass, under that a coffin or cushion with a ducal crown lying upon it, and nethermost an inscription in this order,

Franciscus Mag. Dux Etruriae II. vixit ann. XLVI. ob. XIX Octob. ClhylLXXXVII.
Cosmus Mag. Dux Etr. I. vixit ann. LV. ob. XI Kal. Maii ClhylLXXIII.
Ferdinandus Mag. Dux Etr. III. vixit ann. LX. ob. VII Id. Febr. ClhylGIX.
Cosmus Magn. Dux Etr. IV. vixit. ann. XXX. obiit XXVIII Febr. ClhylCXX.

So there is one side more remaining for Ferdinand II. the fifth Great Duke, who is dead since our being there; the present Great Duke's name being Cosmus III.

Between the monuments of Duke and Duke are the arms of two of the cities subject to the Great Duke, the names whereof are these, Monte Pulciano, Borgo San Sepolcro, Cortona, Volterra, Aronzo, Pistoia, Pisa, Florence.
I shall enlarge no farther concerning the churches, towers, pillars, fountains, statues of brass and stone, and pictures, of which there are a great number in this city, and of excellent workmanship: only I cannot omit to mention two Statuae equesires in brass, much greater than the life; one of Cosmus I. upon the great piazza: the other of Ferdinand I. in the piazza of the Annunciata, erected by Ferdinand II.

The Great Duke’s gallery is in the old palace, a Thegaller handfome pile of building. Under ground, as it were, of the in cellars, are the stables; above them fair portico’s or Gr. Duke. cloifters to walk in. Above the portico’s are shops for all manner of artificers to work in for the Great Duke. The uppermost story is the gallery properly so called; where, in an open walk free for any man to come into, stand many ancient, and some also modern statues. Round about on each side this walk, hang the pictures of many Princes and other persons, who have been famous in the world for learning or valour. Among the rest we noted the pictures of of Queen Elizabeth, King James, Oliver Cromwel, and Johannes Acutus, before remember’d.

The chief rarities are lock’d up in closets, of which we saw four. The things which in our tranfient view we took more efspecial notice of were, a huge terrestrial globe, and a Sphæra armillaris bigger than that. A branch’d candlestick including many little figures of ivory, or white wax appearing thro’ the transparent amber: an engine counterfeiting a perpetual motion, like those of Septalius at Milan. Several stone-tables, so curiously inlaid with small pieces of precious stones of divers colours, as to compose figures of plants, fruits, and flowers, birds, beasts, and insects, so natural and to the life, that scarce any picture drawn by the hand can excel them. One of these, the best and richest that we have any where seen, both for the excellency of the workmanship, and cofflines of the materials, being fet with many rubies and pearls, they valued at 10000 Florence Scudi, which is more than fo many English crowns. Several rich cabinets. That of the greatest value, which they rated at
Observations Topographical.

at 500000 Scudi, was rich set with gems of the first magnitude; a pearl of an enormous greatness, but not perfectly round; several topazes almost as big as walnuts, large rubies and emeralds, besides other stones of inferior note, studs of amethyst, &c. Here we also saw the nail, pretended to be one continued body, half iron, half gold, part of the iron having been turned into gold by one Thurnhauserus, an alchymist of Basil, before-mentioned. To us it seem'd counterfeit, and not neatly neither, the iron and the gold being but bunglingly joined together. A large topaz as big as a puller's egg, An entire image made of one Turqueis stone: many ancient Roman idols of brass; old Roman lamps found in sepulchres, of several fashions: a press full of turn'd work of ivory, very fine and subtile: rhinoceros horns, &c. I omit several pictures and statues wherewith the rooms were adorned, made by the best masters, and much esteemed by those that have judgment in such things.

In the armory we saw several remarkables, as the armour of many great persons of Europe, among others of Henry IV. King of France, and Charles V. Emperor: Hannibal's head-piece (as they called it) it had engraven on it many ancient Morefco characters: a suit of Persian armour for a man on horse-back, made of little scales of iron. A loadstone, having its poles at the greatest distance I ever saw any: several Indian royal vests, made of feathers. Five great swords, such as the Pope uses to bless on Christmas day, and send to Princes. A King of China's armour made of fish-bones, and a wooden sword. This sure they mistook for an Indian King's, the Chinese having of a long time had the use both of iron and guns: Japan arms and swords without point, and broad at the top. Divers Turkish scymitars; Scanderbeg's sword: the hair of a horfe's mane, seven yards in length; the skin of this horfe stuffed up, sent by the Duke of Lorrain: several conceited guns: piftols, on whose muzzles were screw'd the heads of halberds, or pole-axes. Nine piftol-barrels so laid on a frame, that by letting down one cock they were all discharged, making eighteen shot, for each is double charged, and a train of powder leads from the touch-hole.
hole of the middlemost, to the touch-holes of all the rest, in channels made for that purpose. An engine made like a hat, with several pistols in the crown; this they called the *bona notte*, being to be discharged upon your enemy when you compliment him, and bid him good-night: a long gun, and also a pistol, whose barrels are of beaten gold. Several round bucklers, one with *Medusa's* head painted on it by *Michael Angelo*, an highly esteemed piece. Italian locks for suspected wives: ancient *Balaistae* (as they called them) which are no other than great cross-bows. A thong cut out of the hide of a buffalo, 250 yards long. A press full of rich prizes of arms taken from the Turks.

In the *Argenteria*, or wardrobe, we saw several presses, the *Ar- or cupboards* [twelve in number] full of rich plate. *In genteria* or one, all manner of vessels of beaten gold. In another, a sumptuous altar of the same metal (as they told us) set with diamonds and other precious stones of the highest value. On it was inscribed in great capitals (the letters all made up of rubies) *Cosmus II. Dei gratia magnus Dux Etruriae ex voto.*

In some by-rooms we saw the skin of a *moerse*, or sea-horse, stuffed; the skin of an *elk* stuffed; the skin and skeleton of an elephant, which was shewn in *Florence* some eight or ten years ago, and died there.

I might spend many words in describing the *Great Duke's* new palace and gardens, flored with great variety of trees and shrubs, valuable for shade, beauty, fruit, or scent; adorned with a multitude of statues thick set up and down the walls and knots: pleasant fountains and water-works; stately and delicious walks both close and open; goodly flowers and choice plants. We took notice of *Disfammus Creticus*, *Quamoclit Indorum*; *Tragoricanum*; *Stramonium peregrinum* Ger. i. e. *pomspinoserundum*; *Pisum cardatum*, *Balsamina cucumerina*, *Chamaerhiphes*, &c. Here, in an inclosed place were kept two male ostriches, and one female.

In the duke's *Theriotrophium* we observed these sorts of wild beasts, *lion*, *tiger*, *leopard*, *bear*, *wolf*, *porcupine*, *wild boar*. The snout of this was longer in proportion than that of tame or domestic swine: the ears rounder and shorter and of a black colour, as were also the
the feet and tail. These wild swine are constantly of the same colour, which is a grisly or iron-grey. It's worth the observation that most wild animals keep to the same colour both beasts and birds; but those that are kept tame vary infinitely, which is (I suppose) to be attributed partly to the variety of their food, and partly to the highness of their feeding; to which the difference of the climate and soil may contribute something. So we see that upon the Alps and other high mountains covered for the most part with snow, several animals, as bears, foxes, hares, partridges, &c. change their natural colours, and become white, by reason of the coldness of those mountains, or of the constant intuition of snow.

In Florence many of the palaces are made of great, rough hewn stones, not laid smooth, but each protuberating above the superficies of the wall: which fashion of building the Italians call maniera rysftica.

This city at present is rather in a decaying than thriving condition, there having not been (as we were credibly informed) a new house built there these forty years: the citizens generally being but poor. This comes to pass partly by the great decay of their trade; for whereas formerly they served France with silks, now the French themselves work them as well or better than they; partly by reason of the great exactions of the Great Duke, who lays immoderate gabels upon all commodities that are bought and sold. The greatest foreign trade they have at present is with our nation; and that is not much, we having most of our silk from Messina, Aleppo, and other places in the Levant and working it at home. This city is well situate in a good air, only somewhat sharp in winter time; the inhabitants are ingenious and quick-witted. It hath bred more excellent painters, sculptors, and architects than any one city in Italy besides: and for scholars and great wits it may vie with most.

It's the fashion here for gentlemen to sell their own wine by retail. Yet no body goes into the palace to drink; but there is a hole made in the cellar or buttery-wall, to give in and take out flasks or other vessels; and there is a servant attending for the most part so long as there is wine to
to fell. At the palace gate or wall they usually hang up the hackles of old flasks to give notice that there is wine to be sold there.

The gentlemen think it a disparagement to them to practise physic; so that none of them bring up their children to the study of medicine; but they think it no disparagement to exercise merchandize; and for this they have the example of the Great Duke himself, who is the greatest merchant in Europe; nay Leti faith, that it is reported, he trades for more than all the merchants in Genoa.

The Great Duke is both here and in all his dominions supreme and absolute lord, and may pro arbitrio impose what taxes and gabels he pleases; and therein he is not sparing. Every house pays to him the tenth of its yearly rent. No house or land sold but a good part of the price (at least one tenth) goes to him. No women married but he hath 8 per cent. of her portion. Every one that goes to law pays 2 per cent. of what he sues for. Every young heifer that is sold pays a crown; not so much as a basket of eggs comes to market but it pays something for toll. So that his revenue must needs be great: some pays a million and half, others two millions of crowns yearly. His expences amount not to one million; and consequently, considering also the income of his trading, he must needs have an immense treasure; by Leti's reckoning more than 60 millions of crowns; but it's well if it amounts to half that sum. And though some at Florence would have persuaded us that the world was mistaken in this opinion of his great riches, yet we saw good reason to continue in that belief; he using all ways of thrift and sparing as well as getting; keeping no house but allowing his servants board-wages, and being at a set rate with his cook, and his baker, who for the monopoly of fine bread (Pane di bocca they call it) furnisheth his private table, and pays 1000 Scudi per annum besides. Moreover it was a maxim with him, that a good treasure of money is the greatest strength and security of a Prince, and he would often say of our late King Charles I. that want of money ruined him, and therefore it may well be presumed himself would take care to fill his coffers with that.
Observations Topographical

Besides the territories of Florence and Pisa, called the old state, of which he is absolute lord and sovereign; and the territory of Siena, called the new state, for which he is feudatory of the King of Spain, he is also possessed of part of the isle of Elba, which he holds of Spain, part of Graffignana, bought of the marquesses Malaspina; the earldom of St. Florent, purchased of the Strazzu; the marquise of Scanzano, and the earldom of Pitigliano and Sorano formerly belonging to the Ursini, and some other small places, for all which he is feudatory of the Emperor. Radicofani in Tuscany, and Borgo San Sepolcro in Umbria, for which he is feudatory of the Pope.

His citadels and fortresses, especially those on the borders, are thought to be the best fortified and provided with ammunition and victuals of any in Europe; for the guard of which he keeps four or five thousand soldiers in constant pay. The three principal offices of trust are the governors of Siena, of Leghorn, and Petigliano. He hath always about his person a guard of German soldiers. He is able to send into the field 40,000 footmen and 3,000 horsemen. Let it be said, that he hath 40,000 footmen enrolled, who are obliged to stand ready at every call; and 1,000 horsemen lifted and divided into 12 companies, and these last have the privilege not to be imprisoned for debt. He can also put forth to sea upon occasion twelve galleys, two galleasses, and twenty ships of war.

He entertains and diverts the citizens of Florence in summer-time with sports and shows, especially races for prizes (Pallio’s they call them) sometimes Barbary horses, sometimes ordinary horses running through one of the streets of the town (which thence they call the Curfo) without any riders. To make them go, they fasten little flaps of leather fluck with prickles upon their backs.

The great Duke holds good correspondence and amity with all Christian Princes and States; except the Pope upon account of Borgo San Sepolcro, to which the Pope pretends; the marquise of Monte feltre, to which the Duke hath some pretensions in right of his wife, who was heiress to the late Duke of Urbino; and the business of Castro:] and the Duke of Savoy, between whom and him there hath been an antient emulation about precedence.
The Duke hath the nomination of the bishops and governors of all the cities in his dominions.

The ecclesiastical revenues of the Duke’s whole state, according to a survey taken in the year 1645, were found to be 765,000 Scudi or crowns per ann. For this Leti is my Author.

The family of the Medici have had two Dukes besides those of Tuscany, viz. William Duke of Nevers and Lawrence Duke of Urbino; two Arch-duchesses married to them, viz. Joan daughter of the Emperor Ferdinand I, wife of Francis I; and Mary daughter of Ferdinand II, wife of Cosmus II: four Popes, viz. Leo X, Clement VII, Pius IV, and Leo XI: two Queens of France, viz. Katherine wife of Henry II, and Mary wife of Henry IV, mother to our late Queen-mother, who died in Colleen 1640. Their greatness began to exceed the measure of other families (faith my Author) by the death of Pope John XXIII, deposed in the council of Constance in the year 1414, who died in the house of John Medices, and made him his heir.

The gentlemen and citizens of quality keep not their daughters at home after they be eight or ten years of age, but put them into nunneries, where they are bred and taught all manner of women’s work. Out thence they come not till they be married. He that makes love to any of them may with the parents consent see and speak with them at the grate of the nunnery. This is not only a secure but also a cheap way to bring up their daughters. For they pay not to the house above sixteen pounds a year for diet and all.

About Florence we observed very few plants but what we had before met withal in other places. Those we noted were Carduus chrysanthemeus Narbonensis Ger. Acmna flor purpurana-rubente patulo C. B. Echium majus & asperius flore albo C. B. Carduus fallitlialis Ger. Atraclylis; Conyza major Monspelienensis odorata J. B. Galega; Scrophularia, Ruta canina diëta; Lotus pentaphyllus filtequus, villosus C. B. After luteus foliiis ad florem rigidis C. B. Iberis J. B. Juncus acutus maritimus capitulis rotundis C. B. Ageratum vulgare; Stoechas citrina angustifolia; Sideritis vulgaris Ger. Nigella arvensis Park. Satureia aëriva hortensis Ger. Scorpioides Telephium Ang. Lob. Pallerina Tраги J. B.
Observations Topographical,

Globularia Monspeliensis; Melilotus major flore albo; Chrysanthemum Bellidis flore Hort. Pat. Medica orbiculata J. B. Solanum vulgare fructu luteo; Melisfa vulgaris; Chondrilla juncea Ger. Chamaeyce; Steebe caliculis argenteis C. B. Ifcbæmon vulgare; Gramen daityloides radice repente Ger. Bupthalmum vulgare Ger. Buglossium anguifolium Lob. Botrys; Psyllium vulgare; Cichorium verrucarum flore Zacynthia; Scordium; Xeranthemum; Kali spinescum, so far from the sea. Gramen supinum aculeatum J. B. Gramen am eros dictum; duæ varietates. Iris floribus albis in muis urbis copiosissimè, unde Florentina denominatur. In collibus urbi vicinis, Arbutter; Laurus; Lotus arbor; Cyclamen folio anguloso J. B. Phillyrea serrata 2 Cluf. Erica arborescens Monspeliensis, flore purpurascente, ramulis ternis J. B. Satureia S. juliani J. B. Ciftus fœminæ Ger. Lychnis minima rigida Cherleri J. B. Pyracantha, in sylvosifjusta Arnium; Arifloehia Saracenica Ger. ibid. Gratiola; Celutea vesicaria; Rhamnus 1 Clusi ffo. alo Ger. Digitalis lutea vel pallida parva flore C. B.

The red Florence wine is most commended for a table wine of any in Italy; and doubtless it is most wholesome, and, to them who are used to it, also most gufful and pleasant. It is of a deeper colour than ordinary claret, which is caused by letting it stand longer upon the husks or vinacea before it be pressed. For it is the skin only which gives the tincture, the interior pulp, of the grape being white.

Sept. 1.

We began our journey to Rome. First we passed through Cafliano, a pretty little town eight miles distant from Florence; and when we had proceeded four miles further, we left the ordinary road to Siena by Poggi bonzi (which is the plainer but longer) and rode to St. Bucq, a good large village, and from thence to St. Donato, a poor walled town sixteen miles from Florence, and fourteen from Siena. From St. Donato we rode on to Castellina di Campi five miles further from whence to Siena we had nine miles more; the first four mountainous and stony way, the last five good. All this country we rode through, and generally all Tuscany is mountainous and barren. Yet are not the mountains very high.
About 5 miles from Florence we took notice of the Certosa or Carthusian cloister, seated on a pleasant hill by the way side. We had the prospect of Siena about ten miles before we came at it. Siena is a fair city, some Siena, four miles in compass. The piazza or market-place is compass'd about with good buildings, and, for the figure of it, not unfitly resembled to a cochle or scallop-shell. This fancy had they who paved it, for on one side, viz. that next the palace they have placed the figure of the heel of a cochle-shell made in stone, and from thence have drawn rays or ribs of stone (answering to the ridges or striæ of a cochle-shell) to the edges round. The Domo, or cathedral church, is a stately edifice of marble, having a beautiful front, adorn'd within-side with the heads of all the Popes, placed in the wall, round about the body of the church. Part of this church is paved with marble inlaid, or a more elegant sort of mosaick work, containing part of the History of the Bible, done by Michelino Sane. This pavement is cover'd with a moveable floor of boards to preserve it. Had it been finish'd as intended, all Europe could not have shewn the like; but there is not a fourth part done. The painting of the library walls in this church, containing the history of Aeneas Sylvius, afterwards Pope Pius II. half by the hand of Petrus Peruginus, and half by Raphael Urbin, is, in my judgment, the most excellent painting that ever I beheld, and so fresh and lively as if it had been done but yesterday. Here are also other good churches and handsome palaces. We ascended the tower called Torre di mangio, from whence we had a fair prospect of the whole city, which runs out into three angles. The walls inclose much void ground, which is made use of for gardens and vineyards. All the streets and Piazza are paved with brick set edge-ways, after the manner of Venice, and the sides of the streets of the Holland towns. The whole town is well built, and situate upon a hill, and by that means always clean. They here make no use of snow or ice to cool or refresh their wines, their cellars keeping it cool enough. In the palace of the Podesta we saw a room, the walls and roof whereof were painted by Michelino Sane, valued at more than the whole palace besides. We took notice.
Observations Topographical,

notice also of the theatre for comedies, a fair brick building; and the Studium, called the Sapienza, where are the publick schools, a mean building, much like that of Pisa. This city is counted a very good place to sojourn in for a stranger that would learn Italian, as well because the citizens here speak the purest language, as for that they are very civil and courteous to foreigners. Besides, by reason of its situation, the air is temperate even in summer-time; provisions also are reasonable.

Sept. 3.

We travell’d to Radicofani 34 miles, passing through Lucignano, a post-village, and in sight of Cena a village on a hill; also a little wall’d town call’d Buen-convento, then Tornieri, a post-village, and lastly, St. Quiricho, i. e. S. Cyriaci oppidum. Which so soon as I had pass’d, I found great store of lavender-cotton, which grew all along by the way-side. There grew also all this day’s journey in great plenty, Absinthium Romanum Cæs. Between St. Quiricho and Radicofani Cinara sylv. and two other species of thistle, one I guess’d to be Carduus tomentosus Lob. the other I knew not; Arcana flore purpureo-rubente patulo; Veronica spicata caerulea; Winter Savory; After lutes Linariae folio; Colchicum cover’d all the pastures. Between St. Quiricho and Radicofani we pass’d no considerable town or village. All the country we rode through this day is mountainous and barren, very little wood growing on the ground. Radicofani, being a frontier, is strongly fortify’d, and held with a garrison of 300 soldiers by the Great Duke. This Radicofani is setuate upon a high hill, so that one may see it going or coming 12 or 14 miles.

We travell’d from Radicofani to Viterbo 38 miles. About 10 miles from Radicofani we pass’d over a small river called at a place called Ponte Argentino, which divides the State of the Great Duke and of the Pope.

It is to be noted, that in all this country the towns and villages are generally set upon the tops of hills, for coolness, I suppose. We observed also, that the country subject to the Great Duke, at least that part we travell’d this voyage, was craggy and bare of trees, and seem’d to us to be dry, parch’d, and barren land. But so soon
as we came into the Ecclesiastical State the world was well amended; for the hills were for the most part cover'd with trees, and the vallies very fruitful. Fourteen miles from Radicofani we paffed Aqua-pendente, a large old town, ex re nomen babens, for it stands upon the brow of a hill from which the water falls perpendicularly. Then we paffed St. Lorenzo, a little town on the edge of the lake of Volfinii, now called Bolfè, and rode along the brink of the lake five miles to Bolfè. From Bolfè we mounted up to Monte Fiafcone, where we tasted the so much celebrated wine; and, after eight miles further riding over a spacious and fruitful plain, arrived at Viterbo.

We rode to Baceano 22 miles from Viterbo, paffing Sept. 5, through Ronciglione a pretty town belonging to the state of Castro. In the woods we travelled through this day upon the mountains near Viterbo, we found many rare plants, v. g Carduus globosus Ger. Viola matronalis; Casta poetica Lob. Cerrus minore glande Ger. Orobus sylvaticus viciæ folis C. B. Cyclaminus folio anguloso J. B. plentifully in all the woods between Viterbo and Rome: Mespilus vulgaris; Hesperis sylvstris laitfolia, flore parvo albo Park. Thlaspi Candæ Ger. Lamium scutellaria dic-tum; Sorbus; Linaria major purpurea; Blattaria lutea; Cytisus cortice cinereo aut albido, siliquis birfutis. We cannot yet certainly determine what this plant is called by botanic writers. Plumbago Plinia at Bolsena and about Rome plentifully by the way sides; Polygonum vel Linifolia per terram sparsa flore Scorpioidis J. B. Helleborus niger hortensis flore viridi J. B. in vepretis montefs paffim.

We travelled from Baceano to Rome 16 miles. From a mountain we paffed over not far from Baceano we had a wide prospect of the Campania of Rome, which, being covered over with a thick mist, appeared to us (looking down upon it from the clear sky above) like a huge lake.
lake of water, nor could we have persuaded ourselves otherwise, had we not before observed the like Phænomenon in some places of England. About 3 miles short of Rome we pass'd by an ancient monument like to those we had observed at Modena, which they call the sepulchre of Nero; and, somewhat more than a mile before we enter'd the city, we pass'd over the Tiber by the Ponte Molle, anciently Pons Micius; and came upon the Via Flaminia, a strait paved way having Ville and gardens on either side it, which brought us to the gate called Porta del Popolo, whereat we enter'd the city.
O F R O M E.

O F R O M E both ancient and modern, though more might be said than of any city in the world, yet because so much hath been written by others both in Latin and English, I shall be very brief, it being needless to trouble the world with what hath been already published in other books.

The most remarkable antiquities to be seen in Rome are some ruins and remainders of Heathenish Temples, Theatres and Amphitheatres, Circi, Baths, Aqueducts, Obelisks, Triumphal Arches, Pillars, Fora, Mausolæa, Statues, Altar-stones, Grave-stones and other stones with inscriptions, Medals, Entaglie or Gems engraven with figures, sacrificing vessels and instruments, Sepulchral urns, Lachrymal urns, ancient Lamps, Weights, Rings, Fibules, and abundance of other implements.

First, for ancient temples the most remarkable that I observed yet remaining, either entire or some parts or ruins of were

1. The Pantheon, now dedicated to the Virgin Mary and All-Saints, and commonly called the Rotunda from its figure. Its height was 144 feet, and its breadth as much. The roof was vaulted in form of a cupola, and all the light it received was by a large round hole of 3 yards diameter just in the top. It had a porch of 16 tall and massive pillars of speckled marble called oriental granite; each pillar being of one entire stone; of which there are at present only 13 remaining. Upon the architrave of the portico is inscribed in large letters.

M. AGRIP-
And underneath that in lesser Letters this,

IMP. CAES. L. SEPTIMIUS. SEVERUS. PIUS.
PERTINAX. ARABICUS. ADIABENICUS.
PARTHICUS. MAXIMUS. PONTIF. MAX.
TRIB. POT. XI. COS. III. P. P. PROCOS,
ET. IMP. CAES. M. AURELIUS. ANTONI-
NUS. PIUS. FOELIX AUG. TRIB. POTEST.
V. COS. PROCOS. PANTHEUM. VETUS-
TATE. CORRUPTUM. CUM. OMNI. CUL-
TU. RESTITUERUNT.

This temple was covered with copper-plates or tiles, 
taken away by Pope Urban VIII; whence that pasqui-
nate, Quod non fecere barbari fecere Barberini. He there-
upon (as was thought) to silence and appease the clamour
of the people, caused thereof to be made the four famous
wreathed pillars and canopy of the high altar in St. Peter's,
church. Of the very nails [clavi trabales] which fastened
the tiles of the portico was cast a great gun of the weight of
2800 pounds now to be seen in the castle of St. Angelo, with
the figure of one of the nails, and an inscription upon it
signifying whereof it was made, viz. Ex clavis trabalibus
Porticus Agrippae. This temple remains still intire, only
despoiled of its ancient statues and ornaments. For here
besides many others was that famous Minerva of Phidias.
When it was first built it had an ascent of seven steps
which encompassed it round, now you descend eleven
steps to go into it: so much is the rubbish and earth
grown up above it. Indeed a great part of old Rome
lies buried under ground in its ruins. One remarkable
thing in this temple they bade us take notice of, which I
find not in books, that is, that the lintel and side-posts of
the great door of this church (which is of a huge height
and breadth for a door) are all of one intire stone; which
we were content to believe rather than put ourselves to the
trouble of examining. In this church is the monument of
Raphael Urbin, whose epitaph (he being so eminent a
person and one that carried on painting to its highest per-
fection) I shall here insert.

Raphael
Raphaeli Sanctio Joan. F. Urbinat.
Pi?tori eminentiss. Veterumque amulo,
Cujus spirtantes prope imagines fi
Contemplere, naturae atque artis foedus
Facile insepexeris.
Julii II & Leonis X Post. maxx. picture
Et Archite^{,} operibus glori{am auxit.
V. A. XXXVII integer integros,
Quo die natus est eo esse defit,
VII. Id. Aprillis MDXX.
Hic situs est Raphael, tinuit quo sepulite vinc
Rerum magna parenz, & moriente mori.

2. Templum Fortunae virilis, according to some; ac-
cording to others Templum Luna, but more probably of
the Sun and Jupiter. It stands by the river side not far
from the broken bridge; is now called St. Maria Egi-
ptiaca, and therein the Armenians have their service.

3. Templum Solis; according to some Templum Vesta;
and to others Templum Herculis Victoris. It stands near
the precedent, and is now called La Madonna del Sole,
or St. Stefano alle carrozze. It is but small, of a round
figure, having a portico, or gallery of ftri^te pillars round
about it. The walls are of stone, and it hath no win-
dows, but receives all its light from a round hole in the
top, like the Rotonda. This and the former remain still
almost intire.

4. Templum Dianae Aventinae, now the church of
St. Sabino. It is large; the walls of brick and the nave
divided from the isles by twelve ftri^te pillars on every
side.

5. Templum Herculis Aventini; now the church of
St. Alexius and Bonifacius; siiuate on the top of the
Aventine mount, not far from the former.

6. Templum Jani quadrifrontis, in the cow-market.
This seems rather to have been an arch than a temple.

7. Templum Concordie, at the foot of Mons Capitolinus,
of which there remains only the portico, having eight
great pillars of marble, most of them of one stone.

8. Templum Saturni, anciently the treasury, now
St. Adrian's church: at the foot of the capitol, near
Severus's
Observations Topographical,

Severus's arch. The frontispiece of this church is a remainder of the old temple.

9. Templum Antonini & Faustina; now St. Lorenzo in Miranda. The portico of this remains still intire with its ancient inscription, and a great part of the walls made of marble square stones. The marble pillars of the porch suffer much by the weather, being of that sort of stone which hath a grain lying one way, and so riving or cleaving like wood.

10. Templum Romuli & Remi, now of St. Cosmo & Dalmiano; little of the old temple remaining: the stones it seems being carried away by Ignatius Loyola for his foundation. There is a concurrent echo, in a cupola you pass under to go into the body of this church.

11. Templum Isidis & Serapidis i.e. Solis & Luna, now St. Maria nuova, near Titus's arch. The present church is not part of the old temple, nor built exactly upon the place where it stood: but behind the cloister are some part of the ruins of the old temple still remaining.

12. Templum Pacis. This was the largest of all the ancient temples in Rome, built by Vespasian. There are yet standing part of three vaults or arches; and the plan of the whole may easily be discerned. The great triate pillar set up before the church of St. Maria maggiore was taken hence, and was one of eight which supported the nave or body of this temple. It is the greatest pillar of one entire stone now remaining in Rome.

13. Templum Jovis Statoris. Of this the three pillars remaining in the Campo vaccino near the Palatine mountain are supposed to have been part.

14. Templum Jovis tonantis. Of this the three pillars almost buried in the earth, on the architrave whereof are these letters ESTITUER, standing on the left hand the elivos as you go up from Severus's arch to the capitol are supposed to have been part.

15. Templum Fauni, now St. Stefano rotundo, a large round fabrick, having two circles of pillars concentrical, the outermost of lesser pillars; the innermost of larger: in the outermost are forty four pillars, in the inner the just half of that number. Besides the pillars of the inner circle stand exactly at the same distance one from another as do those of the outer.

16. Templum
16. Temple of Heracles Callaiici, now Galluzzo. It stands in the vineyards near St. Bibiana; a very tall building of brick not exactly round but decagonal. The roof of it is a vault or cupola not so great as that of the Rotonda, and yet not much less. It had two doors diametrically opposite, and in the other side were eight niches for statues.

17. Temple of Bacchus extra portam Piam, one mile without the city walls: now the church of St. Costanza. This also is a round structure. The walls are of brick, and of a great thickness: within it hath a lesser round, or concentrical circle of twelve large pillars. There stands an ancient monument of porphyry of the fashion of a huge chest or trough, having a stone to cover it. This is curiously engraved with several figures of branches of trees, boys treading of grapes, of birds, &c. They call it the monument of Bacchus. In several places of the roof are to be seen very fresh the pictures of bunches of grapes, and several things belonging to the vintage. The freshness of the colours and rudeness of the figures make me doubt whether this was ancient Roman painting or no.

18. Temple of Solis. Of this there was lately a piece standing in the garden of the Columnæ upon Monte Cavallo, called Frontispicium Neronis and Torre di Nerone by the vulgar. It is now quite thrown down; only there remain in the garden vast marble stones, the greatest that ever I saw, and some of them curiously carved which came from the top of this building.

19. Temple of Romoli & Remi sub monte Palatino, now dedicated to St. Theodore. This is a round brick buildings, into which you descend by many steps as into the Rotonda.

Secondly, For Amphitheatres and Theatres there are yet remaining great ruins of the amphitheatre of Titus now called the Coliseo, round without, and of an oval figure within; capable of 85000 men to sit and see. There are also some footsteps of the amphitheatre of Statilius Taurus, near to the church of St. Croce in Gierusalemme; and lastly, a good part of the walls of the theatre of Marcellus, upon which the Savelli's palace is built.

Thirdly,
Thirdly, Of Circi there is, 1. A good part of that of Antoninus Caracalla, a mile out of the city. 2. Of the Circus maximus there is little remaining; only the fashion of it may be plainly discerned. 3. The Circus Agonalis flood where now is the Piazza Navona. 4. Of the Circus of Nero in Campo Vaticano nothing remains now to be seen; as neither of 5. the Circus Flaminius.

Fourthly, For baths there are great ruins of those of 1. Diocletian, wherein there were seats for 3200 persons to bathe themselves without seeing or hindering one another; in the building of which he is said to have employed 40000 Christians for fifteen years together. 2. Antoninus Caracalla, in which were 1600 seats or closets of polished marble. These were those Thermae in modum Provinciarum extruæ. Besides there are some ruins remaining of 3. The Thermae of Titus. 4. Of Agrippa, near the Rotonda, called Ciambella. 5. Of Constantine near St. Sylvestre's. 6. Of Nero near the church of St. Eufachius. 7. Of Paulus Aemilius at the foot of Monte cavallo, call'd Magnanapoli. Many others there were anciently of which now scarce any footsteps to be seen.

Fifthly, Of aquæduæts the Author of Roma antica et moderna mentions 4. of which something remains, viz. that of 1. the Aqua Martia brought thirty seven miles, 2. the Aqua Claudia, brought thirty five. Upon the gates called Porta di St. Lorenzo and Porta maggiore there are ancient inscriptions signifying what Emperors repaired and built these aqueducts. 3. The Appia, brought eight miles. 4. The Aqua Virgins brought eight miles, which was repaired by Pope Nicholas V, and is yet made use of, being called Fonte di Trivio. Of new aqueducts there are two very stately ones built by late Popes, of which the two following inscriptions will give the reader an account.
Sixtus V. Pont. max. Picenus
Aquam ex agro Columnae
Via Prænest. fmiatrorum
Multarum collectione venarum
Ducu primo à recepataculo
Mili. XX. à Capite XXII
Adduxit:
Feelicemque de nomine
Ant. Pont. dixit.
Cæpit anno I. absolvit III.
MDLXXXVII.

This work is said to have cost above two hundred thousand crowns.

II.

Paulus V. Pontifex maximus aquam in agro Braccianensi saluberrimis e fontibus collectam, veteribus aquæ Alsatine duætibus restituitis novisque additis XXXV ab Urbe milliario duxit, Anno Domini MDCXII. Pontificatus suo septimo.

Sixthly, Obelisks we took notice of nine, 1. That in the piazza within the Porta del Popolo. It stood anciently in the Circus maximus, but, being fallen down and broken in several pieces, was by the appointment and at the charge of Sixtus V, taken out thence, and, the several pieces being handsomely set together again, erected here upon a fair pedestal; on each side of which it hath an inscription; two ancient ones on the opposite sides in the same words, viz.

Imp. Caesar Divi F.
Augustus
Pontifex maximus
Imp. XII. Cos. XI. Trib. Pot. XIV
Ægypto in potestatem
Populi Romani redditi.
Seli donum dedit.
It is engraven on each side with three rows of hieroglyphicks.

2. That in the piazza before St. Peter's church, the only one that still remains intire and unbroken. It was taken out of the Circus of Caligula and Nero, and set up by Dominicus Fontana, by the order and at the charge of Pope Sixtus V, as were also those of St. Maria maggiore and St. Jo. Lateran. This obelisk hath no hieroglyphicks upon it, is seventy two foot high besides the pedestal, in all 108, said to weigh (according to Laffels) 956148 pounds. Of the manner of taking up and rearing this stone, and the engines employed about it, there is a particular book written. The four modern inscriptions on the four faces of the pedestal, and the ancient one on the obelisk itself, may be seen in Roma antica & moderna.

3. That of St. Jo. Lateran having three rows or files of hieroglyphicks on each side it. This is the greatest of all the obelisks in Rome, being 112 foot long besides the bafe, and at the bafe nine half feet thick one way, and eight foot the other. Who brought it to Rome, and where it was set up, this inscription upon it will acquaint the reader.

It was broken into several pieces but is well mended and set together again, and the wanting hieroglyphicks supplied.

4. That of St. Maria maggiore, lesser than any of the forementioned, having on it no hieroglyphicks. It was taken out of the Mausoleum of Augustus.

5. That of the Piazza Navona, erected by Pope Innocent X. It was taken out of the Circus of Coracalla, is the least of all the forementioned by much, having but one row of hieroglyphicks. Of this Athan. Kircher hath written a book in folio, which he calls Obeliscus Pamphylius, from the Pope's name to whom he dedicates it.

6. That of St. Mahuto [fat] by the Jesuits church. It seems to be but a small piece of the top of an obelisk broken off; it is engravèn with hieroglyphicks, and set up negligently on four rude stones.

7. That in the garden of the Medici: it is full of hieroglyphicks, and set upon a base without any inscription. It is but a small thing, and seems to have been only the top of a broken one.

8. That in the garden of the Mattei, given them by the senate and people of Rome. This also is a small one, and broken in two pieces, whereof the uppermost hath toward the top some hieroglyphicks, the lower piece hath none.

9. In the court of the palace of the Prince of Palestrina of the family of the Barberini lieth an obelisk broken in three pieces, engraven with hieroglyphicks, which it's like was longer.

10. Roma antica mentions another standing at the foot of the stairs in the palace of the Ursini in the Campo di fiore: but this we saw not.

11. We were told of an obelisk lying in the Campus Martius under a row of houses, as big if not bigger than any of those already erected, and supposed to continue intire and unbroken.

These obelisks, all that are engraven with hieroglyphicks, are of one and the same kind of stone, viz. a marble of a mingled colour red and white, which some call very hard, and which hath not in so many ages suffered the least by the weather. As for the figure of them they are made taper-wise, lesseen-
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ing from the bases to the vertex by little and little, so that indeed they are not much unlike a spit, from whence they took their name. Yet are they not continued till they terminate in a point; but when they are become too small to engrave more hieroglyphics upon, the tops are cut into the form of an obtuse pyramid. It is said, and I think truly, that the hieroglyphics engraven upon these obelisks are from the bottom to the top greater and greater by degrees; so that the lowermost and the rest all along to the uppermost appear to the spectator of equal bigness.

Seventhly, of triumphal arches there are yet remaining that of Septimius Severus; that of Titus Vespasian; that of Conflantine the Great; that in the cow-market called the goldsmiths' arch erected to Septimius Severus's son Antoninus: that of Gallienus and Salonina commonly called the arch of St. Vito. As for the arch called Arco di Portogallo in the Via Flaminia, mentioned in Roma antica, it is I suppose demolished, for we could find nothing of it. The inscriptions upon these arches, and the places where they stand, may be seen in the book intitled Roma antica & moderna.

Eighthly, of pillars beside such as belonged to temples there are four remaining. 1. The Columna milliaria, which stood in the Forum Romanum, as it were in the center of the city, from whence they began to reckon the distance from Rome to all parts. This pillar is marked toward the top with this numeral letter I, of a great bigness, signifying one or the first stone, and upon every public way at a mile's end was set up a second stone marked II, and so in order at every mile's end a stone marked with the number of the miles of its distance from Rome: so that secundum lapidem signified at one mile's distance from this pillar; ad tertium two, and so on.

This pillar is not considerable for its greatness but only for the use of it, and the ancient inscriptions upon it. It is now set up on one side of the Area of the Capitol.

2. The Columna rostrata, erected in the Forum Romanum to C. Duilius, who obtained a victory over the Carthaginians in a sea-fight. There is upon it a long inscrip-
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Inscription in old Latin, full of lacunæ, and hardly intelligible; which as it is supplied and made out may be seen in Roma antica.

3. The Columna Trajana or pillar of Trajan of white marble, still standing ever since its first erection. It is 128 foot high beside the base, which is of 12 feet. Within it is hollow and hath a pair of winding stairs of 192 steps, whereby one may ascend to the top, and there are in it 44 little windows to give light. It is made up of 24 stones, and every stone hath in it 8 steps. On it are carved in an helical area, compassing the pillar after the manner of a screw from top to bottom, the exploits and achievements of Trajan in his Dacic expedition, &c. The pedestal of this pillar was all buried under ground, and not to be seen, till they dug about it and laid it open by order of Pope Paul III. Upon it are inscribed these words.

S. P. Q. R.

IMP. CAESARI DIVI NERVAE F. NERVAE TRAJANO AUG. GERMA
DACICO, PONT. MAXIMO, TRIB. POTEST X VI. IMP. VI. COS;
VI. PP. AD DECLARAMUND QUANTAE ALTITUDES MONS ET
LOCUS TANTIS OPERIBUS FIT EGEITUS.

4. The pillar of Antoninus, much like the former, 175 foot high, ascended by 206 steps, and having 56 little windows. This pillar was broken and miserably defaced; but by Pope Sixtus V. mended and restored to its pristine form. Vide Roma antica.

Ninthly, of Mausolea, there are only that of Augustus and the moles of Adrian, now called castle St. Angelo. Mausolea.

Tenthly, of Statues there are an infinite number in the palaces and gardens about town, both ancient and modern: I believe more than in all Europe beside. Some of the most famous and esteemed are, the Equestris Statua in brass of M. Aurelius Antoninus Pius, now standing in the area of the capitol. The statues of the two horses with men by them in stone, now standing upon the Mons Quirinalis which is thence called Monte Cavallo. The statues of Laocoon, the trunk of Hercules, and Cleopatra, in the Pope's garden called Belvedere. The famous statue

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Of altar-stones, grave-stones, and other stones with inscriptions there is great plenty in all quarters of the city.

Of ancient Medals and Entaglie there are daily digged up store; and no wonder it is, this having been the seat of the empire so long. They are to be sold in many shops, and I have frequently seen of them lying upon the stalls in the market-places. Divers also of the Virtuosi have collected whole series of imperial medals.

Of sepulchral urns of several fashions and magnitudes, some made of earth, some of stone, there are abundance to be seen in the villæ, gardens, and palaces of the great persons, and in the cabinets of the Virtuosi.

As for sacrificing vessels and instruments, lachrymal urns, ancient lamps, rings, fibulae, and other implements, tesserae hospitalitatis, weights, &c. several antiquaries there are in town, who have likewise made collections of them; as Leonardus Augustinus, the then Pope's antiquary, and John Petro Bellori, a very ingenious person, and skilful in antiquities, who shew'd us a great number of these things, and very well conserv'd. That worthy and ingenious gentleman, cavalier Carlo Antonio dal Pozzo, shew'd us some twenty volumes in folio, wherein were the figures of most of the antiquities in and about...
about Rome, drawn exactly by the hand. In one of these were all the vessels and instruments used about sacrificing. In others of them we noted the Crepundia antiqua, which were little images made of earth like children, hares, apes, &c. found in urns. The Sistrum of cavalier Gualdi figur’d in Roma Antica: ancient Statere: ancient weights. Of these ancient weights we saw in the Museum of Leonardus Augustinus some made of a dark red stone, handsomely polit’d, of the figure of Holland cheeses, and of several magnitudes, marked on one side with the number of ounces or pounds which they weigh’d. Of these weights I have seen two in the church of St. Maria in Cosmedin, called Schola Græca, and two in the church of St. Maria in Trastevere of the bigness of good large Holland cheeses, which they have a tradition, and have inscribed on the wall where they were hung up, that they were stones that the heathens hung at the feet of Christian martyrs when they suffer’d, to stretch and torment them. A medal with the figure of a talus on one side, and on the other this inscription, Qui ludit arrham det quod satis fit. The ancient Frizillus, or dice-box, like those now in use. The ancient Strigiles: a medal of that sort that was used to be hung about slaves’ necks, having on the one side the figure of the wolf with Romulus and Remus hanging at her paps; on the other, in three concentrical circles, these words, Tene me ne fugiam & revoca me in foro Trajani purpuretica ad Paeceasium Dominum meum. A drinking-glafs made like a Priapus, which explains that of the poet, Vitreo bibt ille Priapo. The ancient timbrel, like those we have seen used now a-days. It is made in fashion of a sieve, the bottom of it on which they strike of vellum, the rim of wood, having several long holes or crannies in it, wherein are hung round pieces of brafs, like great medals upon their centers; besides, there is a string cross the instrument hung full of bells.

Rome is a large city, but seemed to us not so populous as either Venice, Milan, or Naples: they reckon the number of inhabitants to be about 120,000 souls, besides strangers, of which there are a great number always here. The extent of the walls is greater than of any city in Europe, viz. 13 miles; but they take in a
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great deal of waste ground. The city is now crept down from the hills (upon which the chief of it formerly stood) into a valley by the river's side surrounded with hills. It is generally well built; many of the streets are right, and adorn'd with a great number of stately palaces scatter'd up and down all over the town; full of monasteries and churches, of which, they say, of all forts there are above 300. It is well served with all provisions for the belly; yet are not things generally so cheap there as either at Naples or Florence. Their beef (as I intimated before) is very good, not much inferior to ours in England. Before they kill their beasts they put them in a great heat and chase, for the same reason, I suppose, that we hunt deer and bait bulls in England, viz. to make the flesh eat more tender and short, which yet spoils the colour of the meat, and, in some men's judgment, the taste too, disposing it to putrefaction. Their fucking veal, which they call vitella mungana, they imagine all Europe cannot parallel for goodnes and delicacy. Their kid, or Caprette, is also accounted very good meat; and so is their swine's flesh. Their mutton is the least commendable, as being for the most part tough and dry. Tame fowl they have as good and savory as in any place, v. g. hens, capons, turkies, tame pigeons. Geese are seldom here to be seen. Plenty also there is of wild fowl of the best sorts, and cheap enough; as partridge of two kinds, the common and red-leg'd partridge, wood-cocks, snipes, duck and mallard, wigeon, teal, gray, green, and baftard plover, curlews, quails. Of small birds the greatest plenty that I have any where seen: as thrushes in winter time an incredible number, black-birds store, larks infinite. One would think that in a short time they should destroy all the birds of these kinds in the country. For besides that you never fail of great numbers of them in all the poulterers shops, there is every afternoon a market of small birds, wherein they are sold by the country people. Besides the forementiond, there are sometimes to be sold cranes, wild geese, shell-drakes, Avocetts, water-hens, berganders, and several other sorts of wild fowl. I have seen lying frequently in the poulterers shops, and therefore I presume some people eat them, such birds as in England
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no man touches, viz. kites, buzzards, spar-hawks, keftrels, jayes, magpies and wood-peckers. Nothing more commonly fold and eaten here, and in all Italy, than coots and stares. They spare not the least and most innocent birds, which we account scarce worth the drefling, much less powder and shot, v. g. robin-red-breasts, finches of all kinds, titmice, wagtails, wrens, &c.

No want of fish either of frefh or falt water, though it be fold commonly dearer than flesh, as being brought a great way. Scarce any fish to be found any where on the coast of Italy, but some time or other it may be met withal here. Thofe that are the moft frequent in the markets are, of river or frefh-water fish, pike, carp, tench, trout, eel, barble, chevin, dace, I do not remember, that I ever faw a perch to be fold in Rome. Of sea-fish, Mullus antiquorum, which they call Triglia, of which they have a proverb, La Triglia non mangia chi la piglia. He that takes the Triglia eats it not. This fish the French call Rouge from its colour; and we in Cornwall (where I have feen of them taken) Surmullet. Spiegole, in Latin Lupus marinus, of which kind I have not feen any in England; Orate, gilthead; Cephali, which we in English call Mullet, the ancients called it Mugil; farde, a kind of sprat; conger; lamprey; fole; plaife, and others of the flat kind; merluzzos, which we call hake; fometimes small furgeon; dog-fish of feveral sorts; tuny and fword-fish is alfo to be fold here.

Wild boar and venifon of wild deer you fhall feldom fail of, to be fold in the pouleterer's shop. Their wild deer they call Capreole, it is for the moft part very lean, Porcupine alfo is fometimes to be fold in the markets.

Oranges and lemons are cheap in Rome; pears and apples, if they be good and large fruit, dear, they fell them by weight here, as they do generally all over Italy.

Their bread is very good and light, notwithstanding they use no yeafť to raise it, and cheaper than ours in England. And here by the way it may not be amifs to take notice, that the use of yeafť for the raising and fermenting of bread in these northern countries hath been very ancient. I find mention of it in Pliny, lib. 18. cap. 6, who thereupon gives their bread the preeminence for
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for lightness. Galliae, faith he, & Hispaniae frumenta in potum resoluto, quibus diximus generibus, spuma ita concreta pro fermento utuntur. Qua de causa leviorem illis quam ceteris pars est.

Here is great variety of wines: more forts commonly fold than in any other city of Italy: as Greco, Lagrime of Naples, Languedoc wine, wine of Syracusa and Augusla in Sicily, Orvietano, Jenfano, Monte Pulciano, di Monte fiascone, Castelli, Romano, and which is most commonly drunk, Albano. Most of the wines are sweet and full-bodied, and will bear half water. Sweet wines they call abboccati, and rough wines asciuti. They have little wines so harsh and rough upon the palate as our French claret and Florence red wine, though those also are to be had here. Their olives are small, but good and sweet. They have plenty of walnuts and hazel-nuts, and other fruits the same that we have.

For apples and pears no country hath better, I had almost said so good as we in England. For apricocks I tasted none beyond the seas comparable to ours.

Rome is noted for several commodities and manufactures, as viol and lute-strings the best in Europe; perfumed gloves; combs of buffles horns, womens fans, vitriol, essences.

Commonly all strangers that travel thither buy of those things not for their use only, but to make presents of to their friends.

Here is doubtless the best musick in the world, especially voices, there being many eunuchs and nuns, a great part of whose employment it is to sing in the choir.

For pictures of the best masters Rome excels all places, there being more here than I think in all Italy besides; so that Rome is become the school of painters, who come from all parts of Europe hither to study and practise. At present cavalier Bernini is the most noted and indeed only excellent sculptor, and Pietro de Cortona, the most eminent painter.

The villa (as they now call them) of the Princes and prime nobility of Rome, for gardens of flowers, groves and thickets of trees, cut hedges of cypresses, Alaternus, laurel, bay, Philyrea, Laurus tinus, and other sempervirent
vrent plants, close and open walks of great length, orchards of fruit-trees, labyrinths, fountains and ingenious water-works, bird-cages, statues and other ornaments, especially their greatness (some being in compass three or four miles) excel the orchards, gardens, and walks of any Prince in Christendom that I have seen. Of these there are a great number, but the chief of all are 1. The Villa Borghese, of which family was Pope Paul V. This is esteemed the best of all the villæ and gardens about Rome, though it be not so vast as 2. the villa Pamphylia, of which family was Pope Innocent X. This is on the Janiculum without St. Pancras’s gate, and is said to be four miles in compass. 3. The Villa Ludovisìa belonging to the Prince Ludovisìo; of which family was Gregory XV. 4. The Pope’s garden at the Vatican called Belvedere. 5. The Pope’s garden at Monte cavallo. 6. The garden of the Grand Duke or the villa de Medici. 7. The garden of Montalto. 8. The garden of the Mattei.

In all which there are little palaces furnished and adorned with excellent statues, bassi relièvi, pictures and other curiosities, which I forbear to enumerate and describe at large, that I may not spend time, and waste paper in writing what few will think worth their while or pains to read; and which hath already been published by Mr. Lassels in his voyage of Italy, to which I refer the curious for further satisfaction.

Of the palaces and public buildings I shall say nothing, only I cannot forbear a word or two of St. Peter’s Church, which is in my opinion the most stately, sumptuous, and magnificent structure that now doth, or perhaps ever did stand upon the face of the earth. This was the only building that surprised me and exceeded my expectation, being for a work of man the most pleasant and goodly, not to say ravishing object that ever I beheld. The whole pile of that majestic bulk and greatness, that it exceeds in all dimensions the most famous temples mentioned by the antients: being in length 520 foot (as Mr. Lassels tells us) and 385 in breadth; and in some, the greatest christian churches; for though it be not so long as St. Paul’s London, yet is it much broader, and in that respect much handier; the breadth being more proportionate to the length. The cupola of that
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that marvellous height and compass (the diameter thereof being equal to that of the Pantheon) and sustaining on the top a huge stone lantern, with great pillars of stone about it, that it may well be accounted the boldest piece of architecture (as he faith) that I think the world hath seen. The roof arched or vaulted, and the vault divided into great squares or panes like wainscot after the old Roman fashion; the ribs and transverse borders which terminate those squares or pannels being channelled and richly gilded, and the area of each square almost fill'd up with a gilt rose. The oval portico encompassing a large area before the church, consisting of four rows of great stone pillars standing so thick that they shew like a grove of great trees: the stately porch to which you ascend out of this area by twenty four steps; not to mention the incrustation of some part of the walls with polished marble; the excellent statues, stately altars, rare pictures, and other ornaments, render this church truly admirable, and in all respects, I will not say comparable to, but excelling the best in the world.

During our stay at Rome, we rode forth to see. 1. Frescati twelve Italian miles distant, antiently called Tusculum, where Cicero had a villa or country-house, of which as yet they shew some remains. Here are at present three noted ville; 1. That of the Borghefi with the palace called Mondragone, and two others. 2. The Villa Aldobrandina or Belvedere belonging to Prince Pamphilio. 3. The Villa Ludovisia; all of them for walks, groves, labyrinths, gardens, and other ornaments not inferior to the best about Rome, and for cascades or falls of water, wetting sports, and other ingenious water-works, beyond them. What we took more especial notice of, as having not before seen, was the imitation of a tempest or storm of thunder and rain. This artificial thunder they call Girandola.

2. Tivoli, antiently Tibur, eighteen Italian miles off Rome. Of this city Horace was much enamoured, praying that it might be the seat and retirement of his old age. Tibur Argeo positum colono, Sit meae sedes utinam feneae, Sit modus lefso maris & viarum militiaque. It stands like Frescati on the brow of a hill, and overlooks the campagna of Rome. Here are some remains of ancient
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ejent temples, and other buildings, and a remarkable cal-
cade of the river Aniene or Teverone. The villa of Espe
for gardens and orchards, walks and groves, the Giran-
dola and other water-works, is nothing inferior to those
at Freseati. About five miles distant from Tivoli we passed
over the sulphur-river, the water whereof is warm, of a
bluish colour and noisom smell, much like to that of
the sulphur-well at Knareburgh in Yorkshire. It incrusts
the channel it runs in with a whitish kind of friable stone,
which in many places in the bottom and sides of the chan-
nel congeals in the figure of confects or sugar-plums
which they call Confetti de Tivoli. Of these you have
boxes full to be sold at Rome, so exactly resembling con-
sects both for figure and colour, that no man can distin-
guish them; but they are not naturally found so figured,
as they would make strangers believe, but artificially
made so by casting in moulds. About Freseati we found
great store of Styrax arbor growing wild in the hedges,
which we found nowhere else beyond the seas.

The campagna of Rome seems to be good land, but is
esteemed a very bad air and unhealthful country to live
in, which is the reason it is so desolate and thin of inha-
bitants.

I had almost forgot one natural phenomenon we ob-
served at Rome, which did a little surprize us. In
sharp frosty weather in the middle of winter, the water
which the servants brought up to wash with in the morn-
ing was hot to that excess, that we did verily believe they
had heated it over the fire; nor could we be persuaded of
the contrary till we went down to the fountain, and found
it there of equal temper with what was brought up. It
was formerly taken for granted by the Peripatetic schools,
that fountains of springing water are hotter in cold wea-
ther or winter, and colder in hot or summer than at other
times, the reason whereof they assigned to be an Antiper-
ijiasis, satisfying themselves with that, and seeking no
further. Later philosophers, who could not content them-
selves with the notion of Antiperijiasis, chose rather to
deny the truth of the experiment, and affirmed that
fountain-water was not really warmest in the coldest
weather, or coldest in the hottest, but only seemed so to our
sense; the temper of which is much altered according to
the
the difference of the weather. So that what is much colder than our temper, in hot weather, is not much colder in cold weather, and so seems not so cold, and on the contrary. Or thus, we judging of the heat and cold of other things by the proportion they bear to the temper of the air about us, when the air is very cold, though the water hath the same degree of cold it had before, yet it may be hotter than the air, and consequently seem to us actually hot, and vice versa. But for my part whatever the reason be, I must needs assert the truth of the experiment, being very confident that the water, at least of some sources, doth not only seem to be but really is much hotter in cold frosty weather than at other times; else this water could not possibly have seemed to us, as it did, more than lukewarm.

Great store of rain falls here in winter time to make amends for the extraordinary heat and drought of the summer.

Rome is a place not only well worth the seeing, but very convenient to sojourn in, there being where-withal to entertain and divert men of all sorts of humours and tempers.

The present Romans seemed to me in their houses and furniture, particularly their beds and lodging, in their diet, in their manners and customs, and in their very pronunciation (so liquid, plain, and distinct) more to symbolize and agree with us English than any other people of Italy; whether it were that we learned of them, or they of us, or both mutually of each other, when there was that great commerce and intercourse between us and that city for so many years together.

To describe at large the court of Rome, with all its officers and ministers; the ecclesiastical government of the Romish church in general; their ceremonies and shews; the civil government of the territories subject to the Pope, and particularly of the city of Rome; the interest of the Pope, and the terms he stands in with other Princes, would require a volume alone; and therefore I shall choose rather wholly to omit those particulars for the present, and pass on to the description of our succeeding voyage.

January
January 24. 1664. We departed from Rome, and began our journey to Venice; riding along the Via Flaminia, and passing the Tiber again by the Ponte Molle, or Pons Milvius. At seven miles distance from Rome we pasled a small village called Prima porta. Some sup-prima pofe that anciently the city extended thus far: which conjecture I conceive is grounded upon the name of this place. Eight miles further riding brought us to a small town called Castel novo, where we lodg'd. All this afternoon we rode near the Tiber, upon the Via Flaminia, which reaches as far as Rimini. It is paved with broad flints and pebbles, and hath on each side a border of stone, and in that border, at every second or third pace, a stone standing up higher than the level of the border. We observed in the fields we passed through this day great store of vernal crocus's, now in flower.

We proceeded on to Arignano, or Ariano, a little town, and a post-stage eight miles. Here we left the Via Flaminia, and rode round a high hill (which stands single, and may be seen twenty miles forward) to Civita Castellana, a little town standing on a hill and a post-stage, nine miles. Not far from hence we had the prospect of Caprarola and the Duke of Parma's palace, [where we la. were told is a whispering room like that in the palace of Te at Mantua] which seemed not to be more than two or three miles distant in a right line, but we were assured that as the way lay it was ten or twelve miles thither.

Four miles further we came to a poor small town called Borghetto; a little below which we pasled the Tiber by a bridge called Ponte Felice, begun by Sixtus V. and finish'd by Urban VIII., for the benefit of travellers and pilgrims, as appears by an inscription upon it. Not far from the river, on our right hand, we pasled under a little town, standing on the top of a hill, called Magliano, and rode on about 6 miles near the bank of the river (having in prospect at a good distance on our left Horta. hand a town called Horta) till we came to Utricoli, which town at present stands upon a hill, but by the ruins that remain, the ancient Oricoli seems to have lain near the river, at least part of it.
From Utricoli we had stony way over the mountains for five miles. For about a mile before we enter’d Narni we rode upon the brink of a horrid precipice by the river Nera’s side. Narni anciently called Nequinum, and afterwards Narnia from the river Nar which runs beneath that steep rocky mountain upon the ridge whereof this city stands, was formerly a Roman colony, and a place of some account, but is now very mean, poor, and inconsiderable. Leander Albertus faith it was ruined and left almost quite desolate by the Venetian soldiery, who were quartered there in the time that the Emperor Charles V. besieged Pope Clement VII. in the castle St. Angelo. Gattamelata the famous captain for the Venetians, to whom they have erected a brafs statue on horse-back near St. Anthony’s church in the city of Padua, was native of this town. Near Narni are seen the remainders of vast arches of stone, which some say were of a bridge, others more probably of an aqueduct, over the river from one mountain to another.

We rode from Narni over a pleasant and fruitful valley, encompassed with mountains, and cultivated after the manner of Lombardy, to Terni, anciently Interamna from its situation, a handsome little city, having a pretty piazza, on which stands a church that seems to have been an ancient temple. About four miles from this town is that famous cascade or fall of water from the lake di Pie di Luco. At the further end of this valley beyond Terni and upon the hills were the greatest olive-yards or rather forests of huge olive-trees that I have anywhere seen in Italy, and at this time of the year we found the people very busy in brushing down and gathering of olives.

From Terni we had mountainous way to a little place called Tritura, another post-stage, and from thence we descend to Spoleto, the chief town of Umbria thence called Ducato Spoleatano. The walls of this city are of a large extent, and the houses indifferently fair, and there are to be seen many ruins of ancient buildings in it.

From Spoleto we rode through a very pleasant and fruitful valley of a great extent, surrounded with mountains, much resembling the Area of an amphitheatre, planted with rows of trees and vines after the manner of Lombardy.
du. The hills round about yield a pleafant prospect, being sprinkled every where with little towns and houfes set thick upon them. About four miles fhort of Foligno we rode under an indifferent great town, standing on a round hill, called Trevi.

Foligno [Fulginium] is a pleafant and handfome little town, noted for confecfions and computer-meats. At the end of the valley of Spoleto beyond Foligno we obferved the like woods of olive-trees as in the valley of Terni.

Leaving Foligno we ascended again in a way cut out of the fide of a mountain, having on our left hand a huge precipice, and below a valley between very high and steep hills, into which at the upper end falls down a little river called Dale, which drives fome paper-mills; a pleafant place to behold. About four or five miles from Foligno we got up to the top of the Appennine, where the mountains are about as were covered with snow. On the top of these mountains is a little plain, and upon it a small lake or pool of water, and a village called Col fiorito, a very pleafant place in summer-time, as its name imports. When we had paffed over this plain we began again to descend, and the next conliderable village we came to was Serravalle, ex re nomen habens, it being fituate in the jaws of a narrow valley, fourteen miles distant from Foligno. From Serravalle we rode among the mountains by the fide of a little river, paffing feveral small villages, viz. La Muccia or Mutia and Pulverina, &c. and lodged at Vakimarra.

We rode through Tolentino, a pretty little town, having a handfome piazza, nine miles distant from Vakimarra. Tolentino. This was the birth-place of Francifcus Philelphus a leamed man, and a great critic in the Greek tongue. He it was that invented the word flapes for a stirrup, which before had no name in Latin. From Tolentino we had ten miles to Macerata, a large, well built, and populous town, having a handfome piazza. It is the capital city of Marca Anconitana, where the cardinal-legate or governor of the province ufually resides. From Macerata we rode to Loretto paffing through Recanati, in Latin Rcinetum, a very pretty town, fituate on the ridge of a hill, and but three miles fhort of Loretto. It arose from the ruins of Helvina Ricina, demolished by the Goths. Here
we took notice of a table with a brass statue of the Virgin Mary in basso relievo upon it, and an inscription, giving thanks to her that she was pleased to fix her house in the territory of this city.

Loretto stands likewise upon a hill, a pretty small place, consisting only of one little street within the walls, and a burgo or suburb without likewise of one street, as big as the city within. The church and college of the canons stands at one end of the street. Before the church is a little piazza having a cloister or portico on one side where the canons lodgings are. In the midst of this piazza is a handsome fountain, and before the church door a brass statue of Sixtus V, in a sitting posture, with an inscription signifying that he had advanced Loretto to the dignity of a city, giving it a bishop. The doors of the church are of brass cast and graven with several histories. The church is built like our cathedrals in form of a cross, having a cupola in the middle, directly under which stands the Santa Casa, or holy house (as they call it) inclosed in a case of white Parian marble, curiously engraven with several figures in b. r. representing several histories, by the best sculptors then living. The house itself is sufficiently described in the history of it written by Turcellinus. The walls (which are now only remaining, the roof being removed) are made of a kind of red stone (as they would have us believe) not only of the colour but also of the figure of bricks, indeed so like bricks that I can hardly persuade myself they were any other. This kind of stone, they say, at this present is found about Nazareth and nowhere else, which if true is one of the best arguments they have to prove that this house came from thence. That the reader may see what weak proofs and little evidence they have of the miraculous transportation of this house from Judea hither, I shall here insert the whole relation of it made by themselves, which is translated into thirteen languages, and hung up in tables here in the church: and in English runs thus,

*Ave Domina Angelorum.*

The miraculous Origin and Translation of the Church of our Lady of Loretto,
Moral, and Physiological.

The church of Loretto was a chamber of the B. Virgin nigh Jerusalem, in which she was born and bred, and saluted by the angel, and therein conceived and brought up her Son Jesus to the age of twelve years. This chamber after the ascension of our Saviour was by the apostles consecrated into a church in honour of the B. Lady: and St. Luke made a picture to her, likewise extant therein to be seen at this very day. It was frequented with great devotion by the people of the country where it stood whilst they were Catholicks. But when leaving the faith of Christ they followed the sect of Mahomet, the angels took it and carried it into Scavonia, and placed it by a town called Flumen, where not being had in due reverence, they again transported it over the sea to a wood in the territory of Recanati, belonging to a noble woman called Loretta, from whence it took the name of our Lady of Loretto; and thence again they carried it, by reason of the many robberies committed, to a mountain of two brothers in the said territory: and from thence finally, in respect of their disagreement about the gifts and offerings, to the common high-way not far distant, where it now remains without foundations, famous for many signs, graces, and miracles; whereat the inhabitants of Recanati, who often came to see it, much wondering, environed it with a strong and thick wall, yet could no man tell whence it came originally, till in the year 1296. the B. V. appeared in sleep to a holy devout man; to whom she revealed it, and he divulged it to others of authority in this province, who, determining forthwith to try the truth of the vision, resolved to chuse sixteen men of credit, who to that effect should go all together to the city of Nazareth, as they did, carrying with them the measures of this church, and comparing therewith the foundations remnant, they found them wholly agreeable; and in a wall there by engraven, that it stood there, and had left the place. Which done they, presently returning back, published the premises to be true: and from that time forward it has been certainly known, that this church was the chamber of the Virgin Mary: to which Christians began then, and have ever since had great devotion.
Observations Topographical,

votion, for that in it daily she hath done and doth many and many miracles.

One Frere Paul de Sylva, an eremite of great sanctity, who lived in a cottage nigh unto this church, whither daily he went to mattins, said that for ten years space, on the eighth of September, two hours before day he saw a light descend from heaven upon it, which he said was the B. V. who there shewed herself on the feast of her nativity. In confirmation of all which, two virtuous men of the city of Recanati divers times declared unto the prefect of Terreman and governor of the forementioned church as followeth. The one called Paul Renalducci avouched, that his grandfather saw when the angels brought it over the sea, placed it in the forementioned wood, and had often visited it there; the other, called Francis Prior, in like sort affirmed, that his grandfather's grandfather, being 120 years old, had also much frequented it in the same place, and for further proof that it had been there, he reported that his grandfather's grandfather had a house nigh unto it, wherein he dwelt; and that in his time it was carried by the angels from thence to the mountain of the two brothers, where they placed it as above said.

By order of the right reverend monsignor Vincent Cassal of Bologna, governor of this holy place, under protection of the most reverend cardinal Moroni.

I Robert Corbington priest of the society of Jesus, in the year 1634, have faithfully translated the premises out of the Latin original hanging in the said church.

To the honour of the ever-glorious Virgin.

The treasury of this church is very rich, full of jewels, precious stones, gold and silver vessels, and tabulae votivae, embroidered altar-clothes, copes, vests, &c. of great value, besides other ornaments and curiosities, which have been presented by several Princes and great person.
Moral, and Physiological.

the vessels and plate in the house itself. The earthen pots in the apothecary's shop, most part of them painted by the hand of Raphael de Urbino, and the great wine-cellar, are things that use to be shewn to travellers.

We travelled from Loretto to Ancona, fifteen miles of foul way. * This is a considerable city, well peopled and frequented by merchants, by reason of the commodiousness of the harbour, which was formerly the very best in all the gulf, but is now run much to decay. The chief remarkable we took notice of were [1.] The remainders of the stones securing the antient port, where stands that famous triumphal arch of white Parian marble, by order of the senate erected to Trajan; composed of huge stones, and thus inscribed:

\[
\text{Pot. XIX. Imp. IX. Cos. VI. PP. providentissimo.} \\
\text{Principi. Senatus. P. Q. R. Quod. accessum} \\
\text{Italiam, hoc. etiam. addito. ex. pecunia. sua. portu.} \\
\text{tutiorem, navigantibus reddiderit.}
\]


On the top of this arch formerly stood a Statua equestris of Trajan, which is now taken down and set over the gate of the merchants-hall or exchange, which was [2.] the second remarkable. [3.] The theatre for comedies. [4.] The Domo or church of St. Cyriacus. [5.] The citadel. [6.] The shell-fish called Pholades in Latin, because they live in holes within a soft kind of stone, or hard clay, which being exposed to the air, in process of time, becomes a perfect stone for hardnes. The Italians call these stones Ballo di Sasso, and the fifth Ballare or Dattyli de mare. They find the stones (as they told us) out at sea in great plenty, and, taking them up, bring them into the harbour where they keep them. We had a dish of them dress'd, which were no unpleasant meat, inferior for taste to no shell-fish except an oyster.
We travelled along the sea-coast twenty miles to Sinigaglia, antiently Sena Gallica, a handsome little city, well walled about and fortified. Here is a small harbour for boats and barges. From Sinigaglia we still followed the sea-shore to Fano, fifteen miles distant; by the way passing over two long bridges. Fano, antiently Fanum Fortunae, is a much larger city than I had imagined, well walled and fortified. There is an old triumphal arch erected to Augustus, which, because it had been somewhat broken and defaced in the wars with Malatesia, they have in the wall by set a model of it as it was when intire, whereon is inscribed, Effigies arcus ab Augusto ereti, posteaque ex parte diruti bello Pii II. contra Fanenfes, Anno MCCCCLXIII.

DIVO AUGUSTO PIO CONSTANTINO PATRI DOMINORUM.
IMP. CAES. DIVI F. AUGUSTUS PONTIFEX MAXIMUS COS. XIII TRIBUNITIA POTEST. XXXI IMP. XXVI PATER PONT. FEX MAXIMUS COS. XIII TRIBUNITIA POTEST. XXXI IMP. XXVI PATER PATRIÆ MURUM DEDIT.

CURANTE L. TURCIO SECUNDO APONIANI PRÆF. URB. FIL. ASTERIO V.C. CORR. FLAM. ET PICENI.

Here we saw the antient temple of Fortune, now the Augustine friars church: and the brass statue of Fortune which was adored, taken out thence, now standing in the palace. In this city is a senate of seventy gentlemen, changed every third or fourth year, who out of their own number elect, every two months, two priors and a gonfalonier, but the governor or monsignor, placed here by the Pope, is the Dominus fac totum. Malatesia, tyrant of Rimini (as they call him) seized also upon this place, but was driven out by Pope Pius II, assisted by the Duke of Urbin, Carignano of Ancona, and one Caffaro. These two gentlemen had each of them a ladder for his arms, the one red, and the other white. The city out of gratitude took these two ladders for their arms, leaving their former which was a gate or arch with this motto under it, In hac porta stat hic.
Moral, and Physiological.

hic Leo fortis. This city is by some esteemed one of the best situated in Italy.

We still held along the shore till we came to Pesaro, Feb. 1. and pleasant city, having a handsome piazza, encompassed with fair buildings; therein stand many ancient stones with inscriptions. We passed through a long well built street, and had a prospect of the cupola of the Domo. The haven is almost choked up. It is walled about and fortified with bastions and a castle. We saw this town only in transitu, but it merited a little demurr. From hence we crossed the country to a village called Catolica ten miles. We left Gradara on our left hand but came not in sight of it. From Catolica we rode along the sea-shore for the most part till we came within two or three miles of Rimini, and then left the shore and took the Via Flaminia. From Catolica to Rimini they reckon fifteen miles, yet may Rimini easily be seen from thence. Rimini is a pretty proper city, having freight streets like Pesaro and Fano, yet are the buildings but low. Within the walls of this town we passed under a high stone-arch erected to Tiberius (Schoottus faith Augustus) Caesar, but the inscription was somewhat defaced. In the piazza we viewed the stone on which J. Caesar is said to have stood when he made a speech to his soldiers, animating them to accompany him to Rome and invade the city's liberty. On it are these modern inscriptions,


In another piazza we saw a brass statue of Paulus V. Being carneval time we found the gentlemen here tilting. They ran not at one another but at a puppet or man of straw, Bamboccio they call it.

We made a digression to St. Marino, a little town standing on the top of a very high hill, some ten miles or more distant from Rimini. This place hath maintained itself in the condition of a free state or commonwealth, as the inhabitants boast, for above 1000 years, but it's well if half so long. The territory of this republick is but
OBSERVATIONS Topographical,

one mountain about three miles in length, and some nine or ten miles round. In this small territory they have four castelli or villages, viz. Serravalle, Fietano, Monte Giardino, and Fiorentino: eight corn-mills upon the little river Canova, which bounds this territory towards the north, and two powder-mills: the number of souls is about 4000 or 5000, of soldiers or fighting men 1500. The arms of this republick are three towers upon a mountain, and under it this motto, Libertas perpetua. The Borgho of St. Martin stands at the foot of the hill upon which the town is built, and is like some of our North-Wales towns. In this Borgho weekly on Wednesdays is held a market, where are bought and sold a great number of swine, especially in carnaval time, three, four, or five thousand on a market-day. The reason of this great concourse to buy and sell here is because they pay so little toll, viz. about six pence for a drove, be they more or less. From the Borgho up to the town are two ascents, the one more easy and winding about to the furthermost gate, by which coaches may make a shift to get up, the other steep to the nearer gate. On one side the town is walled about, on the other side it needs it not, for it stands on the brow of a precipitous rock of a very great height, whereon they have placed three towers in a row. On the side where the wall goes the hill is very steep and almost impossible to climb but by the made ways. There is no hill near it that can any way offend it, and those that are next far lower than that whereon the town is built. The streets of the town are narrow, and the houses but mean. Here live about sixty Jews. Two clofiers they have within the walls, one of discaicete Franciscans or Succolanti, the other of nuns of the order of Santa Clara; without the walls in the Borgho is a monastery of Capuchines, and about a mile from the town a fair convent of the Servite. They have twenty five small pieces or drakes and two culverines. This place is a bishop's see, and the bishop of it is bishop also of St. Leo, Monte Feltre, and La Penna. This republick is surrounded by the territory of the Pope; they stamp no money; they have neither friendship nor enmity with any of the States or Princes of Italy; and in the several wars of Italy they have enjoyed peace. On occasion they send ambassadors to
to the neighbouring Princes and States. At Rome they have their Protector, who at present is cardinal Carlo Barberini, to whom they sometimes send presents, viz. 100 little cheeses or a butt of muscatella. They acknowledge no superior under God, but have absolute power in civil and criminal causes. If a person banished from other places retires hither, they sometimes give him protection, but it is done by the major vote of the council. If one man kill another, though in his own defence, he is sentenced by the commissary or judge to pay 100 Scudi, but he petitioning the council, they usually bring it down to twenty five. If one murthers another and flies, he is banished for ever and all his goods confiscate. This republic maintains a physician and a surgeon at the publick charge. The muscatella's of this place are much esteemed, and the gentry hereabout in summer-time come ordinarily hither to drink them, and enjoy the fresco. Cows they have none, but sheep and goats good store; of whose milk they make little cheeses that eat well. From the hill we had a prospect of Monte Leone, a strong fortress formerly belonging to this republic, but taken from them by the duke of Urbin. They have four great fairs, every year, the chiefest of all is on St. Bartholomew's day, at which time there is a general muster of all their forces. At these fairs there is great abundance of young cattle sold. Many veals driven as far as Florence. These fairs and markets disgust the neighbouring Princes, as being a great diminution of their tolls.

The government of St. Marino is by a council of forty five, which they call Corpo di Prencipe. Of these fifteen are gentlemen (for there are about twenty families of gentlemen in this state) fifteen artisans or tradesmen, and fifteen farmers or countrymen. They continue for their lives, and when one dies another is chosen by the two third parts of the votes, when a gentleman a gentleman, and so of the rest. These counsellors chuse out of their own number from six months to six months two capitanei (which have the like power as consuls, or mayor, with us) after this manner. When the old captains go out of office they nominate twelve; the names of these are written in six scrolls of paper, viz. two names in a scroll. These scrolls are put into a hat or box, and a boy
Observations Topographical,

puts in his hand and draws out three. These three the elder captain takes and carries to the church of the sacrament, and Te Deum being sung, a priest puts the three scrolls into a hat, and a young child puts in his hand and draws out one, and they whose names are therein written are capitanei for the next six months. These capitanei cannot be elected again for two years following. Besides, the great council elect out of themselves by major vote a lesser council of twelve, viz. four out of each order. And to this council civil and criminal causes and quarrels of right and wrong are referred. This commonwealth hath a commissary or judge, who must be a doctor of law; and always a foreigner. He is elected by the council and continues eighteen months. His stipend is ten crowns the month. His sentence is confirmed, or may be repealed or mitigated by the council. The chancellor is elected in like manner. He is a notary and his allowance is sixty scudi or crowns per annum. They have also a captain of the militia, who continues in office as long as the council pleases. But enough and more than needs will most readers think of this petty commonwealth; concerning which I should not have been so large, but that no body that I know of before me hath made any particular description of its state and government, as accounting it not worth their while to enquire into it, or their pains to set it down.

We travelled from Rimini to Ravenna. We passed the famous bridge over the river Rimina, begun by Augustus and finished by Tiberius. The people say that the stones are joined together without any cement. Indeed the sides or walls of it are of vast stones, each as high as the border and of breadth proportionable, immediately contiguous without any mortar or cement between that I could discern. There is upon it an inscription in large letters signifying when and by whom it was built. At fifteen miles distance from Rimini we passed through a little town called Cesenatico; then Cervia about five miles further, a place environed with fens. It is a bishop's see, and therefore hath the title of a city, yet is it but a mean and pitiful town. All the way between Cervia and Ravenna till we came within two or three miles of the town, we had a wood of pine-trees on our right hand called Pignedas.
Moral, and Physiological.

Pigneda, bearing fruit enough (as Schottus faith to serve all Italy.

Ravenna stands between two rivers [Beda and Mon-Ravenna. tone] one running on one side, and the other on the other. It is a large town but ragged and not well built, the houses are all very low. It hath five gates, an old castle of brick; three very fair convents, one called the Claffe, belonging to the Monachi Classenses, the church whereof is dedicated to St. Romualdo. A second called the Porto, because it is dedicated to St. Maria Portuensis. It belongs to the Canonici regulares Lateranenses. A third of Benedictine monks dedicated to St. Vitale. The church of this convent is a double octagon, the one concentrical to and included in the other, built as they told us by Justinian. The monks shewed us here two marble pillars, for which they said the Venetians offered them their weight in silver; but we have seen the like elsewhere, viz. in the library at Zurch, and at Verona in our Lady's chapel in the garden of Seignior Horatio Giusti. Their generation at first was of a mass or heap of small flints and pebbles united into one body by a cement petrified as hard as themselves and capable of politure. Probably this cement was separated by degrees from a fluid wherein the stones lay. To these monks belongs the Rotonda, a little round church dedicated to the Virgin Mary, about 1/4th of a mile without the walls: the entire roof whereof is of one single stone, notwithstanding that the diameter of the church is fourteen of my ordinary paces, which are near 60 many yards. In the midst of this stone is a round hole to let in the light. Upon the top of it formerly stood a porphyry monument of Theodoricus, a Gothic king, who is supposed to have built it. This monument is now taken down and set in the wall of the convent of the Succolanti, by the way-side with this inscription, Vas hoc Porphyriacum ol. Theodorici Gotor. imp. cineres in Rotundæ apice recendens, hoc Petro Donato Cæsio Narnien. præsule favente translatum ad perennem memoriam Sapientes Reip. P.P. C. MDLXIII.

The monastery of the Succolanti is one of the fairest we have seen belonging to that order, and the church dedicated to St. Apollinaris deserves notice taking, as well for the double row of marble pillars brought from Constanti-
Observations Topographical, Constantinople by Theodoricus, as for the ancient figures of Mosaic work in the walls. In the Domo we noted the figures of the archbishops of Ravenna in Mosaic work. Eleven of them had a dove standing upon their heads, which they say were chosen by a dove alighting and fitting upon their heads, the legend whereof may be seen more at large in Schottus. Near the Franciscans cloister is the monument of Dante the famous poet, which is an arch erected to his memory by Bernardus Bembus, the Ventian Podesta in Ravenna; under which is his effigies, and two inscriptions in Latin verse.

I.

Exigua tumuli Dantes hic forte jacehas,
Squalentii nulli cognite pene situs;
At nunc marisque jubnixus condieris arcu,
Omnibus & cultu splendidior nites.
Nimium Bembus musis incensus Etruscis
Hoc tibi quem inprimis haec coluere dedit.

II.

Fura monarchiae, superos, Phlegetonta lacusque
Lufrando cecini voluerint fata quosque:
Sed quia pars caftit melioribus hospita castris,
Aureatoremque suum petit felicitas aetris,
Hic claudor Dantes patriis extorris ab oris,
Quem genuit parvi Florentia mater amoris.

These verses are said to have been made by Dante himself, sed Musis parum faventibus, and if he had not composed better in Italian he had not deferred the reputation of so great a poet. This city may boast of its antiquity and what it hath been, not what it is, and yet the cardinal legate, governor of Romandola, usually resides here. It is very ill served with fish, notwithstanding it is so near the sea: there is scarce a good inn in town, it lying out of the way of travellers, and strangers, and being no thorough-fare. What was true of old is true still here; it's harder to get good water than good wine, Sit cisterna mihi quam vinea malo Ravennae, the water being all brackish: neither yet
yet was the wine we met withal any of the best. I wonder this city should not be more populous and rich: the country, on the north side all along to Faenza, seeming to be fat and fertile land, and being planted after the manner of Lombardy. It lies indeed very low, yet I believe now a-days is never overflown.

We observed, in this journey from Rome to Venice, a great difference between the temperature of the air on this side, and on the other side the Appennine mountains; on the other side it being very temperate and warm, but on this side as cold and raw as it is at any time in winter with us, or indeed can well be in open weather; and that this cold did not proceed from a general change of weather since our coming on this side, we are well assured; for we heard of no such change, and we found snow lying here in the low grounds in many places, which on the other side was all melted and gone, even upon the hills, before our coming over. The reason of this is obvious, because this ridge of hills being higher than the lower region of the air, or place where the sun-beams are reflected, hinders the commixture of the warm southerly and western air with the cold northern and eastern, but especially stopping on one hand the south and west winds, which else would drive the temperate air and tepid vapours into these parts; and, on the other hand, the cold northern and eastern blasts, which else would temper and much abate the warmth of those beyond the mountains. Hence I do not think incredible, nor much wonder at what is related by some travellers of a mountain in the East-Indies, on the one side whereof it is summer, when on the other it is winter.

We left Ravenna, and rode along the banks of the river Montone till we came within four or five miles of Faenza. The country on each side this river was much like to Lombardy. The river ran very swiftly, notwithstanding to the eye the country seem’d to be an exact level. From Ravenna to Faenza we had twenty long miles.

Faenza is a pretty little city, encompass’d with a strong brick wall, at present neglected and out of repair; famous for earthen ware made here, esteem’d the best in Italy. Before we enter’d the town we pass’d a little suburb.
Observations Topographical.

suburb, and then the bridge, in the midst of which stands a tower. Upon St. Thomas's day yearly all the gentlemen of Faenza meet and choose magistrates for all the year, viz. eight Antiani, or senators, and a chief, who is called prior, for every month; so that for every year there are twelve several senates.

From Faenza we travell'd on to Imola ten miles. The way was very fright; I suppose part of the Via Emilia. About the mid-way between Faenza and Imola we pass'd through a little wall'd town called Castel Bolognese. Half a mile short of Imola we ferried over the river Senio.

Imola, anciently Forum Cornelii, is a lesser town than Faenza, hath a fair square piazza, with a cloister or Portico on one side it.

We travell'd to Bologna upon the Via Emilia.

In this side of Italy they have a custom to boil their wines to make them keep the better. The boil'd wine, which they call Vin Cotto, seem'd to us much stronger than the wine unboil'd, which they call Vin Crudo.

We took the Florentine procaccio's boat to Venice. Passing through nine Sostegni, we came to Mal Albergo, where we shifft our boat, going down from a higher to a lower channel, which brought us to Ferrara, which they reckon to be forty-five miles distant from Bologna. From Ferrara we were tow'd by a horse up a fright; artificial channel to a place called Ponte, where we changed our boat again, coming into the river Po. In the Po we rowed down stream about twenty-seven miles to Corbola; where we shifft our boat the fourth time; not for any necessity of the place, as before, but because we then came into the Venetian territory, and so must take a Venetian boat. We went but two or three miles further down the Po, and then struck into a channel on our left hand, passing a sluice to a little town call'd Loreto, and, proceeding on about fifteen miles further, we pass'd near to Chiozza, a large town built among the Lagoon, and Pellestrina, a village standing upon the Argine or Lido, we enter'd into the Lagoon at the haven of Malamocco, and soon after arrived at Venice, Feb. 9. of which city we have already written as much as suffices for our purpose.
We began our journey from Venice to Geneva by the March way of Rhaetia and Switzerland. Passing by boat to Mestre seven miles, and from Mestre to Treviso by coach twelve miles. At Treviso we took horses and a vitturine Treviso, for Trent: in which journey we spent two days and an half, it being almost eighty miles riding. The first day we passed through C. Franco twelve miles, and then o-Castel ver a fair champaign country to Bassoano, a very handsome Franco, and pleasant walled town upon the river Brenta, over Bassoano, which there is a good bridge of wood. This town drives a great trade of weaving silks.

As soon as we were past Bassoano we enter'd among the mountains, going up beside the river Brenta fourteen miles, and lodged at Pont Sigismund. The second day we rode still up beside the river, and about two miles from Ponte we passed through a gate where we paid Dati to the archduke of Innspruck. At this pais is hewn out of the rock a box or little castle called Canolo, a great height above the road, to which there is no avenue at all, but both the soldiers that kept it and all their provisions must be drawn up by rope and pulley, only there is a foun-
tain of fresh water in it. Notwithstanding that this for-
tress belongs to the arch duke, yet the Venetian territory extends four or five miles further to a place called Canolo.

Sixteen miles riding brought us to a pretty little town called Borgo, and thirteen miles more to Perzine a rich Perzine, and populous burgh, five miles short of Trent. Near this town is a good valley, but at our being there the snow was not melted. Between Bassoano and Ponte the country on the left hand the river Brenta as we went up be-
longs to the Sette Comune, and on the right-hand to Bassoano. Upon the river were several saw-mills, and a great quantity of timber floated down the stream to Padua. As soon as we got among the mountains we every where found stoves in the houses instead of chimneys. The plants we observed in this journey were Erica Pan-
onica 4. Clus. now in flower upon the sides of the moun-
tains and the rocks plentifully: Fumaria bulbosa; Leuco-
sin bulbosum vulgar C. B. & Leuc. bulbosum minus i ri-
phyllon J. B.
We got early to Trent, a pretty little city, seated upon the river Athènes at the foot of the mountains, which do compass it almost round, save the valley where the river runs. The inhabitants speak altogether Italian; and the Venetian money passes current among them, notwithstanding their present Prince is archduke of Innspruck. Beside the north door of the Domo we found the monument of Matthiolus having on it these inscriptions.

Above,

Herbarum vires nec rectius edidit alter,
Nec mage te clarus hac super arte fuit,
Si mens ut corpus depingi posset, imago
Una Dioscoridis Matthiolique foret.

Under his effigies this,

D. O. M.

Petro Andreae Matthiolo Senensi III Caesarum
Ferdinandi, Maximilian & Rudolphi Consiliario.

Et Archiatro,

Et Hieronymae Comitisssæ ex antiqua & illustri
Caetellanorum seu Comitum Varmi familia,
Ferdinandus Matthiolus Caesar Ferdinando Aus-
triae Archiduci, & Joanni Georgio Saxoniae Elec-
tori à consilii & cubiculii medicus;
Apostolica & Imperiali auëtoritatibus Sacri Pa-
latii Lateranæ. Auleque Caesareæ comæ,
Et armatae militiae eques auratus,
Una cum Maximiliano fratre
Anniversariis precibus institutis
Parentibus bene merentiissimis PP. Ann. MDCXVII.
Vixit ille an. LXXVII.
Ann. Chrisli MDLXXVII. obiit Tridenti.
Vixit illa an. XXXII.
Obiit ibidem An. Dom. MDLXIX.

Below this distich,

Saxa quidem absunt, sed tempore nunquam
Interitura tua est gloria Matthiolæ.
On the front of the choir is this following inscription concerning the council held in this city.

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$^\text{logiae Doctores 148 : Procuratores 18 : Officiales Conciliii 3 : Cantores 9 : Notarii 4 : Curfores Papae 2.}$

Sacrofancto Spiritui S. omnium Conciliorum directori facratissima Die Pentecostes, Anno 1639, dicatum.

Here are no remarkable churches or other buildings. The bishop is both spiritual and temporal Prince. Under him there is a governor, who yet can do nothing without the council, which consists of eight persons, viz. the Podejia or mayor of the city; the Capitaneo, two canons of the church, and four gentlemen or citizens. All these are nominated and appointed by the bishop, and continue in power during life, modo bene se gesserint. There be 14 canons belonging to the cathedral, all noblemen, and by these the bishop is chosen. The bishop's name then was Sigismundus earl of Tirol, commonly called Archduke of Inspruck.

Of the natural Abilities, Temper and Inclinations, Manners and Customs, Virtues and Vices of the Italians.

The Italians are, by the general confession of all that write of them, ingenious, apprehensive of any thing, and quick-witted. *Barclay (who is not too favourable to them in the character he gives of them) faith, they have animum rerum omnium capacem; and again, that there is nothing so difficult ad quod Italici acuminis praeflantia non tollatur.

They are patient and assiduous in any thing they set about or desire to learn, never giving over till they master it and attain the perfection of it.

They are a still quiet people, as being naturally melancholy; of a middle temper, between the saftuous gravity of the Spaniard, and unquiet levity of the French, agreeing very well with the English, as the Scots are observed to do with the French, and Spaniards with the Irish.

They are very faithful and loving to their friends, mindful of a courtefy received, and if it lies in their way
way or power, for one good turn will do you two. This I had from a very intelligent person, who hath lived and conversed long enough among them to know them thoroughly. Barclay himself confesseth, that where they do truly love omnia discrimina habent infra tam humani fœderis sanftitatem. Understand it of the better sort; for shopkeepers and tradesmen are false and fraudulent enough; and innkeepers, carriers, watermen, and porters as in other places horribly exacting, if you make not an explicit bargain with them before-hand, inform that in many places the state hath thought it necessary, by publick Bando and decree, to determine how much inn-keepers shall receive of travellers for their dinner, and for their supper and lodging.

They are not easily provoked, but will bear long with one another; and more with strangers than their own country-men. They are also very careful to avoid all occasions of quarrel; not to say or do any thing that may offend any person, especially not to abuse any one by jesting or drollery; which they do not like, nor can easily bear.

No people in Europe are more scrupulous and exact in observing all the punctilios of civility 'and good breeding (bella creanza) they call it) only methinks the epithets they bestow upon mean persons are somewhat extravagant, not to say ridiculous, as when they stile a mechanick or common tradesman Signor molto magnifico, and the like.

When they are in company together, they do not only give every man his turn of speaking, but also attend till he hath done, accounting it a piece of very ill breeding to interrupt any man in his discourse, as hating to be interrupted themselves. Contrary to the manner of the French and Dutch, who make no scruple of interrupting one another, and sometimes talk all together. As careful are they, not to whisper privately one to another when in company, or to talk in an unknown language, which all the company understand not. They do also shew their civility to strangers in not so much as asking them what religion they are of, avoiding all unnecessary disputes about that subject, which are apt to engender quarrels; which thing
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thing we could not but take notice of, because in France you shall scarce exchange three words with any man, before he ask you that question.

It is not easy for a stranger to get acquaintance and familiarity with the Italians, they not much delighting to converse with strangers, as not knowing their humours and customs. Yet is their conversation when gotten pleasant and agreeable, their discourse profitable and carriage obliging.

Most of them, even of the ordinary sort of people, will discourse intelligently about politick affairs, and the government and interest of their own country; being much addicted to, and delighted in politick studies and discourses.

Most of them are very covetous of liberty, especially such cities as have been formerly commonwealths, discourses or treatises of that subject making deep impressions on their minds; so that in some places not only books but also discourses about former revolutions are prohibited. Barclay also faith, that they are gloriæ libertatis cupidí, cujus aedific imaginem vident. Hence the Princes of Italy build store of castles and citadels in their territories, not so much to defend themselves against their enemies as to bridle their subjects, and secure themselves against tumults and insurrections. A strange thing it is, that of all the people of Italy, the Neapolitans, who never tasted the sweetness of liberty, nor mended their condition by their commotions, but always (as we say) leap'd out of the frying-pan into the fire, should be the most tumultuous and given to rebel against their Princes. Leti tells us of one of those petty subordinate Princes in this kingdom of Naples, called Thomaso Ferrari, who governed his subjects not like vassals, but with that sweetness and gentleness, as if they had been his own children; yet some of these fellows taking arms come into their Prince's presence, and say to him, Sir Prince, we are come to drive you out of your palace, and burn all your moveables. Why (answers the Prince) can you find fault with my government? Are you aggrieved in any thing and it shall be redressed. No (replied they) but because we understand that many of our country-men have revolted from their lords.
Moral, and Physiological.

lords, we also to shew, that we love revolutions, are resol- 
ved to rebel against you.

The Italians are greatly delighted in pictures, statues, 
and musick, from the highest to the lowest of them, 
and so intemperately fond of these things, that they will 
give any rate for a choice picture or statute. Though 
all of them cannot paint, or play on the musick, yet 
do they all affect skill and judgment in both: and this 
knowledge is enough to denominate a man a virtuoso. 
Many of them are also curious in collecting ancient 
coins and medals.

They are great admirers of their own language, and 
so wholly given to cultivate, polish, and enrich that, 
that they do in a great measure neglect the Latin, few 
of them now a-days speaking or writing well therein; 
but mingling so many Italian idiotisms with it, that you 
have much ado to understand what they speak or write. 
As for the Greek, few or none have any tolerable skill 
in it, the study thereof being generally neglected and laid 
aside.

They are very temperate in their diet, eating a great 
deal of sallet and but little flesh. Their wine they drink 
well diluted with water, and seldom to any excess. We 
saw only one Italian drunk by the space of a year and 
half that we sojourned in Italy. Whether it be that in 
hot countries men have not so good stomachs as in cold; 
or whether meat, as being better concocted, nourishes 
more there; or that the Italians are out of principle, 
temper, or custom more sober and temperate than other 
nations. Their herbs seemed to me more savory and 
better concocted than ours. Their water also was not 
so crude. But for flesh ours, in my judgment, much ex- 
cels theirs, being much more succulent and sapid. Yet 
in Rome have I eaten beef not inferior to ours: but 
I suppose it might be of German oxen; of which (as we 
were inform'd) there are many driven thither: and for 
sucking veal the Romans (as we have already noted) think 
theirs preferable to any in the world.

The Italians, especially those of inferior quality, are 
in all things very sparing and frugal: whether it be be- 
cause they are so educated and accustomed, or because 
the gabels and taxes which they pay to their governors
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are so great, that they cannot afford to spend much on themselves; or because, naturally loving their ease, they had rather live nearly than take much pains.

The nobility and great persons choose rather to spend their revenues in building fair palaces, and adorning them with pictures and statues; in making stately and spacious orchards, gardens, and walks; in keeping coach- es and horses, and a great retinue of servants and staffi- ers, than in keeping great houses and plentiful tables; giving board-wages to their servants and attendants, which in my opinion is the better way of spending estates, these things finding poor people employment, so that the money comes to be distributed among them according to their industry; whereas the other way maintains in idleness such persons for the most part as least deserve relief: those that are modest and deserving choosing ra- ther (if possibly they can) to maintain themselves and their families by the labour of their hands, than hang about great houses for a meal's meat. Besides that great house-keeping is very often, not to say always, the occa- sion of great disorder and intemperance. Were I there- fore God's steward for a great estate (for such all rich men are or ought to be) I should think it more charity to employ poor people, and give them money for their work, than to distribute my estate among them freely, and suffer them to live in idleness; I mean such as are able to labour.

The inferior gentry affect to appear in publick with as much splendor as they can, and will deny themselves many satisfactions at home, that they may be able to keep a coach, and therein make the tour à la mode about the streets of their city every evening.

The Italians when they call, speak to, or of one an- other, use only the christian name, as Signor Giacomo, Signor Giovanni, &c. unless it be for distinction's sake; so that you may converse among them, perchance, some months before you hear any man's surname mention'd.

The Italian gentry live for the most part in the cities, whence it is that the cities are so splendid and well built, so populous and rich, and the country so poor and thinly inhabited. Yet are the noblemen's palaces rather great and stately, than commodious for habitation. In many cities
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cities the paper windows (which are for the most part tatter'd and broken) disgrace the buildings, being unsuitable to their magnificence.

The houses are generally built of stone, thick-wall'd and high-roof'd, which makes them warm in winter, and cool in summer: but they contrive them rather for coolness than warmth, and therefore they make the windows large to give them air enough.

Of the gentry in Italy, especially in Venice, if there be many brothers of one house, only one usually marries, and that the eldest, if he pleases: if he be not disposed, then any other, as they can agree among themselves. The rest do what they can to greaten him that is married, to uphold the family. The brothers that marry not keep concubines or whores; which though it be a sin, yet their confessors can easily absolve them of it.

In most of the cities and towns of Italy there are Academies or societies of Virtuosi, who have at set times their meetings and exercises, which are for the most part prolixions of wit and Rhetoric, or discourses about moral subjects, curious questions and problems, or paradoxes, sometimes extemporary, sometimes premeditated. These have their head whom they call Prince, and a certain number of academists, who are chosen by balloting, but they seldom refuse any that offer themselves to election. Many of these academies assume to themselves conceited or fanciful names, and take a suitable impress or coat of arms; as for example the Academists of Bergamo call themselves Eccitati, and their impress is the picture of the morning. In Mantua the academists called Accesti have taken for their emblem a looking-glass reflecting the sun-beams; those called Timidi a hare. As for the other cities of Italy, in Rome there are three Academies, the Humoristi, the Lyneci, and the Fantastici: in Padua three, the Ricovinati, Infiammati, and Incogniti: in Bologna three, Ardenti, Indomiti, and one innominate: in Venice two, Discordanti and Gufsoni: in Naples two, Ardenti and Intrinati: in Luca two, Ocsci and Freddi: in Florence la Cruyfca: in Siena Intrinati: in Genoa Addormentati: in Vicenza Olympici: in Parma Innominati: in Pavia Affidati: in Milan Nascofi: in Ferrara Elevati: in Rimini Adagiati: in Cesena Offuscati: in Ancona Ca-
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Most of the Italians of any fashion wear black or dark coloured cloths, and for the fashion of them follow the French (but not too hastily) excepting those countries which are subject to the King of Spain, which use the Spanish habit.

As for their vices, they are chiefly taxed for three.

1. Revenge; they thinking it an ignoble and unmanly thing to put up or pass by any injury or affront. Many times also they dissemble or conceal their displeasure and hatred under a pretence of friendship, that they may more easily revenge themselves of whom they hate by poisioning, affaiinating, or any other way; for nothing will satisfy them but the death of those who have injured them: and there be bravos and cut-throats ready to murther any man for a small piece of money. Besides, which is worst of all, they are implacable, and by no means to be trusted when they say they pardon. Hence they have a proverb among them, *Amicitie reconciliate & menefire riscaldate non furono mai grate.* The women also provoke their children to revenge the death of their fathers by shewing them the weapons wherewith they were murthered, or cloths dipp'd in their blood, or the like, by which means feuds between families are maintained and entail'd from generation to generation. These are the qualities for which we usually say, an *Englishman Italianate* is a devil incarnate.

2. Lust, to which the inhabitants of hot countries are by the temper of their bodies inclined. Hence it is that all cities and great towns do so swarm with courtezans and harlots; and to avoid worse evils, the State is necessitated to give them public toleration and protection. As for masculine venery and other works of darkness, I shall not charge the Italians with them, as not having sufficient ground so to do; and because (as Barclay saith) *Haec sefera tenebris damnata & negari faciili a conficiis possunt,* 

*3. Jea*
3. *Jealousy*, which strangely possesses this people; so that for every little suspicion they will shut up their wives in a chamber, and carry the key with them, not suffering them to stir abroad unless themselves accompany them. To salute an Italian's wife with a kiss is a flagging matter; and to call a man *cornuto* or cuckold in good earnest is the greatest affront or disgrace you can put upon him. The married women in Italy by this means have but bad lives, being for the most part confined to their houses except when they go to church, and then they have an old woman attending them: the doors of their houses shut up at dinner and supper; all visits and familiar discourses with men denied them; neither can they speak or smile without suspicion: one reason of this among others may be, because the husbands knowing themselves to be so dishonest and false to their wives, they presume that had they opportunity they would not be more true to them. And yet for all this guarding and circumpection are not the Italian dames more uncorrupt than the matrons of other nations, but find means to deceive their husbands, and be dishonest in spite of jealousy.

To these I might add *Swearing*, which is so ordinary among all sorts, the priests and monks themselves scarce abstaining from oaths, that I believe they account it no sin.

It is a general custom all over Italy to sleep an hour or two after dinner in summer-time; so that, from two of the clock till four in the afternoon, you shall scarce see any body stirring about the streets of the cities. Indeed if one fits still it is very hard to keep his eyes open at that time. Either this custom did not prevail when the School of Salerno wrote their phyfick precepts, or that direction, *Sit brevis aut nullus tibi somnum meridianus*, was calculated for England, to whose King that book was dedicated. And yet the Italian physicians still advise people either not to sleep at all after dinner, or if they must sleep, to strip of their cloths and go to bed, or only to take a nod in their chair sitting.

In many cities of Italy are hospitals where pilgrims and poor travellers are entertained, and have their diet and lodging for three days (if they have reason to stay
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so long) gratis, besides a piece of money when they go away.

There are also hospitals to receive exposed children, if I may term them; that is, any without exception that shall be brought and put in at a grate on purpose, whither upon ringing a bell an officer comes presently and receives the child, and asking the party that brought it, whether it hath been baptized? carries it to a nurse to give it suck; and there it is maintained till it be grown up. The place where it is put in is so strait as to admit only children new born or very young. This I look upon as a good institution in great cities, taking away from the temptation of murthering their new born children, or destroying their conceptions in the womb, to hide their shame. I know what may be objected against it, viz. that it emboldens them to play the wantons, having so fair a way of concealing it: Sed ex malis minimum.

In Rome, Venice, and some other cities of Italy they have a way of exercising charity little used among us. Several confraternities of well-disposed persons raise sums of money by a free contribution among themselves, which they beflow yearly in portions for the marrying of poor maids, which else might want husbands, and be tempted to dishonest practices to maintain themselves. This I look upon as well-plac’d alms and worthy the imitation; it being very convenient and in a manner necessary, that new-married people should have something to furnish their houses and begin the world with; and no less fitting, that young persons should be encouraged to marry, as well for multiplying of people, wherein the strength of the commonwealth chiefly consists, as for the preventing those evils to which young and single persons are strongly tempted and inclined.

It is a troublesome thing to travel with fire-arms in Italy, you being forced in most cities to leave them at the gate, with the guard, who give you a tally or token; and when you leave the city you bring your tally and receive your arms. This is done to prevent assaults and murders, which are so frequent in many cities of Italy. For this the Great Duke of Tuscany is much to be commended, there being no such murders and outrages committed in any
any of the cities under his dominion as in other places: so diligent is he in searching out, and severe in punishing bravos, cut-throats, assassins, and such kind of malefactors. As much might be said for the Pope in the city of Rome, but in other cities in his territories there is killing enough.

When you depart from any city you must be sure to take a bill of health out of the office that is kept everywhere for that purpose: without which you can hardly get to be admitted into another city, especially if it be in the territory of another Prince or State. If any one comes from an infected or suspected place, he is forced to keep his quarantine (as they call it) that is, be shut up in the lazaretto or pest-house forty days before he be permitted to come into the city. So scrupulously careful are they to prevent contagion.

In Rome and other cities of Italy we have often observed many labourers that wanted work, standing in the market places to be hired; whither people that want help usually go and bargain with them. Which custom illustrates that parable of our Saviour recorded in the beginning of the xxth chapter of St. Matthew’s gospel, wherein the householder is said to go out about the third hour, and see others standing in the market-place, ver. 3. and in ver. 6. he is said to find others about the eleventh hour, and to say to them, why stand ye here all the day idle; and ver. 7. they answer, because no man hath hired us.

In Italy and other hot countries so soon as they have cut down their corn they thresh and winnow it usually, or at least a great part of it, on a floor made in the open air, before they bring it into the house. Hence in the scripture we read of threshing floors as open places without roof or cover. Such I suppose was that where Boaz winnowed barley, Ruth iii. 3. Neither is it any wonder that he should lie there all night: for at Aleppo and even in Malta in summer-time they set their beds upon the roofs of their houses, and sleep sub Dio, in the open air.

One custom we have in England, which (as far as I could observe) is no where used beyond the seas, and that is for children to beg their parents and godfathers blessing upon the knee.

One custom, which prevails generally in foreign countries,
tries is but little used in England, that is, to salute those that sneeze by vailing the bonnet, and praying God to blest, assist, or defend them, &c.

There is a kind of sport or game much used this day by the Italians, called Gioco di mora, which seems to have been used by the ancients and called micare digitis. It is for the most part between two, who put out just at the same time each of them as many fingers as they please, and also name each of them what number he thinks fit; and if either of them happens to be the number of the fingers which both of them together threw out, then he that names that number wins one.

Several Sorts of Meats, Fruits, Salle ts, &c. used in Italy, and other Observations about Diet.

1. In Lombardy and other parts of Italy, Tartufale (as they call them) i.e. Tubera Terrae, a kind of subterraneous mushroom, which our herbarists English Trubs, or after the French name Trufles, are accounted a choice dish, held by naturalists to be incentive of lust. The best of all are gotten in Sicily, and thence sent over into Malta, where they are sold dear. The way to get them is to turn swine into a field where they grow, who find them by the smell, and root them up out of the ground, and set one to follow the swine, and gather them up.

2. Snails boiled and served up with oil and pepper put into their shells are also accounted a good dish: I am sure they are sold dear at Venice and elsewhere, especially the great whitish or ash-coloured shell-snails, which we had not then seen in England, but have since found plentifully upon the downs near Darking in Surrey, whither (as we were informed by the honourable Charles Howard, Esq.) they were brought from beyond seas by Mr. Martin Lister hath found them on the banks of that hollow lane, leading from Puckeridge to Ware. These snails before winter stop up the mouth or aperture of
of their shells with a thick hard white paste like a good lute or plaister, and are kept all winter in barrels or other vessels, and sold by the poulterers. The first place where we met them to be sold in the market was Vienna in Austria, where they imitate the Italians as well in their diet as in the manner of their buildings.

3. Frogs are another Italian viand which we in England eat not. These they usually fry and serve up with oil. At Venice they eat only the loins and hind-legs, as also at Florence, and that upon fish-days. In some places of Lombardy they eat their whole bodies, and besides their frogs are of a larger size than ordinary. Their flesh shews white and lovely as they lie in the markets skinn’d, and ready prepared to be fried. Howbeit even there in Italy, Kircher in his book de Pestie condemns them as an ambiguous and dangerous meat, and I think deservedly; wherefore we do well, having plenty of better food, wholly to abstain from them.

4. Land Tortoises are accounted with them a better meat than sea-tortoises, and are commonly to be sold in the markets. They are eaten by those orders of friars whose rule obliges them to abstain from flesh, as Carthusians, Carmelites, &c.

5. They eat also many sorts of Shell-fish, which we either have not or meddle not with, as purples, periwinkles of several sorts, Patellæ or limpets, sea-urchins, which last are to be found every day in the markets at Naples. They also eat the sea-tortoises, of which the blood put into the stomach and boiled is the best part.

6. Paste made into strings like pack-thread or thongs of white-leather (which if greater they call Macaroni, if lesser Vermicelli) they cut in pieces and put in their pots as we do oat-meal to make their Menestra or broth of, much esteemed by the common-people. These boiled and oiled with a little cheese scraped upon them they eat as we do buttered wheat or rice. The making of these is a trade and mystery; and in every great town you shall see several shops of them.

7. They scrape or grate Chestnut upon all their dishes even of flesh; accounting that it gives the meat a good relish; which to those that are unaccustomed makes it rather nauseous or loathsome.

8. Chestnuts
8. Chestnuts roasted and the kernels served up with juice of lemon and sugar are much esteemed, and by some called the Pistachio's of Italy. At Bologna they grind them and make little cakes of the flower of them, which though eaten by the poor are no desireable dainty to a delicate palate. Roasted chestnuts are a great part of the diet of the poor peasants in Italy; as we have elsewhere noted.

9. They eat all manner of small birds as well as the Germans, viz. wrens, sparrows, titmice, butcher-birds, &c. and several great ones which we touch not in England, as magpies, jays, wood-peckers, jack-daws, &c. Nay we have frequently seen kites and hawks lying on the poulterers' stalls; as we have already noted in our description of Rome.

10. They use several herbs for Sallets, which are not yet, or have been but lately used in England: viz. Selleri, which is nothing else but sweet smallage, the young shoots whereof, with a little of the head of the root cut off, they eat raw with oil and pepper: in like manner they eat fennel; artichoke also they eat raw with the same sauce; [the same part of it that is eaten boil'd.] In Sicily at the highest village upon that side mount Etna that we ascended, they gave us to eat for a sallet the stalks of a tall prickly thistle, bearing a yellow flower, I suppose it was the Cardus Chrysanthemus Dod. which the rankness of the soil had caufed to mount up to that stature. Besides, in most of their sallets they mingle rocket (Rachetta they call it) which to me gives them an odious taste. Curled Endive blanch'd is much used beyond seas; and for a raw sallet seemed to excel lettuce itself; besides it hath this advantage, that it may be kept all winter.

11. Many fruits they eat, which we either have not, or eat not in England, viz. Jujubes, sold by the hucksters while they are yet green: L'azarole, the fruit of the Mespilus Aronia, of a pleasant acid taste: both fruit and tree exactly like the common hawthorn, but bigger. Services or Sorbes the true, as big as little pears; those that grow with us are the fruit of the Sorbus torminalis: Green figs both white and blue in great plenty; a most delicate fruit when fully ripe, comparable for
the tafte to the beft marmalade, and which may be eaten freely without danger of fufteiting: The husks or cobs of Carobs, called in Latin Siliqua dulcis, inGreek kegeis, the word used Luke xv. 16, and therefore by fome fupposed to be the husks the prodigal is faid to have desired to fìll his belly with. Indeed we thought them fitter meat for fwine than men; for though they had a fweet tafte, yet afterwards they troubled our ftomachs and purged us: but they have not upon all men the like effect; for the Italians and Spaniards eat them ordinary without any fuch trouble: Love-apples: Mad-apples both raw and pickled: Water-melons; which theyufe to eat to cool and refresh them, and fome physicians allow fick persons to eat them in fevers. They are almoft as big as pompions, have a green rind and a reddifh pulp with blackifh feed when ripe. The Italians call thefe Cucumeri, whereas cucumbers they call Citrulli. Several forts of gourds, as Cucurbita lagenaria, and Cucurbita flexuosa fve anguina; which eats very well boil'd in pottage: Cucumis anguinus, which is more esteemed and indeed better taffed than the cucumber. The common people both in Italy and Sicily eat green chich-peafe raw, as our people do common peafe.

12. In their deserts and second courses they commonly ferve up pine-kernels, and in time of year green almonds: also a kind of fweet-meat or confection made up of muftard and sugar, which they call Italian muftard.

13. To cool and refresh their wines, they fufe generally snow, where it may easily be had, else ice, which they keep in conservatories all fummer. Without snow they that are used to do it do not willingly drink, no not in winter.

14. In the kingdoms of Naples and Sicily they make a fort of cheefe which they call Casio di cavallo, i.e. horfe-cheefe, for what reafon I could not learn. These cheefes they make up in feveral forms; fome in the fashion of a blown bladder, fome in the fashion of a cylinder, and fome in other figures. They are neither fat nor ftrong, yet well taffed and acceptable to fuch as have eaten of them a while. The pulp or body of them lies in flakes, and hath as it were a grain one way
way like wood. They told us that they were made of buffles milk, but we believed them not, because we observed not many buffles in those countries, where there is more of this cheese made than of other forts.

15. In Italy and other hot countries, their meat is not only naturally more lean and dry than ours, but they roast it also till it be ready to fall from the bones, and there be little juice left in it. Besides, when they roast their meat, they draw coles under the spit, and let the fat drop on them, the nidus whereof perfumes the meat, but not to our gust who are not used to it, and what they lose in dripping they save in drible. Their roasting differs not much from our broiling or carbonading. I speak this of ordinary inns and mean peoples houses, in great houses and inns it is otherwise.

The Italians count not their hours as we do, from twelve to twelve, beginning at mid-day and midnight; but from one to four and twenty, beginning their count at sun-set, which is a much more troublesome way; the setting of the sun being a moveable point or term, and they being therefore necessitated to alter and new-set their clocks every day: whereas midday and mid-night being fix'd points, the clocks need no setting a-new. As for Italy in general, though the Italians imagine it to be the best country in the world, and have a proverb among them that Italy is the garden of the world: yet setting aside Lombardy, Campania felix, and some few other places, the rest is mountainous and barren enough: the earth so parched by the sun-beams that it bears no grass, and (as Barclay faith) seldom yieldeth grain enough for three years successively to supply the necessities and uses of its inhabitants, whatever they may boast of the Italia gleba. The reason why the Italians are so conceited of their own country is, because they seldom travel abroad, and so see not the beauty and fertility of others.

I might have taken notice of the vast and incredible number of religious houses there are in Italy. I have sometimes thought they might in all of both sexes amount to eight or ten thousand. Of these the gentleman
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men make advantage. For such of their daughters as either they cannot get husbands for, or are not able to give portions to, suitable to their birth and quality, they can in one of these houses for a small matter honourably dispose of and settle for their lives. The institution of such houses as these, whither young women of quality, who for want of sufficient fortunes or personal endowments cannot easily provide themselves suitable matches, might retire and find honourable provision, might per-chance be tolerable, yea commendable, were they purged from all superstition, the women not admitted too young, and under no vow of perpetual chastity, only to leave the house in case they married. But because of the danger of introducing monkery, I think it more safe for a Christian state not to permit any such foundations.

Buffles are a common beast in Italy, and they make use of them to draw their wains as we do of oxen: only because they are somewhat fierce and unruly, they are forced to lead them by an iron-ring put in their noses, as our bear-wards do their bears.

1. The Cicadae before mentioned.

2. The flying glow-worms, which are there every where to be seen in summer time. These flying or winged glow-worms are nothing else but the males of the common creeping or unwinged glow-worm. Fabius Columna relates, that Carolus Vintimiglia of Palermo in Sicily, having out of curiosity kept many unwinged glow-worms in a glass, did put in among them a flying one, which presenty in his sight did couple with them one by one after the manner of silk-worms, and that the next day the unwinged ones or females began to lay their eggs. That the males are also flying insects in England, though they do but rarely or not at all shine with us, we are assured by an eye-witness; who saw them in conjunction with the common shining unwinged glow-worms. Here by the way it may not be amiss to impart to the reader a discovery made by a certain gentleman and communicated to me by Francis Jeffop Esq; which is, that those reputed meteors call'd in Latin Ignes fatui, and known in England by the conceited names of Jack with a Lantern, and Will with a Wife, are nothing else but swarms of
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of these flying glow-worms. Which if true, we may give an easy account of those strange Phenomena of these supposed fires, viz. their sudden motion from place to place and leading travellers that follow them into bogs and precipices,

3. Scorpions, which in Italy sting not, or at least their stings are not venemose, as the learned Franciscus Redi affirms; though by experience he found the stinging of the African scorpions to be mortal or at least very noxious.

4. Tarantula's, so called because found about Tarentum. (though we have seen of them at Rome) which are nothing else but a large sort of spiders; the biting whereof is esteemed venomous, and thought to put people into phrenetick fits, enforcing them to dance to certain tunes of the musick, by which means they are cured, long and violent exercise causing a great evacuation by sweat. These fits they say do also yearly return at the same season the patient was bitten. But Dr. Thomas Cornelius of Cofenza before mentioned, a learned physician and virtuoso in Naples, diligently enquiring into this generally received and heretofore unquestioned story, that he might satisfy himself and others whether it were really true in experience.

5. Cimici, as the Italians call them, as the French Puanafe. We English them chinches, or wall-lice, which are very noisome and troublesome by their bitings in the night-time, raising a great heat and redness in the skin. They harbour in the straw of the bolsters and mattresses, and in the wood of the bedsteads; and therefore in some Nofocomia, or hospitals for sick persons, as for example, at Genoa the bedsteads are all of iron. This insect, if it be crush'd or bruis'd, emits a most horrid and loathsome scent, so that those that are bitten by them are often in a doubt whether it be better to endure the trouble of their bitings, or kill them, and suffer their most odious and abominable stink. We have of these insects in some places of England, but not many, neither are they troublesome to us.

We departed from Trent, intending for Coira or Chur in the Grifons country, called in Latin Curia Rhætorum. We rode up the valley where the river Athéis runs, call'd Val Venoîta, every five miles passing through a large village,
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lage, and one handsome little town called Burgo, and lodg’d at a small place call’d Brunsole.

We rode through Bolzan, a considerable town, and, for bigness, comparable to Trent; and ten miles fur- Bolzan, ther Maran, a large town, and lodg’d at a village called Maran. Raveland.

We passed through Latourn, Slach, Schlanders, Maltz, all villages and towns of note; and last of all Cleurn, a pretty great walled town, and then struck up on the left hand among the mountains to a village called Tavers, where we lodg’d.

We rode on through the snow to Monastero, where the Grifons country begins, and St. Maria, a small terra, and stopp’d at Gherf, a village at the foot of the high mountains. In this country the people use a peculiar language of their own, which they call Romanfch, that is, Lingua Romana. It seems to be nearer Spanish than Italian, though distinct from both. Besides their own language they generally speak both Italian and Dutch: so that after we had lost Italian in the valleys, we wonder’d to find it here again among the hills. Their wines they bring all out of the Valtelline, from Tirano, about two days journey distant. The country at this time was all over cover’d with snow, so that they are fain to keep their cattle within doors for fix months: yet the people said that hereabouts the snow did not lie ‘all summer, no not on the tops of the highest mountains. Here we observed that, to draw their sleds over the snow, instead of oxen they made use of bulls, one bull drawing a little sled. About Tavers we observ’d them sowing of dust upon the snow, which they told us was to make the snow melt sooner: I suppose it was rather for manure.

They use stoves in all places, and good reason they have, the country being so cold. A great number of Chamois or Gems [Rupicaprae] are taken all over these countries upon the high hills, as, though the people had not told us, we must needs have gather’d from the multitude of horns we saw stuck up in the houses where we lodged. Bears there are, and wolves among the high mountains, but not many. The men generally wear ruffs and long bushy beards. All the people (as far as we
we had experience, or could judge of them in the short stay we made among them) we found to be honest, hearty, and civil, and the common sort very mannerly. Their houses are built of stone, and cover'd with thin-gles of wood, the walls thick, and the windows very small to fence against the cold. They have no strong holds or fortified places among them; nor will they permit any to be erected; having so much confidence in their own valour, that they think they need no other defence: indeed their country is such as one would think none of their neighbouring Princes should covet, unless for the security of his own territories.

22. We passed the mountain of Bufalora in seven or eight hours. In the top of the mountain, in the mid-way between Cherf and Zernetz, is an inn called Furno. From Zernetz we rode in the valley of the higher Engadine through Zuotz, a great terra, and two other villages, and lodg'd at a little place called Ponte.
OF THE

GRISONs.

The Grisons are divided into three leagues, and each league subdivided into Communes: each Commune contains several villages; not all an equal number, but some more, some fewer. The Lega Grifa (according to Simler) hath nineteen Communes. The Lega della caja di Dio hath twenty one Communes, which are sometimes contracted into eleven. Cleurn, Tavers, and Maltz have lately revolted from this league, and put themselves under the archduke of Inspruck. The Dieci Dritture have ten, as the name imports. Each Commune hath its annual chief magistrate, whom in some places they call Maeftrale, and a certain number of assessors or judges, which in their language are called Truæder. Each terra or village choses its judges by majority of votes. [Sometimes the people choses only a certain number of delegates, which delegates are to make choice of the judges.] All the people, as well rich as poor, as well servants as masters, have their suffrages so soon as they come to the age of sixteen years. The time of their election is St. Matthias's day. The Commune of Engadina alta hath ten great villages (terra they call them) sixteen judges called Truæder, one Maeftrale, one chancellor or notary. The Maeftrale, the chancellor, and four Truæder are always of Zutz. The other terre have some one, some two, according to their bigness. [In other communities the several terre have the Maeftrale and other officers by turns.] These magistrates are changed every two years, but confirmed every year, and may be put out by the people if they please. The Maeftrale (called in some places Landam-
Observations Topographical,

man) is the chief, and assembles the Truæder together, makes processos, and in sum hath the executive power. When they have occasion to meet to decide any business, or judge in any criminal cause, he that is cast or condemned, if he hath goods, bears the charges, if he hath none, then the Commune bears the charges; so that every Commune is a common-wealth by itself, and its government purely democratical. Every two years they have two diets or general councils: the first diet (when the officers which they send to their several Prefecturae are elected) is at Michaelmas, the second (when they take an account of their officers) is on St. John Baptist’s day. To these diets each Commune sends its delegates, Messi they call them, or commissioners, some one and some two. These delegates must act according to the instructions given them by their several communities. Each league hath its head or chief. The burgomaster of Coira is always head of the league della casa di Dio. In the Lega Grisfa there are four communities that by ancient custom have the head (who is here called Landtreichter) by turns. In the Dieci Dritture six communities have the choice of the chief, who is called Landamman. Those six Communes send each its delegates to Tavas, and the delegates by the major vote choose the new Landamman. These sometimes with some assistants meet as a lesser council, but have no absolute or decisive sentence. There lies an appeal from the general diet to the communities, and what the major part of those concludes or agrees upon is valid. The Grifons pay no sort of duties, gabels, or taxes. In Italy the county of Chiavena and the Valtelline are subject to the Grifons. To the county of Chiavena they sent formerly two Podesta’s or bailiffs, one to Plurs, which town was miserably destroyed by the falling of a mountain upon it, and one to Chiavona, who is called Commissario.

Near Plurs are made pots and vessels of stone turned after the manner of wood, which will endure the fire. The Valtelline according to Simler is divided into six Prefecturae, whither the Grifons send Podesta’s or governors. Those are Bormio, which some make a county by itself, Tirano, Tellio, Sondrio, Morbegno, and Travona. They named to us two more, viz. Ponte
Moral, and Physiological.

and Chiur. These Podefia's are changed every two years, the principal or head of them is the prefident of Sondrio, who is not called Podefia, but Governatore as we were told, as Simler faith Capitano. In the chaling of praefects the order both of the leagues and of the communities is observed. So that for example, if the Lega Grifa chuses the governor of Sondrio for this two years, the Lega della eafa di Dio shall have the choice of him the next two, and the Dieci Drittura the following. The like order is observed in the several communities of each league. The people of Voltelline, the county of Bormio, and the county of Chiavena pay no taxes or gabels more than for the maintenance of their governors or Podefia's.

We left Ponte, and paffed over another high moun

tain called in a very bad season, for that it snowed exceeding fast all the while we were abroad, which in many places so filled up the track, that we could see no way at all, only we could presently find when we were out, for then our horses were almost up to the belly in snow: besides a brisk gale of moist bitter cutting wind blew just in our faces, which did so affect my eyes, that I could not open them without great pain for three days, nor easily endure to look upon snow for a great while after. The reason why my eyes were more afflicted than others, I conceive was, because I was not careful to wipe the snow off my face, but suffered it to freeze to the hair of my eyebrows and eyelids: the cold whereof, being contiguous to them, stupefied, and would in time have quite mortified my eyes. And here by the way we may take notice, that the people living in this mountainous cold country look more swarthy and dusky, at least their faces and parts exposed to the air, and have not so good complexions as those that live below in a milder and more temperate region. It is an observation of Bodin in his Method of History, that the inhabitants of the temperate zone, as you go further and further from the tropic, are still whiter and whiter, till you come to a certain degree of latitude, and then they grow dusky and dark-colour'd again; witness the Greenlanders, Laplanders, &c. extremity of cold parching
Observations Topographical,

and tanning the skin as well as excess of heat. And we found this true by our own experience; for our faces were so hack'd and burn'd (if I may take leave so to use that word) by the cold in our passage over these mountains that for some time after we look'd like so many gypsys. This night we lodg'd in a terra called Bergun.

We went to Coira, the capital city of the Grifons, a pretty little town standing on a small river that falls into the Rhine, about half a mile below, environed almost with mountains, save only on that side the river Rhine runs; where there is a pleasant valley, having very good meadow and pasture grounds. The inhabitants of Coira are all Protestants, excepting the bishop (who coins money that is current here) and twenty four canons. The bishop hath nothing at all to do in the government of the town. The form of government is much like that of Zurich and Basil, viz. the citizens are divided into five tribes or companies, each of which choses fourteen senators, which make up the great council of seventy. These are called Rattheren, and are chosen by the people anew every year on St. Martin's day; anew I say, for the same are usually chosen again so long as they live. Out of this great council are chosen yearly of each tribe five into the lesser council, to which are added the five masters of the companies for the last year, who make up the number of thirty. Half these are called senators, and govern the commonwealth. The chief officers who preside in the senate are the two burgomasters, who rule alternately, one one year, the other the next. The council of thirty with the regent burgomaster, who is called Stattwacht, judge in criminal cases. Besides there is a bench of judges made up of the five masters of the companies, and ten out of the council of thirty, where-in the praetor of the city called Stattrichter presides, which determines civil controversies and actions of debt. But from them there lies an appeal to the council of thirty.

In the mountainous pastures about this town, we observed growing plentifully Crocus vernus flore albo, & flo. caeruleo, & flo. ex albo & caeruleo variegato;
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Hepatica nobilis ubique; Leucoium bulbosum Tab. & Ornithogalum flore luteo. Besides Coira the Grifons have two little towns which they call cities, Mayfield and Eylandts. For their religion the Grifons are divided; some communities being Romanists, some Protestants; but most Protestants, of whom they told us there were in all the country about 17,000 fighting men.

We travelled from Coira to Walenflatt, situate be Mar. 29. side a small lake, thence called Walenflatter-Sea: passing 1665. by the way through Mayfield, Ragats, and Sargans, Walenflatt. Both Sargans and Walenflatt are Voghtia's or Prefectures belonging to the seven cantons.

We ferried over the lake to Wessen, and from Wessen rode to Glaris, one of the thirteen cantons of Switzerland. Here we saw the horns of the Ibex (which they call Steinbuck.) They are somewhat like to goat's horns, but larger. They told us, that there were none of these beasts found hereabouts, but that in Wallisland, and in the archbishoprick of Salzburg in Germany, there were of them. But of the Rupricaprae or Gimpes, and Mares Alpini majores, called Marmottos, they have good store, or Gimps. Of birds they have in plenty Merulae torquatæ, which Marmote they call Ringer- Amzel; Merulae aquatæ, which they too's, call Wasser-amzel; Urogallus, or cock of the wood, Lagopus, a milk white bird somewhat bigger than a Partridge, feathered down to the very toes and claws, of the heath-cock kind; but more of these in the Grifons country, where they brought them us to sell. The people of this canton of Glaris, as also Appenzel, are mixed, two third parts Protestants, and one third Roman-Catholicks. They both make use of the same church for their several services: first the priest comes and does mass, then the minister, and preaches.

The governments of the several cantons of Switzerland may be reduced to three forms or heads. The first is of those cantons which have no cities, whose chief officer is is called Landamman; and in these the supreme power is in all the people, by whose counsel all businesses of moment are decided. Of this sort are Uri, Suits, Underwalden, Zug, Glaris, and Appenzel. The second, of those which have cities that were either built by, or sometime subject to Princes, whose chief officer is
Observations Topographical,
called Sciltetus or Scout: this form is most aristocratical of all others; and of this sort are Bern, Lucern, Friburg, and Solothurn. The third, of those which have cities divided into several tribes or companies, by whose suffrages the magistrates are yearly chosen; of this order are Zurich, Basil, and Schaffhaufe.

G L A R I S

Is divided (according to Simler) into fifteen parts, but as we were told there into twelve parishes, of which some have five counsellors, some six; some more, some less, according to their bigness. These make up the senate or council, which consists of sixty, whereof two parts are of the Reformed religion, and one of the Romish, besides the Landamman and other chief officers, who have the privilege of sitting in council when their term is expired. The chief and supreme power is in the whole people. Upon the last Sunday in April yearly there is a general convention of all the males above sixteen years of age, together with the magistrates at a place called Schuandan. This general meeting or convention is called Landtskmein: and by these by majority of suffrages the magistrates and officers are chosen; and first the Landamman, who continues in office sometimes two, sometimes three years. Into this office they may choose out of all the people whom they please without any regard of place. 2. The Statthalter, who is the Landamman's lieutenant. These offices in this canton are thus divided between the Protestants and Papists. Three years the Landamman is a Protestant, and the Statthalter a Papist; then the two following the Landamman is a Papist, and the Statthalter a Protestant. 3. The Seckelmaister or treasurer. 4. Pannerbeer or standard-bearer. 5. Landtsauptman or chief captain, and under him in time of war a lieutenant. 6. Landtsfondricht or ensign. These three last continue for life. 7. Three Landtschrieben, i. e. secretaries or chancellors, who are present in council, but have no suffrages. 8. Landtsweible or apparitor; he gathers the votes in the general convention, summons the council by proclamation in the church, &c. The Landtsemein chooses also the Landtvogts or prefects, and either confirms or abrogates
Moral, and Physiological.

The sixty senators usually continue in office during life \textit{modo bene se gejfertin}, yet are they yearly chosen anew or confirmed at the general convention, not by the whole convention, but each one by that part or parish to which he belongs, and by which he was chosen; who also when any one dies choose another into his place. The \textit{Landamman} when his office is expired is called old \textit{Landamman}, and may still sit in council, which is a favour allowed him in regard of his former dignity. The aforementioned officers also sit in council. The \textit{Landamman} puts men in prison by his authority, propounds business to the council, appoints the days of the council's meeting, and to that end appoints the officer to give them notice in the church. In this canton, to avoid the ambition and inordinate expenses of candidates for offices, who were wont to court and feast the people, they have lately introduced lottery in the choice of officers and governors. All the candidates are first put to the vote, and those eight (if there be so many for any one place) who have most suffrages are set in the middle. Then the \textit{Landtschrieb} or secretary takes eight balls, one of which is gilt, and wraps them up in single papers, and puts them into a hat which he holds under his arm, whilst a little child puts in his hand and takes out the balls one by one, and gives them to the eight. He who happens to have the gilt ball is the officer. Besides these councils there are also two consftories of judges; one consisting of nine, chosen by the \textit{Landtskmein} out of the council or \textit{Rattheeren}, to whom the \textit{Landamman} is added president, who determine all causes of injuries, and all business of inheritances, and where money is gained with hazard of life: the other consisting of five who determine actions of debt. These consftories (faith \textit{Simler}) sit only in \textit{May} and \textit{September}. Private quarrels by consent of the parties are usually referred to a counsellor of the parish. To the general diet at Baden the Reformed send the \textit{Landamman} when he is a Protestant, and the Roman Catholics the Statthalter, and to vice versa.

The territory of \textit{Glaris} is about eight hours long, that is, allowing three \textit{English} miles to an hour, twenty four miles:
miles: the number of freemen of both religions about 2500. This canton hath one vogtia or bailiwick proper to itself, that is Werdenberg, to which every three years they send a new landtvogt or prefect, who is a Protestant.

In the cantons of Basil, Zurich, Bern, Lucern, Schaffhausen, Triburg and Soloturn, the citizens only are freemen, and the territory or country round about with all the towns therein are subjects, and divided into several bailiwicks or præfecturae (Vogtis they call them) to every of which the cities send a bailiff or landtvogt, who is governor there, whom they change in some cantons every second, in some every third, in some every sixth year. In the other cantons where there are no cities, all the countrymen inhabiting the canton, properly so called, are freemen; I say the canton properly so called; for these also have their subjects, whom they govern likewise by their prefects or landtvogts. Besides the proper there are also common præfectures or vogties, some to two, some to three, some to seven, some to twelve, and some to all the cantons: to which the cantons concerned by course send their landtvogts. To the twelve cantons (Appenzel is the excluded) belong the four Italian præfecturae, which they obtained by the donation of Maximilian Sforze Duke of Milan, An. 1513, viz. Lugano, Lagarno, Mendriz, and Val Madia. To the seven cantons, that is Zurich, Lucern, Suitz, Uri, Underwald, Glaris and Zug, belong Baden, Liberæ Provinciae, and Sargans: to these seven and Bern belongs Turgow; to these seven and Appenzel belongs Rhineck or Rheinthal. To the three cantons, i.e. Uri, Suitz, and Underwald belongs Bellinzona in Italy, whose territory is divided into three bailiwicks, to which those three cantons send landtvogts by course, viz. Bellinzona, Val Palenfa, and Riviera: To the two cantons of Suitz and Glaris belong Uznach, Wofent, or Castra Rheticca.

At Glaris they told us, that in their own country those of the canton of Suitz were good soldiers, but living most upon milk and white meats, they could not last and endure abroad. That those of Uri, Appenzel, and the lower part of Glaris made the best soldiers of all.

April 1. We travelled from Glaris through Nafels a little village, and several other villages near the lake of Rappeville.
Moral, and Physiological.

wille or the Zurich-sea, especially Lachen, where they usually take boat for Zurich, and after an hour's riding by the lake's side, and in sight of Rapperswille and the long bridge cross the lake, we climb'd up a very high mountain on our left hand, to the top of which when we were ascended we rode through a country all covered with snow, which in the summer time seems to be a very pleasant place. Here we found Eynsfedle, where is a fa-mous monastery of Benedictine friars, in whose church is an image of our Lady, which works great miracles, *cre dere fas fit.* This is a place of great devotion, visited by strangers and pilgrims after the manner of Loretto. And as there is the holy house, so here is a chapel divinely confe-crated, set in the body of the church, and inclosed in a case of marble, given by an archbishop of Salzburg. Near the door of this church is an alley of shops of beads and medals, as at Loretto; and here as there an incredible number of beggars continually waiting. The canton of Swyts is protector of this abbey. If any one desire to know more of this place he may consult the history of it, intitled (as I remember) *Sanctae Virginis Eynsfidlenfis.*

We rode again over the snow for about three hours, and then descending by degrees we passed through three Swyts, villages, and at last arrived at Swyts, a fair village (for it's counted no other, though it be comparable to the best of our market towns) having a large piazza handsomely paved.

The government of this canton is much what the same with that of Glaris. The whole canton is divided into six venement parts or quarters. Each division hath ten counsellors; of the can-fo that the council or senate consists of sixty, which ton of they call Rathheeren. When a senator dies, that quarter to which he belonged chooses another by the major vote of all the people. Every quarter hath its head, who is called Siebener: because they are seven in all, the Landomman making one of the number; which make a lesser council to manage and take care of the publick revenue. The senators are obliged in important causes to take each his man to be his assistant, and in the most weighty of all (as concerning peace or war) each two men; so that then the council is tripled. The last Sunday of April (as at Glaris) is the convention of the whole canton called the
the landiskmein, when all the males above sixteen years of age meet and elect by major vote the landamman and other officers and landvogts. To this meeting all the people that can conveniently are obliged to come; and every one to swear fidelity to their country, to maintain their liberties, &c. The officers are the same as at Glaris. This canton and every one of the rest send two Meffis to the general diet at Baden, of which the landamman is usually one. This canton hath also the like two little councils or consiftories as Glaris.

We rode about three miles to a place called Brunen, beside the lake of Lucern, and there embark’d for Altorf, spending in our passage upon the water about three hours, and then we had but a mile to the town. From Schwytz to Altorf there is no travelling by land (as they told us) unless we would go some scores of miles about. Altorf hath no piazza, yet is it a larger town than Schwytz, and hath a pretty church and a monastery of Capucines. Here we heard at large related to us the story of William Tell, and the landvogt, which he that is defirous to know may consult Simler. On the top of a pillar over one of their fountains in the fstreet is fet the statue of this Tell, with his crofs-bow on his fooulder, and leading his fon by the hand. At some distance stands a tower on which are painted the several passages of the story.

The government is almost all the fame with that of Schwytz. The number of senators, and manner of their election the fame. The officers and magiftrates the fame, only they mention’d a Suk-heer, who hath the charge of the ammunition, whom they told us not of in other cantons, and fix fierfprachts, i. e. proctors or counfellors, but not of the council. The senators, being to judge in criminal caufes, take to them another man, fo that then the council is doubled. They have also a leffer council of fifteen, called the Landtram, which decides civil caufes. These are taken out of the great council, and go round in a rota. They meet the firft Monday every month. A third council also they have called the Po-derade, which fits weekly about actions of debt where the sum exceeds not fixty livers. The senators (as they told us) have no salary or allowance at all. When one of the council is chofen landvogt he is put out of the council. Uri is the firft canton that fet ifelf at liberty.
We returned to the lake of Lucern, and taking boat, April 4, we went by water within one hour of Stantz, the principal village of Underwald, where we lodged. As we failed upon this lake, we happen’d to see a great fall of snow from the tops of some mountains hanging over the lake, which made a rattling and report not unlike thunder, as Monsieur des Cartes in his meteors notes. At Stantz they have a very fair church, and two convents, one of Capucine friars, and one of nuns. Here and at Altorf, Swytz, and Lucern, &c. we observ’d in the church-yards crosses set upon the graves, some of wood, some of iron, and on some of them hanging a little copper kettle with holy water in it. Some women we saw coming with a bunch of herbs in their hands, which they dipp’d in the kettle, and sprinkled the water therewith upon the graves. These, I suppose, were widows or mothers who sprinkled the water upon the graves of their dead husbands or children.

This canton is divided into two parts, Oberwald, or the upper, whose capital village is Stanner, and the lower, or Underwald, the head whereof is Stantz. In the lower are sixty senators, chosen by eleven Communes; some whereof have more, and some fewer, according to their bigness. The officers are the same, and chosen in like manner as in Schwytz and Uri; only the Landamman and Statthalter continue in office but one year.

The Landtweibel or apparitor, and seven judges, chosen one out of a Commune, judge in civil causes. From these there is an appeal to another tribunal of eleven, consisting of the Landamman, and one elected out of each Commune, save that the Landamman is of. These eleven are chosen out of the council, the seven indifferently. In capital causes the council of sixty judges, and besides any one of the country may be present, and give his suffrage, if he pleaseth, though ordinarily none do but the senators, who are all thereto by oath obliged. The senators and officers of this canton have all salaries. Here and in Uri all the males of all conditions that are fourteen years old and upward have their suffrages at the Landtskmeind. Oberwald hath likewise a council, Landamman, and other officers by themselves, indeed nothing common with Underwald.
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derwald. They nominate landtvogts and ambassadors by

turns. They might be esteem'd two cantons, were it

not for that they have but two delegates at the diet at

Baden, as the other cantons have.

These three cantons, Uri, Swytz, and Underwald, con-
fit chiefly, not to pay wholly, of pasture ground: no
corn-fields or vineyards here. Their wine is imported
from Italy, their corn from several parts. They boast
that by this means their ground is not so subject to the
casualties of weather, or injuries of bad seasons, as either
plowed fields or vineyards, and yields to the owners a
more certain profit. It's well if one reason, why they
maintain all their ground pasture, be not because they
are unwilling to take pains in husbandry. Wine is
dear here. At Altorf and Stantz they have it from Lo-
garno. At Swytz they have both Valtelline and Logarno-
wine. The people are very honest and good-natur'd,
keep their houses neat and cleanly, and withal very po-
lite and in good repair. The men are given much to
drinking. The meat stands before them three or four
hours, and they now and then eat a bit, but the main
business is drinking.

April 5. We travell'd to Lucern, crossing over a part of the

lake. This is a very neat city, and pleasantly situate

upon the lake: divided into parts by a river which runs
out of the lake; over which there are three bridges, one
for carts and horses, the other two handsome foot-bridges
cover'd over with a roof or penthouse, one near a quarter
of a mile long. Besides, there is a fourth bridge, which
leads towards the church, cover'd like this last, and
longer than it. The great church stands without the
city wall; a very handsome, tall, and lightsome structure.
Over the western door is the greatest organ that ever I
saw: a man might very well creep into the hollow of the
greater pipes of it.

The account of the government that was given us
here was much different from Simler's. They told us
that the great council consisted of 136, whereas he writes
that it consists of no more than 100: but these may be
reconcil'd; for that, I suppose, he excludes the lesser
council, which they included.
Moral, and Physiological.

They continue in office during life; and when one dies, the rest of the council choose another into his place out of the citizens whom they think fit. Simler faith, that the lesser council of the last half year choose the new senators. This council hath two presidents whom they call Scutelri, who preside alternis annis, and continue in office during life. Simler faith they are chosen yearly by the suffragés of both the councils. The manner of choosing officers and senators is this. Behind a curtain, according to the number of competitors, are placed two, three, or more boxes. Every senator hath given him a little medal or piece of money for that purpose; and so the senators go one by one behind the curtain, and put the medal into what box they please, and he that hath most of these pieces is understood to be chosen.

Out of the great council is chosen a lesser of the most ancient and wife, who also continue during life, and judge in civil causes, and take care of the ordinary concerns of the city; and for that purpose they sit daily. They are divided into two equal parts, eighteen for the summer, and eighteen for the winter. If one of the winter dies, those of the summer elect one into his place out of the hundred, and vice versa. The great council of 136 judge in criminal causes. Those of the lesser council have five Batz [about 10d. or 1s. English] and those of the great council two Batz per diem, for every day they sit in council. All the people of the territory of this city are subjects, and divided into nineteen or twenty Prefectura: the number of fighting men about 18000. The subjects in time of peace pay no more tribute than five Batz, or a hen the man per annum, to the landtvoeg.

From Lucern we travelled to Zugb called in Latin Tu- April. 6. gium, about fifteen miles. This city is by one half less Zugb. than Lucern; it stands by the side of a little lake. The government of this canton is popular like those of Uri, verment Stwitz, and Unterwalden. Besides the city there are three of the cantons Communes which have an interest in the government, viz. Eyry, Menfingen, and Baar. They have a council of forty (as they told us there) but according to Simler of forty five; nine out of each commune and eighteen out
out of the city. The three Communes have the Landamman six years and the city three. So that when the Landamman is of a Commune he continues in office but two years, when of the city three years. When one of the council dies another is chosen into his place by major vote of all the males above eighteen years of age of the city, or that community to which he that died belonged. The magistrates are the same and elected in like manner as in Uri and Swytz, &c. All the Prefecture (which are in number eight) belong to the city only. The city together with its subjects can arm 4000 soldiers; the three communities not 2000. Yet are they obliged by ancient convention to bear two third parts of the charge, in case there be any war. In criminal causes they have twelve judges taken out of the council, three of the city and three of each community. In civil the senators judge in their several communities. To the general Diet at Baden the city sends one, and the three communities another. The nomination of the common Landtvoegts the city hath once, and the communities twice. When the Landamman is of the communities, he is obliged during his office to reside in the city.

The lake of Zugh hath great variety of fish, more than any other lake of Switzerland, if the people there may be believed. They named to us eels, carps, perches, trouts, salmon, which is very strange, there being no way for them to get thither but up the Rhine, and so they must have a course of above 500 miles; and besides there being at Wafferthal a huge cataract of the whole river, which one would think it were impossible to pass. Esch called by the Italians Temelo, and in English Grayling, Trifca or Trasne, in English Eelpout, pikes (of which we saw one taken that weighed thirty pound) weiss-fish or Alberlin, called at Geneva Farra. This fish is taken in the lake of Bala in Merionethshire in Wales, and there called Gumiad from the whiteness of it: and in Hulls-water near Pereth in Cumberland and there called Schelley: Høffler, which I take to be the Charre of Winandermere in Westmoreland, and the Torgoch of North-wales: Balla; Nafè, called by naturalists Nafus, breams, crevifes, and a great many sorts more to the number.
number of at least fifty. In many of the shady lanes we passed through about Stantz, Zug, and elsewhere we observed growing plentifully Anblatum Cordi or Denta-ria aphylos.

We travelled from Zug to Zurich, which is five good hours riding. But of that city we have already written.

From Zurich we rode to Mellingen a free town not far from Baden, four good leagues; and then through a little walled town belonging to the Bernese called Lensburg, and lodged at Arauw a considerable town upon the river Aar, subject also to the Bernese, four short leagues.

We travelled a straight rode passing no considerable town till we arrived at Solothurn, nine leagues distant from Arauw. This, though it be the head of a canton, is no large town, nor very considerable for its strength.

We diverted out of the common rode to Geneva to see Bern, six hours distant from Solothurn. This is a handsomc city, built all of stone, though the houses be not tall. It hath one fair long street with narrow portico's or cloisters on each side. It lies stretched out in length upon a hill which I may call a Peninsula, it is so almost begirt about with the river. On that side where it is not compassed with the river it is strongly fortified with good bastions and outworks. The founder of this city as also of Friburg in Switzerland, and Friburg in Brisgoia, was Berchtoldus duke of Zerin; as appears by the inscription upon their monies. To him they have erected a monument in the great church. This church is one of the handsomest stone-fabrics in all Switzerland.

The territory of this city is more than one third part of the country of the Switzes, and is divided into sixty Praefecturae or bailiages, besides four which are common to them with Friburg. For this reason there must needs be many rich men in the city, though they have but little trade. The Landtvogs or bailiffs continue in office six years, during which time they enrich themselves well; yet do not their subjects complain, but acknowledge themselves well used by their governors. Here they keep five or six bears in a pit.
Observations Topographical

These bears I observed to climb the fir-trees growing in the pit, and delighting to fit on the tops of them like birds on a perch. The arms of the town is also a bear, which they took I suppose alluding to their name Bern: and they first coined the money called Batzes from the figure of a bear stamped upon it: which afterward all the cantons imitated, calling it also by the same name.

From Bern we rode to Friburg a handfome town and the head of a canton, built upon a hill almost begirt with a river after the manner of Bern, and by the same founder, on all sides environed with hills, save where it is contiguous to the land. Their territory is surrounded with and inclosed in the territory of Bern.

From Friburg we travelled through Maulton to Lausanna, a great town and an university, and from Lausanna, April 19. through Morges a large town, Rolle and Nyon considerable towns by the lake of Geneva's side, and Verfay a little town on the lake near Geneva, belonging to the French, and came to our lodging at Geneva, where we rested and sojourned near three months.

The governments of Soloturn, Bern, and Friburg are much like that of Lucern. In Soloturn the number of the lesser council is thirty five, and of the greater one hundred and fifteen. When one of the thirty five dies, the thirty four remaining chuse one into his place out of the one hundred and fifteen. When one of the one hundred and fifteen dies, or is advanced, the rest chuse one into his place out of the number of the citizens. In Bern the greater council consists of two hundred, and the lesser (as we were told there) of forty two, though Simler makes them but twenty six. These councils are chosen by twenty electors, and the Sculthefs, viz. the four Signiferi of the city, and sixteen whom they pick out of the whole body of the citizens, and join with themselves. In Friburg the lesser council is of twenty four, and the greater of two hundred. When one of the lesser council dies they chuse one into his place out of the greater: and when one of the greater dies, or is removed, the lesser (as I understood them) chuse one into his place out of the number of the citizens. All these cities
Moral, and Physiological.

cities have two Sculieti or consulps who rule alternis an-
nis. He that desires a more full and particular account
of the government of these cities may consult Simler de
Repub. Helvetiorum. Each of the cantons have some
faint or other to be their patron and protector, whose
image the Popish cantons set on the reverse of their mo-
nies, v. g. St. Osvald a king of England, protector of
Zug. In their church they have his relics, and have set
up his image on horseback. The Protestant cantons
are Zurich, Bern, Basl, Schaffhausen, part of Glaris,
and part of Appenzel. That which most frequently
breeds differences and quarrels among the Switzers is the
business of the common vogties or bailiwicks. For most
of these [I mean the Dutch ones] being of the Reformed
religion are oppressed and and injured by the Popish
Landtvoegts, the Protestant cantons not knowing how
either to help and relieve them or retaliate. For,
the Popish cantons being more in number than the Pro-
testants, they send Landtvoegts to these places twice to the
Protestants once. This one of the ministers of Zurich
told me was fundi sui calamitas, and occasioned the two
late breaches among them.

The Switzers on each side are very stiff in their re-
ligion; the Papists not permitting or tolerating one Pro-
testant, nor the Protestants one Papist in their proper territo-
ries. Tho' the cantons adhering to the church of Rome are
more in number, yet the Reformed are much the greater,
besides that their land is better, very like ours in England.
The Romanists are accounted the better soldiers, and
good reason they have, being more exercised in war,
serving the Spanish and French Kings, as being of the
same religion. Besides, the Zurichers, who antiently had
the reputation for valour, are now much given to mer-
chandise and to accumulate riches, and so taken off from
martial studies and exercises. The Bernese though they
have far the greatest and best territory of all (so that it's
said they can arm as many men as the duchy of Milan;
fend into the field 100000 soldiers and yet leave enough
at home to till the land) yet have they no reputation for
soldiers; they lost their credit quite in the late skirmish
with the Lucernese, who account them rather Savoyards
than Switzers. All the cantons of Switzerland co in money

except
Observations Topographical.

except Appenzel, Underwald, and Glaris, of which Glaris formerly hath coined though now it doth not. All the Switzers in general are very honest people, kind and civil to strangers. One may travel their country securely with a bag of gold in his hand. When we came to our inns they would be troubled, if we distrusted them so far as to take our portmanteaus into our lodging-chambers and not leave them in the common dining rooms. They keep their houses very clean and polite like our housewives in England. For plants, going from Zurich to Mellingen we observed common Gooseberry in the hedges and by the way-sides very plentifully, and in some places Barberries, Sigillium Solomonis and Herba Paris are the most common plants that grow in this country in the woods and hedges every where: Annoymus flore Coluteæ on the mountains near Zurich. From Arauw to Solsturn Helleboræftræ maximus on the hills sides, as also Christophoriana, not to mention Fumaria Bulbosa every where growing in the shady lanes.

Geneva.

Geneva is pleasantly seated at the lower end of the Lacus Lemanus, now called Genfser-zee or the lake of Geneva, upon a hill side respecting the lake; so that from the lake you have a fair prospect of the whole town. It is divided by the river Rhodanus or Rhône into two parts, which are joined together by two wooden bridges, one of which hath on each side a row of houses after the manner of London-bridge, only they are low. The two principal and indeed only considerable streets in the town are the low street [Rue bas] which runs along by the river and lake’s side; and the high street or great street [Rue Grand] which runs up the hill. The city is differently strong, and they have lately been at great expences to fortifie it à la moderna with ramparts and bastions of earth. Though it be small yet is it very populous, being supposed to contain 30000 souls. St. Peter’s church, formerly the cathedral, is handsome and well built, and in it is a stately monument for the duke of Rohan. The citizens are very busy and industrious, subsisting chiefly by trading: the whole territory of this republick being not so great as some one nobleman’s estate in England for extent of land. All provisions of victuals are very plentiful
ful and cheap at Geneva, especially milk-meats, the neighbouring mountains feeding abundance of cattle.

The tops of Jura, Saleve, and other high mountains of Savoy, Daulphiny, and the Alps, where they are bare of wood, put forth very good grass so soon as the snow is melted off them, which usually is about or before the middle of May. And then the country people drive up their cattle to pasture, and feed them there for three months time. Upon these hill tops they have here and there low sheds or dairy houses, which serve the men to live in, and to make their butter and cheese in, so long as they keep their beasts above. The men I say, for they only ascend up thither and do all the dairy work, leaving their wives to keep house below; it being too toilome for them to clamber up such high and steep hills. By reason of these cotes it is very convenient simpling upon the mountains, for, if a man be hungry or thirsty, he may soon find relief at one of them. We always found the people very kind and willing to give us such as they had, viz. brown bread, milk, whey, butter, curds, &c. for which we could scarce fasten any money upon them.

For the temper of the air, in respect of heat and cold, Geneva I think is very like England, there being no great excess of either extreme. The city is well governed, vice discountenanced, and the people either really better or at least more restrained than in other places: though they do take a liberty to shoot and use other sports and exercises upon the Lord's day, yet most of their ministers disallow it, and preach against it.

Our long stay here at Geneva, and that in the pro-Plants per season for simpling, gave us leisure to search for, observed and advantage of finding many species of plants in the about neighbouring fields and mountains, of which I shall Geneva, here present the reader with a catalogue: such as are native of England are in the Roman letter.

In Colle la Bastie dicto & Sylvis clivosis ad Rhodani ripas.

Colutea
Observations Topographical,


In monte Saleve dicta una circiter leucà à Geneva distante.


mus
Moral, and Physiological

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Observations Topographical.


Moral, and Physiological.


Observationes Topographicae

Observationes Topographicae


Iterum in monte Thuiri.

Moral, and Physiological.


In pratis, pastuis, satiis, collibus, dumetis, aggeribus, alveis, muris, viis publicis, & alibi circa urbem.

Observations Topographical,

nigro J. B. In sepibus & dumetis. Betonica coronaria
five Caryophyllus sylystrius vulgaris. J. B. in pratis.
Gallitrichum sylystrius vulgo, sylystrius Sclareae sture
purpureo caeruleo magnu J. B. Orchis galea & alis fere
cinereis J. B. Orchis myodes; Orchis fuciflora galea &
alis herbidis; in aggeribus sylvohis utrare & copiofe.
Asclepias flreu albo; Tamarix Germanica, syve minor fru-
tifico J. B. Ad Arve fluivium. Pomenonium petreum
Gefneri; Ad Rhodani ripas, inque ipsis urbis muris.
Crisfa galli utraqu; mas & femina J. B. in pratis. Lotus
siliquosa lutea Monspeliensis J. B. Chamaemelum vulga-
amurum. J. B. inter fegetes. Chamaebalanus legumin-
osa five Terrae glands; in vineis & feget. extra por-
tam S. Gerovoli. Lathyrus flreu vario ex coccineo & al-
bo, inter fegetes: Rosa rubello flreu simplici non flavo-
J. B. in collibus. Gramen cypervoides exiguam feminibus
bullatis; Melampyrum multi five Triticum vaccinum. J. B.
inter fegetes. Melampyrum criftatum J. B. Afsphode-
lus bulbofis Dodonaei, fine Ornithogalum fpiicatum flo.
vi-
rente J. B. inter fegetes. Orchis magna latis folis, ga-
led fusca vel nigricante J. B. Ad latus sylvohis cujuftam
collis propè montem Saleve. Thlaspi umellatum arven-
se amarum J. B. In arvis non procul à Thuiri copiofe.
Allium umelliferum pratenfe J. B. Rapiifum monopofe-
in, in aggeribus foflarum. Campanula rotundifelia minima
J. B. in glareofis ad Arve. Rosa sylvohis rubella
paruo frutice J. B. in collibus & dumetis copiofiffime.
Medica major eretfior floribus purpurascendibus J. B. feri-
tur aliquibus in locis ad pabulum jumentorum. Rubia e-
recta quadrifolia J. B. Melilotus quinta Tragi J. B. i. e.
Securidaca flo. vario fiiquis articulatis: Blattaria flo. albo
& luteo, ad vias. Chamaedrys fiiuria angulfifolia J. B.
in dumetis. Pilofella minor fole angulfifore, minus pilos,
repens. J. B. Hyacinthus maximum botryodes, comè caerulæ
J. B. inter fegetes paffim. Thlaspi minus juxta S. Ger-
vasii, in muris. Sedum parvum folio circinnato, flore albo
Stachys Fuchsii, ad vias. Cynoglossum minus J. B. in ru-
deratis & ad vias. Cardiaca, ibid. Lathyrus fiiiqua hir-
futâ J. B. inter fegetes circa Champe. Atraëtyllis, juxta
vias propè urbem. Saxifragia Venetorum, in collibus ad
Arve fl. Anis lutea non flavo, Dalechampio Natrîx
J. B.
Moral, and Phvsiological.


From Geneva we travelled to Lyons, the second city in France for greatness, handsom building, trade, riches, and multitude of people; if any, setting aside Paris, may compare with it for any one of thefe, for alto- gether I am sure none can. But becaufe we were hurried out of France by the King's declaration before we had finished one third part of our intended-travels there: and becaufe this relation is already swelled to a greater volume than I at firft intended, I shall only fet down the names of the chief places we faw, and plants we found in that part of France, where we spent our time till we returned home to England. In our journey from Geneva to Lyons we took notice only of two plants which were ftrangers to us, viz. Valeriana rubra angufi- folia.
Observations Topographical.

July 25: From Lyons we travelled to Grenoble, and thence to the grand Chartruse. By the way thither, but especially upon the mountains about this cloister, we found a great many plants which we had not met with any where before, to wit Linariae aliquatanus similiis folio Bellidis J. B. In some fields about five or six leagues from Lyons in the way to Grenoble: Catanance Dalechampii folio Cytani, flore Coronopii J. B. On the sides of the mountains about half a league above Grenoble in the way to the grand Chartruse, Melampyro affinis Parietaria eæulea quorundam J. B. ibid. in sylvosis. In the mountains about the cloister, Sambucus racemosæ: Circaæ minima Col. Helleborus niger Lob. Trachelium majus Belgareum; Radix Rhodia, copiofissime; Gentianella Alpina verna magno flore; Pulflatilla alba J. B. Solidago Saracenica; Periclymenum reëtum fructû nigro Park. Xylofeuim Allobrogicum i. e. Periclymenum reëtum fructô rubro Ger. Chamæemesphilus Goferi; Imperatoria vulgaris; Sonchus eæuleus latifoliolus J. B. Nerium Alpinum quirosdam, alios Ledum glabrum J. B. Auricula ursi; Víctorialis longa; Trifolium Alpinum argenteum Park. Helleborus niger Socrinea folio minor. Park. Pedicularis five Crafà galli montana; Radix ei simplex, alba, paucis fibris donata, magnitudine & figura radicis Tragopogi, nisi quòd longior fit, sapore non ingrato nucis Avellanae paulo amariore. Folia ad radicem paue [unum aut duo] alata, ex pluribus pinnarum conjunctionibus Filicis ferè in modum composita, inferius hirsuta, in acutum desinentia, pallide viridia. Singulæ pinnæ ad margines serratae Crafà galli vulgaris folia bene imitantur. Caulis ab eadem radice fingularis, dodrantalis aut pedalis, rotundus, firmus, non-nihil hirsutus, intus concavus, in summate geftans spicam palmarem florum densè fitiporum, pallide luteorum, Crafàe galli similiim, nifi quod vix sese aperiant, è calice ventricoso pentagono emergentium, pediculis nonnullis. In calice latet vasculum feminale turbinatum feminibus minutis rotundis reple tum. Unum habet hæc planta in caule folium infra Spicam: in ipsa Spica ad finguales flores fingula folia.
Morale, and Physiological.


Afteri montano purpureo simili J. B. Radix ei fatis craffa, obliqua, intus nonnihil lutea, fapore acriusculo, fibras aliquid donata. Folia ad radicem plura, longa, angusta, figurâ fere Polemonii petrae Gesneri, faturo vireo splendentia, ad latera nonnihil pilosa, neq; dentata neq; ferrata. Caules semipedales aut dodrantales, furceî, foliiis vestiti alternatim positis, iis quae ad radicem similiibus, ramosis, singulis ramulis florem suffinentibus Bellidis minoris, nisi quod limbus feu corona foliorum radiatorum in margine minoribus brevioribus, foliolis confpet colore purpurascence præditas, interiores afofculi qui fun- dum floris componunt inter viridem quasi & luteum colorum ambigunt. In ascenfu montium Julii 17 florentem inveni, & Bellidem Alpinam Ramesam flore purpurascence denominavi.


Pen.
Pentaphyllum argenteum Alpinum flore albo. Radicem non observavi. Folia quinquepartita reliquorum hujus generis more, exigua lanugine, mollis, argentea utrinque cadentia, in extremitatis duntaxat crenata. Caules ex eadem radice plures, pariter villosi, infirmi, folii duobus tribusve tripartito ut plurimum divisis vestiti; quae appendicibus duabus caulem appletuntur, flores in fummitate sustinentes duos vel tres pentapetalos, albos, cum numerofo intus flaminulis purpureis apicibus ornatis. Vice styli congeries velut faciculus quidam filamentorum. Calix (ut in reliquis hujus generis) 10 foliolis hirsutis constat, quinquefoliis latioribus, quinque angustioribus alternatim postis: Est hoc Pentaphyllum foliiis inferne, & superne incanis J. B.

Museus Alpinus flore insigni dilute rubente J. B. Hae planta rectius meo judicio Caryophyllus aut Lychnis in scriberetur.

Cerinthe quornundam major, versicolore flore J. B. Perennis esse videtur hae planta; folii est maculosi, floribus purpurascensibus pentagonis; feminibus reliquis fui generis minoribus, cum planta ipsa omnium maxima fit.

Alfina minima Alpina flore albo majore. Hypericum nummulariae folio C. B. Planta quaedam umbellifera Pimpinellae similis, quam describere non possumus omifi.

From Grenoble we travelled to Orange, in which journey we observed Echinopus minor J. B. which grows plentifully all over Gallia Narbonensis; fpace cum spinosis capitulis purpurea tendufoha J. B. which is as common; Thymum vulgare rigidius folio cinereo J. B. This also is found every where in the ftony grounds in this country; Pulegium cervinum by the Rhone side at Pont S. Esprit; Lavendula major fve vulgaris Park. As common every where as Thyme; Dentellaria Rondeletii; Acanthium Illyricum; Chondrilla viscosa caule venuit. Ool. Echiu fve Anchusa quaedam species flore carneo, An Lycoptis?

From Orange we proceeded to Avignon, whereabout we observed whole fields fown with Foenum Burgundiacum: and besides what we found about Orange, Pahirus; Cifius Ledon Monspeliensium; Cifius feemina folio Salviæ; Malus granata; quae per totam Galliam Narbonenfem.
Moral, and Physiological.

frequentissima est. Catanares Dalechampii flore cyani folio Coronopi J. B. per Galliam Narbonensem passim. Helianthenum tenuifolium glabrum flore luteo J. B. Helianthenum flore albo, folio angusto birtuto J. B. Feeniciulam tortuofium J. B. Millefolium odoratum; Millefolium tenuifolium luteum J. B. quod non adeo vulgare circa Monspelium; Stechas citrina tenuifolia Narbonensis J. B. Capparis; Ilex coxisfera; Genista Hispanica; Botrys; Cucumis asinus; Aphalathus 2. Monspelians J. B. and many others which grow also about Montpellier.

Our next stage was Nîmes, where, besides those mentioned about Avignon, most of which are also found here, we noted Thalpi bisectates asperum hieracifolium & majus C. B. Phyllium fémper virens, Camphorata Monspeliansum, Trifolium bituminosum; Ruta sylvetris, Peganum Narbonensium; Tithymalus serratus; Lotus arbor; Coronculus spicifolius, Plumbago Plini, Scabiosa montana calidarum regionum Lob. Tithymalus Characias Amygdaloides, Pâpaver corniculatum luteum; Clematis fæve Flammula repens C. B. Phyteuma Monspeliansum; Side-ritis verticillis spinosis; Alkekengi; Clematis daphnoides major; Lepidium vulgare; Chondrilla vilicifó caule omnifóro, Col. Et quod nusquam alibi hactenus invenierim, Abratanum fæmina folis Ericei five Unguentaria Lutetianorum.

From Nîmes we travelled to Montpellier, where we abode all the autumn and part of the winter, during which time, though the seafon of the year for simpling was past, we observed the following plants.


In Promontorio Ceti; vidimus etiam in montibus propé oppidum S. Chamas in Galloprovincia. Anchusa angustifolia C. B. in collibus juxta Castelneuf & aux Garigues. Anchusa Monspeliaca C. B. in colle arenoso non longè à Castelneuf verius Grammontium lucum. ANDROACE Matth., in fundo stagni Volcarum Estang diicto copiofissi-
Observations Topographical,

Moral, and Physiological.


Observations Topographicae,

MONTPELLIER is a round town, standing upon a hill in the midst of a stony country; something bigger than Geneva but not so populous. The number of inhabitants at present being about 25000, of which two third parts are Papists and one Protestants. The Protestants have two churches (temples they call them) in town. The streets of this city are very narrow, short, and crooked, without any uniformity or beauty at all, so intricate that it's half a year's work to understand them all, and learn the way from place to place. The houses are many of them well built of free-stone, which, were they set well together in order, would make three or four handsome streets. No large piazza or market-place in town. The number of apothecaries in this little city is scarce credible, there being thirty shops, and yet all find something to do: their cypress powder, sweet-bags, coxlets, treacle, confectio alkermes, &byacintha having a name all France over. The Queen of Hungary's water (as they call it) made here is likewise much bought up. It is nothing but common spirit of wine in which rosemary flowers have been macerated, distilled from the said flowers. The wines hereabout are very strong and bear water well. Their vineyards are of dwarf vines without any support, the standards, when the branches are prun'd off, being like the standards of our offer-gardens.
At Montpellier the best verdet or verdgreece (Viride aris) is made. They told us that so good could not be made elsewhere though they used the same method and the same materials, whether it be to be attributed to the just temper of heat, or the nature of the wine they use, or some other unknown quality. The manner thus,

First they take grape-stalks well cleansed from the raisins and from all filth, and putting in the bottom of a pot a quantity of the best red wine, they set sticks cross a little above the wine, and upon them lay a quantity of grape-stalks first also drenched in wine, and let them alone about fifteen days, more or less, according to the season, till they come to make (as they call it) a rose, that is, the outsides become to appearance dry, and the middle only wet. These grape-stalks being thus prepared, they put in the bottom of a large earthen pot of the best red wine that begins to be fourve, but is not yet come to be vinegar, to the quantity of about two or three inches depth; somewhat above the wine they set sticks cross the pot, and having ready many little plates of copper, they lay upon the cross sticks first a layer of the prepared grape-stalks, then a layer of copper plates, and so alternately S S S till the pot be full. In the middle of the pot they usually leave a hole all along for the vapour of the wine to ascend; neither are the copper plates laid near together for the same reason.

When they have filled up the pot they cover it, and set it in a cellar, and after some five or six days turn the copper plates, letting the pot remain in the cellar three or four days more. In eight or ten days, according to the season, the Verdet will be come. Then they take out the plates, and, laying them six or seven on a heap, put them in a trough, and sprinkle the edges of them with the same wine for three or four days: next they press them with heavy weights for four or five days; and last of all scrape off the Verdet with knives, and moulding it with a little wine, dry it and sell it.

The same plates are again put into pots, and used as before. So then the Verdet is nothing but the rust or scurf of the copper calcin'd by the vapour of the wine.
Moral, and Physiological.

Here also we saw the manner and process of blanching of bees wax.

First they melt the wax in a great copper cauldron, then they have ready a mould or form of wood of the figure of a sugar-loaf, or the block of a steeple-crown’d hat, which, having besmear’d over with slime of snails, they dip into the wax thus melted. This takes up a skin or film of wax, as candles upon dipping do. This they smooth with their hands and dip in water, and when it is cold take it off the form, from which, by reason of the anointing the form with the foremention’d mucilage, it will readily slip in the form of a cone, or long crucible. These cones (so let me call them) are set in a garden in ranks singly one by one, supported with canes or reeds crossing one another on this fashion,

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Round about they set pots with water, wherewith they sprinkle the wax often to keep it from melting. In summer-time, when the sun lies hot upon it some six or seven times a day, otherwiles but three or four times. In fourteen or fifteen days the upper end of these cones will grow white, and then they turn them to whiten the other end. In a month’s time, more or less, according to the weather, they will become white all over. Then they melt the wax again in earthen pans like Metæ or scuttles, and run it so melted through the neb of a tin pot into water, and as it runs down into the water, a man either breaks it with his hand into grains, or works it into round figures like spiral wreaths or corelæ, and these they expose again to the weather in the garden, and order as before, till they become purely white; and then melt into great pieces to sell. The mucilage wherewith they besmear the forms is made of snails taken alive, shells and all, and pounded in a mortar till they become a perfect pap or viscus. The form once besmear’d well over with this pap will last dipping many times. Wax whiten’d is almost twice as dear as yellow
yellow wax. Yellow wax is solutive, and used where there is an inflammation and the sorne not ripe; white wax on the contrary very astringent. They say Montpellier is a place proper for the whitening of wax; and that the same workmen, coming over into England, found the air of a different temper, and not convenient for this trade.

At Montpellier is made the best Confection Alkermes, as reason there is it should, the grain which gives it its denomination being in no country of Europe found so plentifully as here. The manner of the preparation of this grain for the making the confection you may find set down in the Philosophical Transactions, Numb. 20. pag. 362. and I shall therefore here omit. These grains have formerly been thought to have been proper to the dwarf or shrub Ilex, called therefore Ilex coccifera, and a by-fruit or excrescence of the twigs of that plant. But my learned and ingenious friend Mr. Martin Lister, who hath been very happy in making discoveries in natural history, hath found the like grains here in England upon the twigs of cherry and other trees, and judged them to be the work of an insect, and by her affixed to the twigs for nests to breed and harbour her young; and indeed to me they appeared to be so, easily receding and falling off from the wood when the young are hatched and gone. As for the grains themselves they are so like the Kermes grains, that they are scarce to be distinguished and grow to the twigs just in the same places and manner. But, for a more full and compleat history of them, I refer the reader to Mr. Lister's Letters published in the Philosophical Transactions.

At Montpellier I observed the manner of making oil olive: first they take olives, whether fresh gathered or laid a while on a heap it matters not (as they told me) and bruise or grind them to a paste, as we do apples to make cyder, with a perpendicular mill-stone running round in a trough. This paste, or the olives thus bruised, they put in round thin baskets made of Spartum like straws, having a round hole in the top; but both top and bottom clapping together, so that when pressed they look like a thin round cake. Half a score or more of these baskets filled with olive pounce they lay on a heap in the press, and
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and, letting down the press-beam, squeeze them at first without any mixture. Then winding up the beam they take out the baskets, and into each one put a good quantity of scalding water (which they have always ready) and shaking the basket mingle it with the pouce, and then, piling them one upon another as before, press them down a second time. This second operation they repeat again, and then taking out the pouce put in new, and proceed as before. The oil, together with the water, runs out into vessels set to receive it. The water, with the Amurca, sinks to the bottom, and the oil swims above it, which they take off with a copper dish like a fleeting dish, as good housewives skim the cream from their milk. The water mixed with the red juice of the olive becomes red and thick, not at all mingling with the oil, so that it cannot easily the least drop of it be taken up without perceiving it. It's said that in Provence they spread their olives on a floor after they are gathered, and there let them rest thirty days to dry, and for that reason their oil is better than that of Languedoc. Others lay them on a heap a while to let them sweat, as they call it. It is worth the noting that though the olives be very bitter and of a fiery ungrateful taste, yet the oil which is drawn from them is sweet; the like is observed in bitter almonds, and it is very likely might be in all other bitter fruits; which is a sufficient proof that the taste of such fruits doth not inhere in the oil, at least which is made by expression; and it deserves examination, whether the chymical oil may not also be desvested of the taste of the vegetable from which it is extracted.

Olives when they come to maturity change colour and become black as some other plums do, but it is very late in the year first. They are then notwithstanding of a horrid and ungrateful taste, firing the throat and palate of one that eats them. They afford most oil when full ripe, but best (as they told us) when gathered and pressed green. Sometimes they pickle ripe olives, but they will not last; therefore those which they pickle to send abroad are gathered green. The pickle they use is nothing else but a brine of salt and water.

Near Peroul about a league from Montpellier we saw a boiling fountain (as they call it) that is, the water did boil as a fountain.
heave up and bubble as if it boiled. This phænomenon in the water was caused by a vapour ascending out of the earth through the water; as was manifest, for that if one did but dig any where near the place, and pour water upon the place new digged, one should observe in it the like bubbling, the vapour arising not only in that place where the fountain was but all thereabout. The like vapour ascending out of the earth, and causing such ebullition in water it passes through, hath been observed in Mr. Hawkley's ground about a mile from the town of Wigan in Lancashire, which vapour by the application of a lighted candle, paper, or the like, catches fire and flames vigorously. Whether or no this vapour at Persul would in like manner catch fire and burn I cannot say, it coming not in our minds to make the experiment.

From Montpelier we took a journey of pleasure to see the adjacent country, and first we rode to Frontignan, a little walled town by the estang side, three miles distant, which gives name to the so famous muscated wine. The country about this town toward the sea southward lies open to the sun, but toward the land northward it is encompassed with a ridge of hills in form of a bow, touching the sea at each end; so that the whole is like a theatre: in the Arena, and on the sides of the hills, grows the muscated grape of which this wine is made. In this space are contained two other little towns, the one called Miraval, the other Vich. This last gives name to a mineral water, springing near it, much used hereabout. It hath an acid vitriolic taste, but nothing so strong as our spaw-waters, and therefore I guess the operation of it is much weaker.

At Frontignan and other places we saw the manner of making raisins [vina pastæ]. They take the fairest bunches, and with a pair of scissors snip off all the faulty grapes, and tie two bunches together with a string. Then they dip them in a boiling ley [lixivium] into which they put a little oil, till they are very plump and ready to crack. Jo. Bauhinus saith, that they let them continue so long in the boiling lixivium, quad flacefcat tantum & corrugentur. But we observed no such thing, for they did not continue the bunches half a minute, but

presently
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presently took them out again and washed them in a vessel of fair cold water, then they put them upon wooden poles for two or three days in the shade to dry, and after that exposed them to the sun, taking them in the night-time or rainy weather. Cyprianus Eichovius describes the manner of making raisins in Spain thus: There are (faith he) two sorts of Uva passio, or raisins: the one of those they call raisins of the sun, of a blue colour, the other of the Uva passio Lice, which they call frail or basket-raisins. In preparing the first sort they thus proceed. When the bunch they design for that purpose begins to grow ripe, they cut the foot-stalk of it half asunder, that so the radical juice or moisture may be at least in a great measure detained, and not pass to the grapes; and so they leave it hanging on the vine. Then by the heat of the sun the grapes are by degrees dried. When they are sufficiently dry they gather them and put them up in vessels.

The second sort they make on this fashion. When they prune their vines, they bind up the cuttings in faggots and reserve them till the vintage time. Then they burn them and of their ashes make a ley or lixivium, which they boil in great vessels, and therein immerse the bunches of grapes one by one. Afterwards to dry them they spread them upon a paved floor clean swept, made for that purpose in the vineyard, that so they may be the more speedily dried by the sun-beams. When they are sufficiently concocted and dried they put them up in frails or baskets. After the same manner they prepare figs for to dry, by dipping them in a lixivium made of the ashes of the dried branches of the fig-tree cut off in pruning. But however they superstitiously observe to make their lixivium for raisins of the ashes of branches pruned off the vine, &c. I doubt not but the ashes of any wood indifferently taken would serve as well for that purpose.

From Frontignan we rode to Balleruch, to see the Baths at hot waters which are used as well inwardly as outwardly. Balleruch.

At our being there, which was in the beginning of September, the water was scarce lukewarm; they told us that in the winter it was very hot. The bath is not above two flight-shots distant from the estang, and the water thereof tastes very salt and brackish; whether by
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by reason of the sea's being so near it, or because the water comes from some salt mine I know not, yet the latter seemeth the more probable, because, should it come from the sea, the water straining through so much sand would probably lose its salt by the way, as we have found by experiment in England.

At Gabian about a day's journey from Montpellier in the way to Beziers is a fountain of Petroleum. It burns like oil, is of a strong pungent scent, and a blackish colour. It distills out of several places of the rock all the year long, but most in summer time. They gather it up with ladles and put it in a barrel set on one end, which hath a spigot just at the bottom; when they have put in a good quantity they open the spigot to let out the water, and when the oil begins to come presently stop it. They pay for the farm of this fountain about fifty crowns per annum. We were told by one monsieur Beaullafie a chymist in Montpellier, that Petroleum was the very fame with the oil of jet, and not to be distinguished from it by colour, taste, smell, consistency, virtues, or any other accident, as he had by experience found.

Upon the coast of the Mediterranean sea in several places, as at Berre, near Martegue in Provence, at Messina in Sicily, &c. they make * salt of the sea-water drawn into shallow pools and evaporated by the sun-beams in summer time. First, they let the water into a large shallow plain like the cooler in a brew-house, and there being well heated they run it into several shallow beds like the beds of a garden; when the sun hath dried up all the water they let in more, and so again three or four times till the salt remaining at the bottom of these receptacles come to be three fingers thick, and then they take it up with shovels, and heap it on little hills: but the whole process of this operation being exactly described in the Philosophical Transactions Numb. 51. page 1025. I shall forbear to enlarge any further concerning it.

Now that I have mentioned Martegue, I shall add the manner of making † Botargo, out of Mr. F. Willughby's notes. At Martegue they take abundance of mullets [Mugiles not mulli] as one would be apt to think by the English name] in their Burdigo's, which are places in the

* Making of salt by evaporating sea water by the sun-beams,

† The preparation of Botargo.
shallows, inclosed with hedges of reeds. The male mullets are called Alleutants, because they shed the milt [Lac piscium]. The females Botar, of the rows or spawn of which Botargo is made. They first take out the spawn intire, and cover it round with salt for four or five hours: then they pref it a little between two boards or stones; then they wash it, and at last dry it in the sun for thir-teen or fourteen days taking it in at nights.

Decemb. 7. 1665. from Montpellier we made an ex-cursive voyage into Provence. The principal cities and towns that we saw were 1. Lunel, about four leagues dif-tant from Montpellier. 2. Arles, a considerable city, once the head of a kingdom, called anciently Arelate, standing upon the river Rhône, which a good way above this city divides itself into two branches, and makes an island called the Camarg. All this island is full of Vermicularis frutex growing by the ditch sides all along. Beyond this city in the way to Marseille we passed over a large plain or level all over covered with stones, called now the Craux or les Champs pierreux, anciently Campi lapidei, to 3. St. Cha-Chamas, a large burgh standing upon the ridge and on each side a narrow hill, which is perforated like Panisty-pus. Upon the rocks near this town I found Safeli Ethio-picum frutex growing in great plenty, as also Alypum montis Ceti; Coris Montpejulana; Ruta sykosiris minor; Colutea caule Genista fungofo J. B. We observed also this day, all along as we rode upon the hills and by the way sides, our common furze or genista spinosa.

4. Marseillells, an ancient city not great but well built Marseille- lous. We were told that the number of souls was about 120000. The streets are narrow as in most of the an-cient towns in this country, to keep off the scorching beams of the sun in summer time. The haven is the most se-cure and commodious that I have seen: the entrance into it is so strait and narrow that a man may easily cast a stone cros it, but the haven within large enough to contain 500 vessels or more: of an oval figure. On one side of this haven the town is built which compasses it more than half round, having before it a handsome kay well paved, which serves the citizens for a walk or promenade. This haven is not capable of ships of above 600 tun. On the
the rocks near this town I found growing plentifully the
fame Colutea I observed at St. Chamas: Valeriana rubra
Dod. Cardus galactites J. B. By the sea-side Traga-
cantha Maffilienfium plentifully. After luteus supinus J. B.
Titymalus myrsinites angustifolius; Coronopus Maffilienfis
Lob. 5. Bauffet. 6. Olliole, two little towns. 7. Toul-
on, no great town, but well fortified, and the best ha-
ven the King of France hath on the Mediterranean sea,
having a large bay capable of the greatest vessels, where
there is good riding for ships. At Toulon they make
holes in their stone-walls at three or four foot distance,
near the ground, and there plant capers, the fruit where-
of they prepare and pickle after this fashion. They ga-
ther the buds or blossoms of the flowers before they be
explicated, and, spreading them thin, lay them in the
shade to wither for three or four hours, to prevent the
opening of the flower. Then they put them in a vessel.
and pour vinegar upon them, covering the vessel with a
board, and so let them stand for nine days; at the end
whereof they take them out and pres them gently, and
put them in fresh vinegar, letting them stand as long as
before: this done the third time, they put them up in
barrels with vinegar. Some mingle salt with their vinegar,
which is the best way, and preserves the capers for three
years both for colour and taste as good as at the first. I
observed near Bauffet great plenty of myrtle in the hedges;
near Olliole Acanthus sativus; Althaea frutescens folio rotund-
diore incano C. B. Fumaria minor fove tenusfola surrepta
J. B. Acacia trifolia; Teucrum vulgare; Arisarum lati-
folium: Chrysocomie Ger. 8. St. Maximine, near which is
the famous grot of Mary Magdalen, called St. Baulme.
9. Aix, anciently Aquae Sextiae from the hot baths that
are there. This is a very elegant and pleasant city, well
built with fair stone houses, having broad streets and
handsome piazzas.

10. Selogne, Salbna. In the Cordeliers church lies
buried Nostradamus the famous French prophet, whose
verses the Frenchmen esteem as oracles. In the church
wall is placed a stone with this inscription to his
memory.

D. M.
A Relation of a Voyage made through a great part of Spain, by Francis Willughby, Esq; containing the chief Observables he met with there, collected out of his Notes.

August 31. 1664. We left Bagnols in the county of Roussillon, being the last or furthest town belonging to the French, and at about three fourths of a league's distance came to a great stone erected here for a boundary between France and Spain; and passing very bad way among desolate mountains after many hours riding we came to Lansa, the first town of the King of Spain's country. All along these mountains grew rosemary, common furze or gorse, and Agnus castus of two forts, the one with a carneous, the other with a blue flower. From Lansa we went on the same day as far as Cau de Creux, five leagues or twenty English miles from Bagnols. Among these mountains we met with no brooks and scarce any water.

September 1. We intended to have seen the coral-fishing here, but the windy weather hinder'd us. The sea must be very calm and smooth, else it is impossible for
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for them to fish for it. It grows downward (as the urinators told us) under the hollow rocks, and not upwards as trees. I believe rather that it grows indifferently either upwards or downwards according to the situation of the rocks.

The engine they use to get it is a great cross of wood ABCD, that at the middle E hath a huge weight of lead made fast to it, and at each end A, B, C, D, a round net. To the lead at E is fasten'd a long rope. They go out in little boats and let down this cross; and when they have found a rock at the bottom of the sea, he that manages the rope thrusts it into the hollows, getting in one or two of the legs, and if there be any coral it entangles in the nets at the end of the cross by which it is torn of and brought up. The natural colour of the coral, while it is alive and growing to the rocks, is a pale carneous; but when the scurf (which answers to the bark in trees) is rubbed off, it is red. The coral
coral that dies or is broken off from the rocks loses that carneous scurf or bark in the sea and becomes red, though sometimes it gets a greenish white ruff. They say it is fifty years before it comes to its full growth: but that I conceive is an ungrounded conjecture. They sometimes but very rarely find branches of three or four pounds weight. It rots, dies, grows light, worm-eaten, and full of holes like wood. They all affirmed it to be hard and not soft as it grows under water, contrary to the current tradition of the antients, *Mollis fuit herba sub undis.* I believe the outward scurf or bark may be soft, it easily crumbling off afterwards, which might give occasion to the fable. They told us that a piece of coral (having the carneous scurf upon it) wetted is just the same as when it is first taken out of the sea. The best coral rude as it is found is worth a pistole the pound, or two or three pieces of eight: polished and wrought into beads, bracelets, &c. at Marseilles it is sold for thirty, forty, and sometimes sixty fols (i.e. so many pence) the ounce. They find here white coral also but very rarely.

Near *C. de Creux* upon the mountains they find a kind of *Selenitis,* which may be cut or slit into very thin plates, like the common *Muscovy glas.*

Upon the shore are thrown up *conchae venereae* of several sorts and magnitudes, and other small shells of affinity to them, which they call *Porcellane.* These they put in the juice of lemons or citrons, and set them out in an open bottle all night. The dew mingling with the acid juice dissolves the porcellane. This liquor they use for a cosmetic.

They catch fish about *C. de Creux* as at Naples, by hanging a fire-brand or other light at the end of the boat, which intices the fish into the nets.

This day we passed by *Rosas,* a strong garrison, *Castillon,* *Villa Sacra,* and lay at *Figera.*

Sept. 2. We passed *Crispia,* *Basalon,* *Argelagues,* *St. Ja* and lay at *Castel-Soulet,* five leagues. All the way we observed abundance of pomegranate-trees. *G. Foulet* is a small garrison.

3. We passed by *Aulet,* where we saw a *bufalore,* of which there are divers in that town. It is a hole or cave, out of which continually issues a cool air. They keep
keep bottles of wine, fruit, &c. in a little house built over the cave. The wine here kept drinks as cool as if it were kept in ice or snow. They say that it is the water running and falling down under the ground that makes these Spiracula, which is not unlikely. They are all on the left side of the river as you go to Vic, and none on the right. This day also we passed Rhoda and lay at Vic, seven leagues.

4. We went to the hill where the amethysts or violet-stones are found distant two leagues from Vic, called St. Sigminont. On the top of the hill is an hermitage and place of devotion, where Sigminont a Burgundian King did penance. The amethysts are found lower in the side of the hills. Viscount JACQUE is lord of the soil, and whoever opens a mine pays him a pistole and an half per mensem. They find the stones by following a vein of reddish or black earth, or a vein in the rock so coloured. They are all hexagonal, and pointed like chrystal. There are of three sorts, the best are the blackest or deepest violet. 2. Others are almost quite white. 3 Some, but very rarely, are found tinted with yellow. They sometimes flick a great many together to the rock like the Brifol diamonds, but those are never good: the best are found loose in the chinks of the rock, in a fat yellowish or reddish earth. They scrape out this earth with long narrow knives that enter into the chinks, and then crumble it in pieces with their fingers to feel for the stones. They are afterwards ground and polished upon leaden moulds after the same manner as chrystal is. First they use the dust of Smiril or emery, and at last of Tripoli. All along the way to this hill we saw abundance of Arbetus and Rhus coriariorum called Rhondo. In this country they use not bark of oak to tan their leather, as we do, but the leaves and branches of this shrub, which they first bruise with a perpendicular stone, and then mingle with water, and, heating the water lukewarm, steep the skins in it three or four days. In these mountains are also found emeralds, gold and other sorts of minerals and stones, but it doth not turn to account to search for them. Topazes are found in a lake call'd the lake of Silles, not far from St. Colonna near Girona. They find them upon the shore of the lake.
At Vienna there is a great market-place, and a church said to have been built by Charlemagne when he had discomfited the Saracens, and driven them out of Catalonia. This night we lodged at Moia, having travelled only three leagues.

We rode within sight of Montserret, broken at the top into rocks standing like the teeth of a jaw, from whence it took its name. There is a chapel of our Lady, a place of great devotion. This night we lodg'd at Casa della pobla, a single inn, five leagues.

We came to Cardona two leagues. All the way as we rode, the rocks and stones were full of round holes, just like those in the stones at Ancona, in which the Pholades harbour; and there is no question but these holes have been made by some animal before the stones were harden'd.

We viewed the mountain of salt, where were three officers, one to weigh the salt, another to receive money, and the third to keep accounts. The revenue of this salt amounts yearly to about 30,000 pieces of eight. For every quintal, that is 104 pounds, they pay 10 reals of two sous to a real. The salt is hard and transparent like chrysfal, and, when powder'd fine, as white as snow. They hew it out with axes and mattocks; and make chaplets, boxes, &c. of it. They say there is no end of it, but that it reaches to the center of the earth. Near the place where they work there are two caves within the rock of salt, to the end of one of which they never durst venture to go.

Not far from this there is another mountain of salt, where the salt sticks to the rocks, and is most of it tinctur'd with red. Of this red salt they make broad plates like tiles, which they call Ruggiolas; these they heat before the fire, but never put them into it, and use them to take away aches, strengthen the stomach, keep the feet warm, &c. Well heated on both sides, they will keep warm for twenty-four hours. Amongst this red salt there is a kind of Selenitis (which some call ising-glass, and the Italians Gejfo, from the Latin word Gypsum, signifying chalk, because when burnt it is turned into a white calx) which naturally roches into parallelepipeds of the figure of a lozenge. Of which sorts of stones...
Observe

In topographical, tones are found in several places of our nation. About these mountains of salt grows great plenty of Halimus and Limonium.

Cardona is a dukedom containing three or four villages besides the town. The Duke thereof is one of the the richeft grandees of Spain, having three dukedoms, four marquifates, two earldoms, &c. The name of his family is Folke. He lives for the most part at Madrid, but sends every three years a governor. The King of Spain hath nothing at all to do with this city: and the Duke never imposes any taxes, but hath only all the tithes of the corn, wine, &c. There is a council of thirty six changed every year, and he that hath been of the council must wait three years before he can be chosen again. The last thing the council does is to choose a new council for the year following. This new council is divided into four ranks, not equally, but as the old council shall think fit; and their names are put into four boxes, out of every box a child takes out one to be consul. He that is drawn out of the first box is the first consul, and so in order. Near the town is a castle, and in the castle a tower said to be built by Charlemagne. Every Duke hath an oath given him by the consuls, wherein is an article that he must reside in the castle, which is never kept.

We passed through Kalab, and lay at a single inn a league and a half further, four leagues and an half distant from Cardona.

We passed through St. Columba, Roccafort, and lay at Sirreall five leagues and an half.

We passed by Pobla a famous ancient monastery, about two leagues distant from Sirreall. In the church there are a great many monuments. They told us, that thirteen Queens and seven Kings lay interred there. Then we passed Praves, and lay that night at Coulnowvil five leagues. All over Catalonia they reckon a league two hours, and make account that four Catalonian leagues are equal to six French. We heard that there were amethysts also found about Praves.

We passed by Falsot, two leagues from Coulnowvil, where are a great many lead-mines. The ore is very rich, and they melt it just as it is taken out of the mine,
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mine, without beating it to powder. They sold the ore for forty Reals of Arditz the quintal, a quintal being 122 pounds: Five quintals of ore usually yield four quintals of lead. This town and the mines about it belong to the Duke of Cardona. They told us, that the vein of metal lay always east and west. The best and finest of this ore they grind to powder, and thereof make varnish to lead earthen pots and vessels with, sprinkling the powder upon the pots. This night we lay at Tivifa, four leagues.

We passed Venu-falet, Tivians, and lodged at Tortosà, six leagues. All along the way we saw a great deal of Palma humilis Hispanica non spinosa. The fruit grew up in bunches out of the ground like the berries of Arum, and was not much bigger. Those that were ripe were of a reddish colour, of an oblong figure, and divided into four quarters: those that were less ripe were yellowish. The skin and pulp very thin, and did but just serve to cover the stone. It hath the smell and taste of dates. The stones being broken are not at all hollow, but have a hard white kernel or pearl within them. We observed also abundance of Garoffus (as they called it) i.e. Caroba five Siliqua dulcis, the cobs whereof they give their mules instead of provender. The Spanish soldiers at the siege of Barcelona had nothing but these Siliquae and water to live upon. All over Catalonia the people are generally poor. They use neither glass nor paper in their windows, but only shuts of wood.

Tortosà is a very poor and desolate town. There is a bridge of boats over the river Iberus, now called Ebro, in sight of which we rode all along from Tivifa hither. At Tortosà they were wont to make salt-sellers, mortars, bowls, beads, &c. of a kind of marble of a mingled colour, red and yellow, found near the town, which they call Jasper, and of another greenish marble spotted with black, brought from Genoa.

We went to the jasper mine about two miles from the town, with one of the chief workmen. We saw there vast pillars hewn out and wrought for a church in Palermo. He told us, that all the veins of marble, jasper, &c. went from east to west; that they fawed
Observations

Topographical

these stones to make tables, &c. with only water and sand; that, when there was not enough red in the stone, they made little holes and set in red stones; that the cement, they used for all stones in mosaick works, was made of one half mastich, and one half Greek pitch; that in building they joined the stones together with ordinary lime, but on the outside they filled up the chinks with a cement made of the powder of the jasper, mingled with sulphur and Mangra; to make it more white, they put in more sulphur, to make it more red, they put in more Mangra. The jasper was hew’d out with chizzels and hammers, just as stone in our stone-pits. It is afterwards polished with armoril, i.e. the powder they use to polish armour with, and to give it a lustre, so that one may see his face in it with the powder of the cinders of the bell tin.

This day we set out towards Valence, passing the Ebro by the bridge of boats, and lodged at Galera, a small village two leagues distant from Tortosa.

We passed by Tregera, whereabouts seemed to be the ruins of an old Roman way; Mattheau, Salsandail, and lay at Lefcouvas, seven leagues. Near Lescouvas we found store of Oleander, with a red flower.

We passed Cabanos, Pobletta, Buriol, Villa reale, Annules, seven leagues. This journey we saw a great many rivers quite dried up, and for above a month together had scarce any rain: that little that was always came just from the sea.

We passed Chinces, Almenaro, Moulvedere, (an Saguntus?) Maffa-magril, Albalade, and arriv’d at Valence, seven leagues. Near Valence the country is very populous and well cultivated. Abundance of mulberry-trees are planted in rows all the fields over. As we passed through the market-place at Valence, all the people houted at us, and threw parings of melons, &c. on our cloaks. It seems they are not used to see strangers and travellers there. This was the first place in Spain where we were searched. In this city is an university. I heard a professor read logic. The scholars are sufficiently insolent and very disputacious. One of them ask’d me, Quid est Ens universale?
Moral, and Physiological.

verfale? and whether I was of Thomas Aquinas's opinion? Another, Quid est Genus? None of them understood any thing of the new philosophy, or had so much as heard of it; none of the new books to be found in any of their booksellers shops; in a word, the university of Valence is just where our universities were 100 years ago.

In the kingdom of Valence the King of Spain is not absolute; but to impose taxes, raise soldiers, &c. he must have the content of the three estates, i. e. 1. The clergy. 2. The nobility. 3. The cities and villages: and, if one of these refuse to consent, nothing can be done. These three estates have six deputies, two for each, who are changed every third year. Of the two for the cities, one is for the city of Valentia, and the other for all the rest. Each city chusing a syndic, one is taken by lot to be a deputy. The six deputies have the care and government of the militia. Upon any urgent occasion the deputies must assemble the three estates. i. e. the chief of the clergy, the nobility, and the syndics of the cities.

The city of Valence is governed by six jurats or consuls. They are taken by lot out of six urns or burles, two out of each: in the first urn are the names of all the better sort of nobility that have the title of Dons: in the second urn the names of all the lower rank of nobility, that have not the title of Dons: in the third, the names of all rich citizens that are not gentlemen; they must have at least 400 crowns yearly rent besides what their wives bring. Besides these, there is a rationel and two syndics changed every third year; six advocates for their lives, and forty plebeians changed yearly. The city being divided into fifteen trades or companies, each company chuses two, which make thirty; the other ten are chosen, two by the rationel, and eight by the six jurats and two syndics, each chusing one. Of all these officers and the forty plebeians consists the senate: But nothing can be done, unless there be twenty nine of the plebeians present at least. There is also, 1. a judge for criminal caufes, taken by turns out of the three urns, and changed yearly. He hath an advocate to affift him, who is changed yearly, but so that all the
advocates in the city have the place by turns: and a Lieutenant criminal taken by lot out of the forty plebeians.

2. A Musfafa who has the care of all kind of victuals, corn, weights, measures, &c. He is taken by lot out of the three burges as the criminal judge is, and hath also a lieutenant out of the forty. Moreover there is a judge for civil causes taken out of the three burges, who has an advocate like the criminal judge; but he cannot decide causes of above fifteen crowns.

The university is governed by the town, who every third year choose a Rector that must be a canon. The other officers are a beadle, a serjeant, and a punctadore, who is to take notice when any professor fails to read. There are eight Propositi in this university, four for divinity, two for the canon law, and two for the civil law; who have each 500 crowns yearly. There are also four readers for philosophy, seven for physick, one for the Greek tongue, one for the Hebrew, and two for the mathematicks. These have but small stipends, but all their scholars that come to hear their lectures pay somewhat yearly. If a professor promote three rich scholars, that are able to pay the fees, to any degree, he may promote a fourth that is poor for nothing.

The degrees are the same with those in our universities, viz. 1. Batchelor after they have finished a course in philosophy; which degree costs about twelve crowns. 2. Master of arts, which costs eighty. 3. Batchelor in divinity, law, or physick, which costs sixteen. 4. Doctor, which costs 150. They may be masters of arts presently after they are batchelors if they will, and in like manner doctors.

In the market at Valence and all Spain over, they divide hens and chickens into pieces, and sell them by quarters: they make great vessels of goats skins to put wine and oil in, and lesser bottles which they call botos. The women paint, laying it on so thick as if one daubed minium upon a wall. No garrisson nor soldiers here.

We set out from Valence, and passing by Masanoff, Cararegi, & Seille lodged at Musfafes, three leagues. Coming out of Valence we were fain to give money at three places, to avoid searching.
Moral, and Physiological.

We passed Cullera, where we ferried over a great river called Xucar, and lay at Gandia. There is a college and an university, as appears by this inscription upon the wall of the col. Sanctus Franciscus à Borgia, Dux Gandiae. Prepositus generalis Societatis Jeifi 3 hoc Collegium & hanc Universitatem a fundamentis crexit A. D. 1546. At Cullera the wine first began to be sweet, and three leagues off at Gandia the plantations of sugar-canés began. Whether the nature of the soil, that was fit to nourish the sugar-canés, did not also contribute to the sweetness of the grapes? At Gandia we first found raisins of the sun (as they are called in England) in Spain they call this kind Panfas, and they seem to be the Duracine of the ancients. They are all white, round, and have a tougher skin than other grapes. They gather them when fully ripe, and dip them in a boiling Lixivium of water and ashes, just dipping them in, and taking them out again; and then dry them upon boards in the sun, taking them in by night or in foul weather. The name raisin comes from Racemus. Figs are dried just as they are gathered, not being dipp’d into any Lixivium.

I went to Olives, where and at Gandia are the engines for sugar-works, the best are at Olives. By the way we saw the sugar-canés growing in several places. They are planted in low wet grounds, well mucked and dressed, divided into beds or hillocks and furrows. They cut the canes close to the roots in November and December, and cutting of the slender tops, which afford no good juice, keep them under ground till March, and then prick them into these hillocks or beds; out of every talea or cut, shoot four, five, or six canes, which will be ripe the next December. The knots or joints of the cane at the bottom are very close together, scarce an inch asunder, but upwards the distance is more as the cane grows slenderer. Within is a white pulp or pith, full of sap, sweet as honey. They fell them at Gandia to eat, and, cutting them into pieces just in the middle between two knots, suck the pieces at both ends. To make sugar, after the canes are cleansed from the tops and leaves, and cut into pieces, they are first bruised either with a perpendicular stone running round, as apples.
apples to make cyder, or olives to make oil; or between
two axes strongly capped with iron, horizontally placed
and turned contrary ways; and then pressed as grapes
or olives are. The juice thus pressed out is boiled in
three severall cauldrons, one after another. In the third
cauldron it becomes thick and black, and is then put in-
to conical pots, which at the bottom have a little hole
stopped only with coarse and foul sugar; Mr. Ligon
faith with plantain leaves. These pots are cover'd when
full with a cake of paste, made of a kind of earth call'd
in Spanish Gritty, and found near Olives, which is good
to take spots out of clothes, which cap or cover sinks
as the sugar sinks. [Mr. Swift told me, that the clay
they use with us is tobacco-pipe clay, or very like it,
and that the water in the clay sERVED to wash down
and carry away the Molossos, at least the clay helps the
sepparation and precipitation of it.] These conical pots
are put into other pots, into which by the hole at the
vertex the juice drains down through the coarse sugar at
the bottom. It drains so for five or six months, in which
time the sugar in the conical pots grows hard and white,
all the juice being either drunk up by the lute, or run
out by the hole at the vertex. The juice is boiled again
so long as it is good for any thing, but at last it makes
only a foul red sugar that will never be better. The
conical loaves of sugar, after they are taken out, are set
to drain over the same pots for fourteen or fifteen days.
To make the sugar more white, they must boil it
again, but about one sixth is lost every time. A
pound of sugar of twelve ounces is sold at Olives for
three sous and a half; refined for five or six sous.
The sugar-juice is strained through strainers of linnen, as
it is put out of one cauldron into another. They take it
out of the first and second cauldrons so soon as it begins
to boil; but in the third cauldron they let it boil till
the scum rifes, and then take off only the scum with
a scummer, and put it into a long trough to cool,
and, when it is cool, put it into the conical pots. One
scum rifes after another in the third cauldron. The
scum, when it is taken off, is white, but turns to a
black liquor in the trough. They never refine the sug-
gar more than three or four times. They use for the
refining
refining of it whites of eggs, putting in two or three dozen into a cauldron. They use but one cauldron for refining. When it is refined, it grows white and hard in nine or ten days. The juice boiled up is eaten with bread toasted, as honey: the juice of the refined sugar is much better than the first juice. The Duke of Gandia sends presents of this refined juice to the Queen of Spain. When they refine it, they put a little water into the cauldrons, to dissolve it the better. But for a more exact description of the whole process of the sugar-works, I refer to Piso in his Natural History of Brasil, and Ligon in his Description of Barbadoes. The sugar of Olives is better than the sugar of Gandia. At Muntia in Granada they also make a great deal of sugar.

About Valence, Gandia, &c. the earth is always wrought, and never lies fallow or idle. They reckon five Raccotta's or crops in one year. 1. Of mulberry leaves for silk. 2. Wheat and other European grain. 3. Darsi, i.e. Maiz or Indian wheat. 4. Grapes. 5. Olives; and 6. at Gandia sugar-canes. After the wheat is cut they presently sow the Indian wheat. They complained that lately for a great many years together they had very bad Raccotta's for want of rain, which had almost ruined Spain.

We passed Benegana, and lay at Chativer six leagues and a half. Chativer is an ancient town of the Moors, and was once head of one of their little kingdoms. About a league from the town began a very remarkable aquaeduct made by the Moors. It was just over a river along the side of a hill, in most places not above a yard or two under ground, and had a great many funnels just like the tops of chimneys to give vent, and let out the water when there should be too much. The tops of these funnels were made of a red clay and pebble stones. The water came almost to the top in all of them, but run over but in one.

We passed in sight of Montesa, a castle belonging to the knights of Montesa that wear a red cross; Ortenente, and lodged at Bechert, six leagues.

Near Alicant among the mountains there is a very good breed of falcons. In the plains near Alicant grows abundance
Observations

To the abundance of *Gramen spartum* Plinii, five *portularum Officinarum*. B. i. e. matweed, of which the frails wherein they put raisins and other fruit are made. This in Spain they call Spar, at Marseilles Auffe. The women hereabout gather abundance of this, and steep it in seawater till it be well softened. Then they dry it and carry it by sea to Marseilles, where they sell it at eight ducats the milliere: every milliere consists of ten packieres; every packiere of one hundred Manado's or handfuls. Of this they make cables for ships, baskets, &c. In this day's journey we saw a great many fountains covered with long arches to hinder them from being dried up. We passed Elda, Novelda, Aspe, Clavillente, Albitella, and lay at Orivola, eleven leagues.

Sept. 30.

We came to Murcia, four leagues. Near Orivola (which city is an episcopal see) we observed many turpentine-trees, some in flower, and some with ripe berries. Near Elda they dig up a fort of Selenite, which they burn and put into wine to clarify it. About a league from Orivola began the kingdom of Murcia: two leagues from Orivola we were fain to give money, to avoid searching. Murcia, which gives denomination to this kingdom is a pitiful desolate town. The fish-market here is shut up in a cage or grate as at Genoa, the people crowding about it, and thrusting in their baskets as there.

Octob. 1.

We travelled through a miserable desolate country to Mula, seven leagues.

2. We passed through Caravacca, where they drive a great trade of making little crosses of silver, brass, wood, &c. after that pilgrims, travellers, &c. have bought them, they carry them to the castle to touch them by a famous cross, which according to their fabulous legend descended miraculously from heaven, which forsooth infuses a wonderful virtue into them. We lay this night at an odd house four leagues off Caravacca, having travelled in all ten leagues.

3. We passed by Venta nova, and came to Huefca, eight leagues. At Huefca we first saw a yellowish white wine like sack. The kingdom of Granada began about four leagues before we came to Huefca. The town of Huefca belongs to the duke of Alora.

We passed by Bafa and rested at Venta eight leagues.
We travelled to Guadix, an episcopal see, and ancient Roman colony. Upon the gates we took notice of this inscription. *Receptit Colonia Accitana Gemelienfis provinciae capit prima omnium Hispanicarum fidem Christi fе, rejecit idolis, evangelizantibus sanctis Torcato & fecis, Anno salutis 70, Pentificatus S. Petri 37, imperii Neronis 13. Urbis Accis patrono suo sanctifìssimo D. D. 1593.*

Honorati sunt Amici tui Deus. Colonia Accitana.

We travelled to Granada six leagues distant from Deimos, where we lodged the night before. Here we saw the castle called La Lhambra, the seat of the Kings of Granada. Within the walls of the castle live abundance of people which dare not live in the city for debt or other causes. There is a fair palace begun by Charles V. and yet unfinished: the outside of it is square, but it is round within, having two rows of cloisters one above another round about the court. Adjoining to this is the ancient palace of the Kings of Granada: within there is all the same kind of morefco work wrought in mortar and stone with gold and painting. The cloisters are supported by long slender pillars. In this palace is an octagonal chamber vaulted at the top, with eight doors, one in every side. If one stand in one angle and whisper to another that stands in the angle diametrically opposite, the voice is conveyed as in the whispering place at Gloucester: but if you stand in an angle that is not diametrically opposite you hear nothing. The reason of the conveying the voice is the vault above, and the corners being frighten into a very sharp angle or channel. In Granada are two great market-places, one called Plaffa nova, the other de villa Rambla. In the great church are two monuments, one for Ferdinand and Isabella, with this inscription, *Mahometicae fetae prostratores, Hæreticae pervicaciae extinctoris, Fernandus Aragonum & Helisbetha Castellæ, vir & uxor unamnes, Catholici appellati marmoreo clauditur hoc tumulo.* The other is of Philippus I. and Joanna, daughter and heir of Ferdinand and Isabella without an inscription. In the river Daro that runs by Granada they find gold among the sand. In the mountains of Sierra nevada near Granada are said to be divers sorts of minerals, which are not at all looked after. Near Motril at the Capo di Gatto there is a mine of granates.
nates covered with the sea. They are pointed as amethyfts and chryftal, but the beft come from Africa. We faw that day Monte sacro, a place within half a league of the town, of great devotion. In Cafihle, Granada, &c, the greater cities have a Corregidore, and the leffer an Alcayde, who administer justice, and are appointed and fent by the King to govern the towns. All over the kingdom of Cafihle they eat flesh upon Saturdays, and obferve only Fridays.

Octob. 12. We left Granada, and, paffing by Santa Feda, travelled to Lotta, eight leagues.

13. At Lotta we were troubled with soldiers that came from the frontiers of Portugal to take up their winter quarters. There had been of this party 2600, but this fummer at Alcantara they were reduced to 900, the reft being f lain, or dead of defeases. We paffed this day by Archidona, Lalameda, Larouda, and lay at Pedrera, ten leagues.

14. We paffed by Offuna, La Pobla, and lay at Elazabel, ten leagues. This country was the beft we faw fince we came into Spain, the land being for the moft part well planted and cultivated.

15. We paffed by Gandula, and arrived at Sevil, seven leagues. Between Gandula and Sevil there are abundance of olive-trees. Here we firft faw the greater f ort of olives, which are usually eaten in England for a fallet, called the great Spanifh olive; all that we had f een in Italy or in Spain before being of the leffer f ort. Here is a brave aqueduct of brick, which conveys water from Carmona, fix leagues di f tant: under the arches there are Stalaclites, as at the aqueduct of Pifa. The gallions bring nothing home from the West-Indies but plate, the merchants fhips are loaden with leather, Cocoa, fugar, Lana di Vigonna, &c. Of the Cocoa nut they make Chocolate thus; firft they toast the berries to get off the husk, then pound the kernels to powder, and to every miliao, i.e. three pound and a half of powder, they add and mingle two pound of fugar, twelve Vanilkas, a little Pimentone or Guiny pepper (which is used by the Spaniards only) and a little Acchiote to give a colour; but these two laft may be omitted. They melt the fugar, and then mingle all well together, and work it up either in rolls or loaves,
Morally and Physiologically.

Sevil hath of late decayed very much, and doth continually decay more and more, the trading being most removed to Cales, the reason whereof is because they pay about twenty seven per cent. for all merchandizes at Sevil, and but four or five per cent. at Cales. The chief places to be seen in Sevil are 1. The great church. 2. The King's or assistants palace. 3. The archbishop's palace. 4. The steeple of the great church, like St. Mark's tower at Venice, which you ascend almost to the top without stairs, by gently inclining plains. 5. The Franciscan convent. 6. The Longha, where the merchants meet about the affairs of the flote. 7. The convent of Nostredame del peuple. 8. The bridge of boats over the Guadalquivir, i. e. the river Betis. The town on the other side this river is called Triana. 9. The inquisition or castle of Triana just over the bridge. 10. An old tower, called Torre d'oro, where St. Ferdinand that recovered Sevil kept money made of leather. 11. The aqueduct. 12. The old palace and garden of the Moors. Near the bridge along the river side they come every night with their coaches to take the fresco.

In the great church between two altars are three monuments for St. Ferdinand the Wise, his wife Beatrice, and his son Alphonfus. The same epitaph in Hebrew, Arabick, Greek, and Latin.

Hic jacet illuJirijjimus Rex Fernandus Castelli & Toledo, Legionis, Galliciae, SibiJiae, Cordubae, Murciae & Jabeni, qui totam Hispianiam conquijjvit, fideJifimus, veraJifimus, constantijjimus, inJifimus, streuJifimus, devotijjimus, liberalijjimus, patientijjimus, piiJifimus, humillimus, in timore & servitio Dei efficacijjimus; qui contrivit & exterminavit penitus bojium fiorum pretiosijam; qui sublimavij & exaltavij omnes amicos suos, qui civitatem Hispalem qua caput est & metropolis totius Hispianiae de manibus eripuit paganorum, & cultui reftituit Christiano; ubi solvens naturae debitum ad Dominum transmigravit ultima die Maii, Anno ab incarnatione Domini 1252.
In the same church is Fernandus Columbus, Christopher Columbus's son buried, with this epitaph.

A qui jace el mucho magnifico signor Don Hernando Colon, el quel expleo y gafo toda su vida y facenda en aumento de los Letras y en juntar y perpetuar en esta cividad todos los libros di todas las ciencias qui in su tempo halló y en ridurlos à quatro libros segun estan à qui senalados. Fallecio en esta cividad à 12 di Julio 1532. An. de su edad 50 an. 10 meses & 14 dies. Fue Hyio del valoroso & memorabile Signor Don Christophero Colon. primiero Admirante qui descubio las Indias y nuevo mondo, en vida di los Catholicos Reys Don Fernando y Donna Isabella di gloriosa memoria, à onze de Octobre dy mill quatrocentos y noventa, y dos annos, y partio del puerto de Palaò a descubrirlas con tres Carabelas y noventa personas a tres de Agosto...... iuntes...... y bolblo a Castilla con la vittoria a quattro di Marzo del anno siguente, y torno despues otras dos vezes a poblar lequale descubrio, y al fin fallecio à Valladolid à vente de Maio de mill y quincientos y seys annos, Rogad al Senor por ellos.

Chocolate is sold at Sevil for something more than a piece of eight the pound. Vanillas, which they mingle with Cacao to make Chocolate, for a Real di plato. Acchioté, which they mingle with the other ingredients, to give a colour, is made of a kind of red earth brought from New Spain, wrought up into cakes, it is sold for a Real di plato the ounce. All the oil and wine they have in the West-Indies goes from Spain, they not being permitted to plant vines or olive-trees, that they may always have a dependence upon Spain. At and near Sevil we paid two Reals de quarto a bed; bread, wine, flesh, and all other commodities excessive dear, excepting only olives and pomegranates, which were better here than in any other part of Spain. There had lately been a great plague in Sevil, which had very much depopulated and impoverish'd, indeed almost ruin'd the city.

I set out from Sevil towards Madrid: the first day we travell'd to Carmona, where the aqueduct foremen- tion'd
Moral, and Physiological.

tion'd begins, six leagues; in all which way we, saw no houses, but a great many aloe-trees.

We passed Les fontes, and lay at Euia, a great town of above 20,000 inhabitants. Between Carmona and Euia is a very good country, with abundance of corn and olive-trees. Ossuna is within four leagues of Euia, where the Duke of Ossuna hath a palace. We travel'd this day nine leagues.

We passed over the river Xenil that runs into Guadalquivir, baited at Arrasib, and lodg'd at Cordova, eight leagues. About a league from Cordova we passed another little river that runs into Guadalquivir. Before we enter'd Cordova we rode over a great stone bridge that here crosses the Guadalquivir. In the middle of the bridge stands a statue erected to the angel Raphael with this inscription.


The most considerable places in Cordova are 1. The bishop's palace. 2. The Cavalleria, where the King keeps a great many horses. 3. The ruins of Almanfor's palace, the last King of the Moors. 4. Plafia di Corridera. 5. The church of the Augustine friars. 6. The great church, which was anciently a mosque. It is large but very low, supported by a great many rows of pillars in a quadrate order, sixteen rows one way and thirty another. Upon many of the pillars are Moors heads carved in the stone, and one or two with turbants on. In the middle
middle of this church is the great chapel, where are several bishops interred. In one of the chapels that is now dedicated to St. Peter, in the Moors time was kept a thigh of Mahomet: round about the cornish of this chapel, and that part of the church next it, is an Arabic inscription. The people complain grievously that Córdoba is quite ruined and undone by gabels and taxes.

We left Cordova, and after a league or two riding entered the Sierra Morena, a miserable desolate mountainous county, and lodged at a little village called Adamus; six leagues.

We travelled all day through the Sierra Morena, and lay at a village called La conquista; nine leagues.

In this day's journey we saw abundance of galls upon the limes, which were of like bigness, figure, colour, consistency, and other accidents than those that grow upon oaks. This day we first met with red wine again, which they call Vino tinto. We got safe out of Sierra Morena, and came to Almedovar del campo, a great lougar, nine leagues. About the middle of Sierra Morena are the bounds of Castilia nova and Andaluzia.

We passed by Caraquel, Ciudad real, and lay at Malagon, ten leagues. Between Malagon and Ciudad real we passed over the river Anas, now called Guadiana, which was there but a little brook. In this day's journey we met with a great many great flocks of sheep and goats, going towards the Sierra Morena out of Cafile; it being the custom all summer to feed their sheep upon the mountains of Cafile, and in winter in the Sierra Morena.

We passed by the ruins of an aqueduct, about four leagues from Malagon, then Yenus a good big lougar, and lay at Orgas; ten leagues.

We passed through Toledo, and lay at Esquinas, eleven leagues. As soon as ever we passed the Sierra Morena, we felt a great change of weather, the warm air that comes from Afiric and the Mediterranean sea being stopped by the interposition of the mountains. This day there was here a hard frost and pretty thick ice. The most considerable things in Toledo are, 1. The bridge over Tagus, consisting of but two arches, one great, one and one little one. 2. The shambles, where, notwithstanding
Standing the coldness of the day, I saw abundance of flies, which confutes the story that there is but one great fly there all the year. 3. The great church, where there are many monuments of bishops, but without inscriptions; in the Capella maggior lie interred two Kings, and in the Capella de los Res four Kings. 4. The King's palace. 5. The ruins of a famous engine to raise up water to the King's palace. There is so little of it remaining, that it is impossible thence to find out all the contrivance and intrigue of it.

Between Toledo and Madrid, the country is very populous, and the soil very good. All along the road from Seville to Madrid, the common fare is rabbits, red-legg'd partridges, and eggs; which are sufficiently dear.

We arrived at Madrid: six leagues near the town we passed over the river Xarante. Madrid is very populous, well built with good brick houses, many having glass windows; which is worth the noting, because you shall scarce see any in all Spain besides. The streets are very foul and nasty. There is one very fair piazza or market-place, encompassed round with tall and uniform houses, having five rows of balconies one above another, and underneath portico's or cloisters quite round.

The chief things to be seen in Madrid are, 1. The prison. 2. The piazza just now mentioned. 3. The King's chapel. 4. The palaces of several noblemen, as that of the Duke of Alva, that of the Duke of Medina de los Torres, &c. 5. The King's palace, where there is the King's Cavalleria and the Queen's Cavalleria. 6. A great piazza before the palace, where are abundance of coaches always attending. 7. The English college of Theatines. 8. Il retiro. Out of the town the Escorial and El Pardo.

I set out from Madrid for port St. Sebastian. We passed within sight of the Escorial and El Pardo, and lay that night at St. Augustine; six leagues.

We passed Butrago and lay at Sampsera, all the way a barren, miserable, mountainous country; eleven leagues. We passed Frecedille and lay at Aranda having crossed the river Durius or Duero; eleven leagues.
Observations Topographical.

We pass'd Bahalon and Lerma, where is a convent of Dominican friars and a palace of the Duke of Lerma's, and came that night to Burgos; twelve leagues. The most considerable things in Burgos are, 1. The bridge over the river Relarzon. 2. The gate at the end of the bridge, where are the statues of Charles V; of Janus Calvus; of Diego Porcellero; of Fernandez Gonzales; of Nunio Pastrés; of Don Carlotte, all famous men of Burgos. 3. The market-place. 4. The great church in which are a great many monuments of bishops and canons, two great monuments, of Pedro Fernando di Velasco, constable of Castile, and his wife Mencia di Mendoza countess of Haro. This night we lodged at Quintora-villes; five leagues.

We pass'd by Pancorva, a place very famous for good water, Miranda a great town, where there is a good bridge over the river Iberus, and after that we pass'd over two other rivers Baxias and Sadurra, and lay at Erminian; eleven leagues. At Miranda there is a great market for wheat.

We travel'd to Vittoria. Over one of the gates is the statue of King Bamba, and inscribed in gold letters, Hae est victoria que vincit; four leagues. Vittoria is the chief city of a little country called Alaba. We pass'd this day by Salines the first town of Guipuscoa and lay at Escurias; nine leagues. In Guipuscoa they pay no taxes or other duties to the King, without the consent of the country. The whole province is more commonly called Provincia than Guipuscoa; it is cantoned out into a great many corporations and villages, every one of which send one, two, or three representatives to the general meeting when there is any public business. All offices are annual, and chosen diversely, according to the differing customs of the towns. The chief officer in each town to determine all civil and criminal causes is the Alcal'da; but from him they may appeal to the governor of the province, sent by the King every third year; and from the governor to the King's council at Valladolid. Next to the Alcal'da are two Regidores to look after the prices of all commodities; a Bolfer for the treafury; a Medino for the prison, Argozils or fereaments, &c. They boast that they are the walls of Spain, and therefore have many privileges. Guipuscoa is under the bishop of Pamplona. In Guipu-
Moral, and Physiological.

Guipuscoa and Bisca[y] they have a peculiar language of their own, and therefore send their children to school to learn Spanish (which they call Romance) as we do ours to learn Latin. The searchers having hinder'd us, we were forced to travel a great way in the night. We were lighted by Tias or Teas, which burnt as well, and gave as good a light as torches. When they went out they tossed them up and down in their hands, which kindled them again. These Teas (so called, doubtless from the Latin word tædæ) are very commonly used in this country, and are nothing else but bastons of wood hacked and cleft (but so as the pieces hang together) and afterwards foundly dried in an oven or chimney. Along the middle they use to cleave them almost quite asunder. They are made of several sorts of wood, of Robla, i. e. oak, Aiga, i. e. but the best of Avellana, i. e. hazel. I wonder much at this, unless they have some way of preparing the wood, by steeping it in oil, or other inflammable matter. The tædæ of the ancients were made only of the trunks of old and fappy pines.

We passed by Mondragone, where there is a fabricia of arms for the King, Oniate, Legaspa, Villa real, and lay at Villa franca, seven leagues. We left St. Adrian, which is the ordinary road, a little on our left hand. This country is very populous and well wooded, all the hills being covered with oaks. They use no ploughs, but turn over the ground with tridents of iron; four or five of them working together, and thrusting in their tridents all together, turn up a yard or two of earth at a time, which they afterwards dress and level like beds in a garden. The people are something better condition'd than the Spaniards, richer, and far more populous. 1. Because there is a better government and greater liberty. 2. There is abundance of wood and iron. 3. More rain than in the other parts of Spain.

We passed Tolosa, and arrived this night at St. Sebastian, having travelled eight leagues. The most observable things in St. Sebastian are, 1. The walls and guns. 2. A great convent of Dominican friars, in which there is a famous pair of stone stairs, each step being
Observations. Topographical.

of one intire stone, and supported only on one side.

3. The haven. The government of St. Sebastian consists of a great council of all that have one or more houses and are married, but none can bear office unless he have two houses; of these there are not above 150 or 200, though the town be very populous, containing about 24,000 souls. Once in a year all the names of this 150, or 200, are put into an urn, and a child takes out eight to be electors. Every one of these eight chooses his man. The old magistrates, that are just then going out, divide these eight that the electors have chosen into four pairs, fitting them as well as they can, viz. an old man and a young together, &c. These four pairs are put into an urn. The first pair that are drawn out are the two Alcaldas for that year; the second pair the two deputy Alcaldas; the third pair the two Regidores; the fourth pair, the two deputy Regidores. In much the same manner they chuse two jurats, one syndick or attorney-general, one treasurer, &c. All these officers make a lesser senate, but in business of importance the whole number meets. There is no distinction of Nobles and Plebeii, but all that are descended from Guipuscoans, that are married and have one house, are in a capacity to be electors; all that have two houses, to be magistrates. The jurats places are most desired, there being a great many ecclesiastical preferments belonging to the town, the disposition whereof, when they come to be vacant, is in them, who usually bestow them upon their relations and friends.

Every winter there are several whales caught upon this coast, they coming hither in winter and frequenting here, as they do upon the coast of Greenland in summer. They catch them by striking them with a harping iron, after the same manner as they do sword-fish upon the coast of Calabria and Sicily. Abundance of cyder made about St. Sebastian and Bayonne.

From St. Sebastian I travelled through Orogna, Irun, on the left hand of which is Fontarabia, a strong fort just on the frontiers of Spain. About half a league from Irun is the river that parts France and Spain. In the middle of
Moral, and Physiological.

of this river is an island, where the kings of France and Spain met, when Lewis XIV. the present King married Philip IVth's daughter. The island was divided just in the middle, and a house built, so that, at the table where they sat to eat, the King of France sat in France, and the King of Spain in Spain.

Spain is in many places, not to say most, very thin of people, and almost defolate. The causes are. 1. A bad religion. 2. The tyrannical inquisition. 3. The multitude of whores. 4. The barrenness of the soil. 5. The wretched laziness of the people, very like the Welsh and Irish, walking slowly, and always cumber'd with a great cloak and long sword. 6. The expulsion of the Jews and Moors, the first of which were planted there by the Emperor Adrian, and the latter by the Caliphs after the conquest of Spain. 7. Wars and plantations. In all the towns, especially in the south and west parts of Spain, a great many ruins of houses to be seen. Within a quarter of a league of a town you begin to see ground ploughed, else all a wild country, and nothing but rosemary, cistus, juniper, lavender, broom, lentiscus, &c. growing in the fields and on the hills. Little or no hay any where in Spain, they feeding their mules and horses with straw. At least one half of Spain is mountainous.

The Spaniards are not so abstinent as most people take them to be, eating the best they can get, and freely enough if it be at another man's cost: and in inns never refusing partridges, quails, &c. for the dearness if they have but money. Laziness and sloth makes them poor, and poverty makes them pinch their bellies and fare hardly. They seldom mingle water with their wine, it being a common saying among them Vino poco & puro, though all over Spain the wine is very hot and strong. They delight much in Pimentone, i. e. Guiny pepper and mingle it with all their sauces. In roasting of meat they never use dripping pans but draw the coals just under the meat, which though it be not so cleanly yet is the quicker and more thrifty way for saving of stewel. They tear rabbets in funder with their hands when they are almost roasted, and stew them in a pot with water and Pimentone. To toast bread they throw it upon the coals. They long
Observations Topographical,

long and ask for every thing they see, to avoid which a merchant that travelled with me was wont to put in something into his victuals which they did not love. They take tobacco much in snuff, and if one take out a box of snuff he must give some to all the company. The best person in the company at table cuts and tears the meat in pieces, and gives to every one his share.

They are most impertinently inquisitive, whence you come? whither you go? what business you have, &c. most horribly rude, insolent, and imperious; uncivil to strangers, asking them, what do you come into our country for? we do not go into yours. [This is to be understood of the middle and inferior sort of people, many of the gentry being very civil and well-bred.] Their children are the most unmannerly and ill-bred of any in world. The sons of French fathers and Spanish women when they are grown up often turn their fathers out of doors, having many privileges above them for being born in Spain. They are extremely given to lying, Almuzos and such kind of fellows not to be believed or trusted in any thing they promise.

They ride altogether upon mules, and carry their portmanteau's before them, for fear they should be lost or stolen from behind them; they lie between a high pommel of the saddle and an iron hook. Instead of stirrups persons of quality use great clogs of wood of the shape of shoes without heels. They cut away the mules hair close to the skin under the saddles and portmanteau's, to avoid galling. Of this bastard breed of animals the males are usually bigger than the females. 2. Whether the reason be that they are always bred of a mare and an he als? 2. They pifs very often. 2. Whether the reason be the sharpness of their urine or the smallness of their bladder? 3. They pifs almost always when they go through water. 4. They shoe them with shoes a great deal broader than their feet, to prevent I suppose the breaking of their hoofs. Under the mouths of their mules of burthen they usually hang a net with provender in it. These beasts are better at climbing of mountains than horses, have a greater courage to endure long and hard travel, and besides are maintained with less charge.
The Spaniards seldom ride alone, but they do for a caravans as they do for a caravan in Arabia. The common phrases or forms of salutation, when they meet or pass by one another, are *Garde Dios vosfes*, i.e. *vous autres* [God defend you] *Adios* [adieu] *Vaga con Dios* [God go along with you]. When they are angry *Cornuto*, i.e. cuckold, is the first word, and sometimes *Cornuiffimo*. When they speak to their mules or boys they fend of errands, they say, *Anda Cornuto*, [go cuckold.] When they refuse a courtesy, or compliment to drink first, go first or the like, they say, *Non per vita mea*, [no by my life.] At any thing strange or ridiculous they cry out, *Cuerpo di Dios* or *di Cristo* [body of God or body of Christ]. When they call to one to make him hear, instead of *Escoutes* in French, or *Sentí* in Italian, they cry *O-yes* just as our criers do in England. When they put off a beggar not giving him an alms, they say, *Vosfes perdone*. [Good friend, pardon or excuse me.]

As for their religion the Spaniards are the most orthodox and rigid Romanists in the world, it being a saying among them *Faltando in uno punto à Dios*. [If you leave the church in one punctilio, God be with you, you must needs be damned.] All over Spain there are abundance of pitiful wooden crosses set up in the middle of heaps of stone. Under all the pictures of the Virgin Mary is written *Concebida sin peccado originale*. At the *Ave-Mary* bell they all fall down upon their knees; whereas in other countries they are contented only to pluck off their hats. When they have done their devotions, as also after their meals when they take away, and when they go to bed, they say *Sia lodato il Santiffimo Sacramento*, [praised be the most holy sacrament.]

For fornication and impurity they are the worst of all nations, at least in Europe; almost all the inns in Andaluzia, Castile, Granada, Murcia, &c. having whores who dres the meat, and do all the business. They are to be hid' at a very cheap rate. It were a shame to mention their impudence, lewdness, and immodest behaviours and practices. In Catalonia, Guipuzcoa and some other places they are not so bad.
Observations Topographical.

They are so lazy that in their shops they will say they have not a commodity rather than take pains to look for it: not to be hir'd to carry a portmanteau, go of an errand, &c. but at an excessive rate. Mercers never tie up anything they sell, and, if they allow paper, they only rudely mumble up the commodities in it. Of their fantastical and ridiculous pride, and that too in the extremest poverty, all the world rings. If there be any employment that you would set them about which they think themselves too good for, they presently say, Send for a Frenchman. Indeed the French do almost all the work in Spain. All the best shops are kept by Frenchmen, the best workmen in every kind are French, and I believe near one fourth or one fifth part of the people in Spain are of that nation. I have heard some travellers say, that, should the King of France recall all his subjects out of Spain, the Spaniards would hazard to be all starved to death.

Bread is very scarce and very dear in many places of Spain, because of the barrenness of the soil and want of rain, but chiefly because of the sloth of the people in letting a great deal of ground lie untilled, and in not taking the pains to fetch corn and bread from those places where there is plenty. So that in a day's journey the price of bread will be trebled, and in another day's journey fall as much again. This summer there was a tumult at Madrid: the poor people gathering about the King's palace cried out, Let the King live, but let the ill government die; let exactors die, &c. just as they did at Naples in the rebellion under Masaniello. Upon which the King sent to all the towns about for bread-corn, and in two or three days bread was very plentiful and cheap. All over Catalonia bread was very cheap. The Spanish bread is commended for the best of the world, and well it may be, if, as we have heard, they pick their wheat grain by grain.

At my being at Madrid there was an engineer there sent by the emperor, that had invented a plow, called by the Spaniards, a Sembrador, to sow corn at equal distances, and one grain in a hole; the description whereof hath been since published in the Philosophical Transactions.
In all kind of good learning the Spaniards are behind the rest of Europe, understanding nothing at all but a little of the old wrangling philosophy and school divinity.

The people are much discontented all over Spain, complaining of taxes, evil counsellors, &c. but they have a good opinion of, and are generally well-affected to their King, whose intentions they say are very good.

As for their habit and dress in that they are to be commended that they are constant to the same fashions, tho' they be not the most convenient that might be devised. To change for the better I think it rather commendable than blame-worthy; but to change out of meer levity or an apish imitation of others is foolish and unreasonable. They wear great hats with broad crowns, and the top broader than the bottom. Their hair most commonly, but especially when they travel, they tie up in a knot behind, and sometimes braid like women. Their bands lie upon black collars just of the same bigness or a little bigger. They are joined to the collar and they put on collar and band together. They wear very much cambric half-shirts, and have their sleeves open before and behind both winter and summer; they have great skirts upon their doublets. Their breeches are very strait and close to their thighs, and button'd down on each side, and reach a little lower than the knee. They wear very flight-wrought black silk stockings, that the white linnen stockings which they wear underneath may be seen through them. Their shoes just fit for their feet, very light and thin, with low heels. Over their doublets they wear a close coat, or jerkin with open sleeves like the doublet, and, for the most part, with hanging sleeves like childrens, yet never reaching lower than their skirts: a very long sword, and a short dagger hanging just behind them; and at last, over all, a cloak with a great cape.

The women wear great vardingales, standing so far out on each side, that to enter in at an ordinary door they are fain to go side-ways: when they go abroad are cover'd with a vail of black, having only a hole left for one eye. The poor people wear shoes made of pack-thread.
The most noble sport in Spain is the Jeu de Taureau, or bull-fighting, practised at Valentia, Madrid, &c. At Madrid three times in the year, where in the marketplace a brave don on horseback, and a great many pages on foot fight with a wild bull: when one bull is kill'd or much wounded they turn in another. Seldom but some of the pages are kill'd. And with these cruel and bloody spectacles the people are much delighted, as were the Romans of old in the time of heathenism.

He, that desires to know more of the good qualities of the Spaniards, may read Mr. Galliard's character of Spain.

FINIS.
CATALOGUS STIRPIUM
IN Exteris Regionibus
A nobis Observatarum,
Quae vel non omnino vel parce admodum
IN ANGLIA
Sponte proveniunt.

LONDINI:
Anno Domini M.DCCXXXVIII.
AMERICA
PRAEFATIO.

CITO plus minus abhinc annis plantarum indagandarum studio in transmarinas regiones profectus Germaniae utriusque, Italiae, Galliae bonam partem peragravi. Cujus itineris quis fructus fuerit, quem nunc exhibeo Stirpium exoticarum Catalogus, Amice Lectore, te certiorem faciet. An tibi titulos & nomina nuda perlegere jucundum futurum sit nescio; mibi certe Plantas ipsas liberas & spontis sue quales eas alma tellus est benigno suo sinu effundit, contemplanti incredibilis quaedam voluptas orta est: nec minus gaudebam (ut cum Clusio loquar) nova aliqua stirpe primium inventa quam si amplissimum thesaurum offendissem: Cumq; plurimas quotidie vel mibi antea incognitas, vel Britanniae nostra hospites obrias habemur, magnum me operae pretium perigrinando fecisse ratus, in Hispaniam quoque profectonem meditabam: verum praetextu belli, Anglis omnibus publico programmato Regis Galliae est finibus suis excedere jussis, Hispanicum iter minus tumore fore ratus, in patriam reversus sum. Liceat jam mibi paucarum quaedam de Plantis in genere à me obser- vata Praefationis loco Catalogo præmittere.

I. Quo ad meridiem & Solis cursum propius accedas ed pluribus plantarum species sponte oriri animadvertes.
PRÆFATIO.

Quamvis enim Regiones frigide & Septentrionales suas quoq; stirpes peculiare obtineant, paucissime tamen eae sunt si cum earum multitudine conferantur que in temperatis & calidioribus tantum proveniunt. Cui accedit quod juga, verticis aut etiam latera montium in Regionibus calidis, cum frigidiorum depressis, planis & silvis acris temperamentum quodammodo conveniant, quo sit ut easdem fere stirpes producant, adeo; ne planta quidem Septentrionales Meridionalibus defin.

II. Huc etiam facit quod secundo in loco a nobis observatum fuit: Montes scilicet excelsos quorum vertices maximam annum partem nivibus operiuntur varieitate specierum præcipuè abundare. Alpes certe que Italianam a Gallia & Germania divident in luxuriae plantarum penu Botanicorum scrutinii in hunc usq; diem sufficient, magna ad-buc nondum profitarum residuà multitudine. Quod tanta soli fertilitas dicam an luxuria nivibus debatur extra controversiam est, seu quia velut vesta imposita radices forveat & ab injuriis cali & frigoris vehementiad defendat, seve quod sale nitro quo abundare creditur, terram letificet & saeundet.

III. Arborès nonnullae in aliis regionibus humiles perpetuo & pulillis fruticum menuram non exceedunt; in aliis eximiam magnitudinem & staturam aequantur, cum utrobiq; spontis sue sint. Hujusmodi sunt Lentiscus, Arbutus, Juniperus, Buxus, &c. Præterea sunt quæ apud nos sate & in hortis culte teneræ & molles perpetuò manent, adeò ut ad berbarum genus pertinere videantur; quæ tamen ubi sponte exeunt in frutices satis creaf-sos & lignosos adolescunt, quod in Ricino & Tra-gio observavimus.

IV. Ejus.
IV. Ejusdem generis arbores aut etiam herbæ in alis Regionibus vel succos fundunt, vel fruekus spurios edunt, in alis minime. Sic Fraxinus v. g. in Calabria Manna exudat, cùm alibi nè in Italia quidem id faciat. Lentiscus in sòla insula Chio Mástichen fundit, ut Bellonius & Hermolaus affirmant: certè in Italia & Gallia Narbonensi, ubi tamen còpiosimma est, vel nullam vel paucissimam præbet. Idem observatur in Ferula, Panace Herculeo, Aloe aliisque. Quod ad fruekus spurios attinet, Quercus in Italia, Illyrico, Hispania alijsq; temperatoriumibus Gallias edit, cùm in Britannia & frigidioribus nullus unquam audìtus sit Gallarum proven tus.

Difficilis quæstio est, an Plantes quæpiam nullo semine prævio sponte è terra orientur: (1.) Quod ad imperfectias vulgò dictas, Fungos, Tubera & id genus attinet, manifestum est eas ex semine non nasci cùm nullum gignant. (2.) Ob eandem rationem submarine omnes Algeæ, Fuci, Coralia, Alcyonia, &c. sponte oriendi censendæ sunt, cùm nullum in iis semen hæstænus animadversum fuerit; quod tamen imprimit mirum videtur, cùm earum innumerae férè species & ingens ubique proven tus sit. (3.) Perfeßiores quoque quamvis plerumq; Semini ortum debeant, nonnunquam tamen spontis fæce esse magnum nobis argumentum suppedibat viscus arboribus innatus, etiam in prona seu aversa ramorum parte. Unde omnino fabulosum esse constat quod de ejus ortu Veteres prodiderunt, quodq; Proverbio illi, Turdus malum ipse fibi cacat, originem dedisse perbibetur.

Nec minus anceps & difficilis quæstio est, An Plan tes aliique degenerent & speciem mutent? Cui
PRÆFATIO.

ut aliqua in parte satisfaciam, dico primò, pro diversis speciebus minimè habendas esse quacunque ex ejusdem plantæ semine vulgô orientur, quaque speciem suam iterum non propagant, quantumvis accidentibus nonnullis, v. g. floris colore, petalorum gemina aut multiplici serie, aliisve accidentibus à nobis in Praefatione Catalogi Plantarum Angliae recentis differant. Cùm enim numerus specierum in natura certus sit & determinatus, floris autem colore, multiplicitate, &c. variantium multitudo novis quotannis exorientibus infinita, meritò eas à specierum gradu & dignitate removemus. Nam sì bec sufficerent ad specificam distinctionem inducendam, certè Æthiops quoq; ab Europæo, Juvencus niger ab albo, rubro variòve specie differret; quod nemo, ut opinor, fane mentis unquam conceperit. Hinc Tuliparum, Anemonarum, Caryophyllorum, Auricularum, &c. inexplicabilis varietas ad tres quatuòvre species facilè reductur, cùm reliqua diversitas quæ in floris colore, plenitudine, geminatione, &c. consitit, merè accidentalis sit minimæque specifica, cæli aut soli, alimentève differentiis imputanda. Quid quod Plantæ hæ in eodem loco (ut alibi monuimus) diutius relièta & neglectæ paulatim degenerent, florum gratiæ, seu quæ in colorum pulchritudine, seu quæ in petalorum numero specificæ, perœunte, & ad sylvæstrum tandem formam & ingenium redeant.

Ob easdem rationes nec figura, color sapórvæ fructus seu pericarpii in Pomis & Pyris essentialem & specificam differentiam arguunt. Quoq; siculicet fructus bis accidentibus diversè ex eodem semine orientur, quoq; constanti naturæ lege speciem suam semine iterum non propagent. Atque hic obiter monere convenit, varietasæ seu species novas vulgò creditas Pomorum & Pyrorum ab insitione (quantumvis
PRÆFATIO.

(quantumvis magna cum fiducia id affirmant arcanorum jactatares) frustra sperari, cùm, Fructum perpetuò surculi naturam sequi, mihi pro certo & infallibili in Horticultura axiomate semper suerit, verùm quas habemus differentias semini debéri & ex semine novas indies obtineri posse. Quod adeò verum est, ut varietates etiam in floribus, foliis, caulibus superius memoratas (quamvis vel translatione iterata de loco in locum, vel irrigando aquâ colore aliquo imbuta nonnunquam effici posse, Lauremburgio, in iis quæ ipse expertus est, Authori εξωτερικαλίστη αλίστα, affirmantibus fident non denegavim) frequentiùs tamen faciliumque ex semine in terram pinguem & opulentam aut alio quovis modo à naturali & solita diversam projecto oriri minimè dubium sit. Quantam autem vim & efficaciam babeat ad hæc effecta producenda alimentorum diversitas in domesticis & mansuetis animalibus patet. Æcum enim fera in plerisq; speciebus eoldem colores servent in universum omnia, mansueta & domesticâ coloribus infinitum variant, nec coloribus tantum sed & carnis sapore aliisq; accidentibus. Ceó folâq; diversitas quid in hoc genere posset pluribus exemplis facile esset demonstrare. Hinc in Septentrionalibus frigidis & montibus altissimis maximam anni partem nivibus obtectis Urși, Vulpes, Lepores, Perdices, Corvi albi non pauci reperiantur, quæ in temperatioribus rarissimè occurrunt & pro monstri fere habentur. Hinc in Anglia nostra boves Lancastrenses vel g. mirum quantum à Sussexianis cornuâ pulchritudine totâq; specie externâ, à Wallicis & Scoticis magnitudine differant. Idem ëst & de ovibus, quœ in montosis & sterili oribus adeò parum magnitudine proficiunt ut pro quinque solidis singula veneant; in pinguiibus vero & temperatis in eam molem excrescunt, ut a 4 duas.
PRÆFATIO.

duas etiam libras nostræ monetae valeant. Quòd si animalia iliac mutuo transferas, Septentrionalia sci, aut montosa in locum Meridionalium campesriumve, & vice versa, prosapiam suam non diu retinent, verum paulatim degenerant & ad indigenarum mensuram & indolem accedunt.


Abies
Bies fæmina, five Eiaetw ëlæw J. B. Abies Park. Abies & Abies mas Ger. Nos enim has non dìlinguimus, quamvis C. Baubinuæ quoq; Bellonium & Dodonæum secutus præter Piceam duas faciat Abietis species, nimirum I, i. e. conis sursum speciïtibús, five maren, & II, i. e. albam five fœminam. Hac de re suûs differentem vide J. Bau-binum qui nee Bellonium nec Dodonæum Abietem distinctè novisse demonstrat. The Female Fir-Tree. In Suevia & Bavariae sylvis primum observatus, posea in Alpibus copiósè. Quæ de Abiete annotavimus vide in Cat. Ang.


N. Ventrís lumbrícos sumptum interimit, quotídiano experimento muliïcularum, tum fæmen, tum etiam herba. Folia ficca ad fitenda alba fœmarum profliuia conferre scríbit Matthiolus.


Id Catalogus Stirpium

cens C. B. Italis & Siculis Herba bianca. Tree-Wormwood. In Sicilia, Regno Neapolitano, & insularum adja-
centum ripibus maritimis.

Absinthium Ponticum & Romanum quibusdam J. B. Ait Cæ-
falpinus in collibus argillofis agro Senensi frequens effe:
quad & nos verum comperimus cum Florentiâ Romam
iremus.

Absinthium Seriphium Narbonense Park. Seriph. tenuifolium
maritimam Narbon. J. B. Seriph. Gallicum C. B. Propè
Portum Liburnum in Italia atque etiam juxta Montpelium
ad maris litus & alibi.

Absinthium tenuifolium Austriacum Ger. Park. Austr. tenui-
folium J. B. Ponticum tenuifolium Austriacum C. B. Ad
vias non longè à Vienna Austriæ quæ ad Neapolin Austri-
acam itur. De Absinthii facultatibus confule Cat. Ang.

Acanthi altera trifolia Ger. II, five trifolia C. B. fecunda, feu
altera Dioscoridis Park. altera Dioscoridis notior Europea,
folio Cytisi, facie & filiquis Genistæ-fparti spinosi Lob.
Afpalathus secunda trifolia, quæ Acanthi secunda Matthiolo
trifolia J. B. In Sicilia propè Messanam ; Italia circa Nea-
polin, & Gallo-provincia circa Tolonam portum.

Acanthus fativus Lob. Ger. Park. fativus vel mollis Virgillii
C. B. Carduus Acanthus, five Branca urfina J. B. Bap-
trurjine, or Bear’s-breech. In Italæ meridionalibus circa
Baia & Neapolin, ítemque in Sicilia copiosè.

N. Est è 5 herbis emollientibus. Ufus potifsimum ex-
ternus est in clysteribus aliisq; paregoricis quaurumcunque
formularum & ut plurimum in cataplasmatis. Schrod.
Prodeft etiam, auftore Dodonæo, tabidis, fanguinem fpue-
tibus, ex alto delapfis, ictu alicui aut conatu fpurra vires
fæcis, non minus quàm Symphyti majoris radices, quas sub-
flantia, lento succo, & qualitate proxímè referr.

2. Acanthi folia ob figuræ venuftatem & elegantiam ve-
teres Archifetii columnarum capitulis infculpere foelbant.
Frondibus Acanthi (inquit Vitruvius, lib. 4. cap. 1.) Co-
olumnas Corinthiacas coronabant.

Acanthium Illyricum Park. Illyric. purpureum Ger. Spina
tomentosa altera spinosor C. B. Carduus quibusdam dièus
Acanthium Illyricum, aliis verò Onopordon J. B. In Italia,
Sicilia & Gallia Narbonensi frequens occurrit.

Acarna floré purpureo rubente patulo C. B. Park. Acanthoides
parva Apula Col. In Sicilia propè Messanam, Italia propè
Florentiam, & Gallia Narbonensi propè Monpetulum, in
arenosis.

Acarna major caule foliofo C. B. Park. Acarnæ similis floré
purpureo, Chamaeleon Salmanticenius Clusio J. B. Propè
montem
montem S. Lupi non longè ab oppidulo S. Lupiæ dicto, itémque juxta vias non longè ab oppidulo Vic in valle Frontigniana.

Acer acutioribus foliis Geijh. hort. III. Aceris majoris varietas altera J. B. In montibus Stiriae & in Alpibus Sabaudicis propè Genevam.


Acer majus folio rotundìore minùsq; laciniato. An Acer II, i. e. montanum flavum C. B? Observavimus primò in Heturiae fylvis non longè à Viterbo, pollea etiam in montibus Genevæ vicinis.


N. Radix, prodente Plinio, contusa ë vino jecinoris doloribus utilissimè imponitur.

Acetofa montana maxima ν. Oxalis maxima.


Achillea ν. Millefolium.


Aconitum lycoctonum Napello simile Neubergense, foliis la-tioribus, flore purpureo J. B. An Aconitum Napello simile fæd minus, cæruleum, præcocius ejusdem? Hanc plantam in sepibus non longè à Memminga Suevæ urbe observavimus.


N. Facultate est hominibus aliísque animalibus extitii & pernitiosæ. Semen ejus aut radix in pulverem redacta, & óleo temperata ut ungumentum indè flat, illitu pedicu-los ac surfruses enecat & abstergit. Trag.

Aconitum
Catalogus Stirpium

Aconitum hyemale Ger. Park. hyem. Belgarum Lob. I, fìve unifolium luteum bulbosum C. B. Ranunculus cum flore in medio folio, radice tuberosâ J. B. Anemone Bononien-
sium nonnullis dicitur, quoniam circa Bononiam & per totam etiam Lombardiam copioseffìmè provenit, mensis Fe-
bruarii initio florens.

Aconitum pardalianches v. Thora.
Aconitum racemosum v. Christophoriana.

† Adianthum ëxehyrov five furcatum Thalii. Filix faxa-
tillis Tragi. J. B. Park. faxat. V, five corniculata C. B. In
rupium fissuris propè Rhenum Fl. invenimus etiam in

Adianthum five Capillus Veneris J. B. verum, five Capillus
Veneris verus Park. I, seu folis Coriandri C. B. Capillus
Veneris verus Ger. Black Maiden-hair. In humidis & um-
brosis rupibus & puteis, in Gallia Narbonensi & Italia
vulgare.

N. Pulmonum renûm; vitis medetur; hepatis & lienis
obstructiones referat; Urinam & meneses ciet. Schrod. Ve-
rèm de ejus virtutibus & ufu integrum libellum scripès
Gallicè Petrus Formius M. D. Monspelienfis.

Ægilops Narbonensis Lob. Festaqua five Æg. Narbonensis
Park. Festaqua Italica Ger. Gramen Festaqua XIV, five Fes-
tuca altera capitulis duris C. B. In Sicilia, Italia, & Gal-
lia Narbonensi vulgatissima.

Ageratum purpureum Dalechampii J. B. purpureum Park.
ferratum Alpinum C. B. In rupibus ad radices montis
Salevaæ & in ascenfu montis Jura propè Genevam; Utro-
biq; copiose.

Ageratum Septentriorialium Lob. vulgare, five Coftus hor-
torum minor Park. foliis ferratis C. B. Ager plerisq;
Herba Julia quibusdam J. B. Balfamita fœmina five A-
geratum Ger. Maudlin Tanf. In Etruria circa Libur-
um, Florentiam, &c. itèm; circa Monspelium in Gallia
Narbonensi abundè. Trago & Matth. Eupatorium Mèfias
dicitur.

N. 1. Substantìae tenuís est, faporis aromatici, attenuat,
exterget, putredini refìtit; Hepaticum est, laxat alvum quàm
blandissìmè. Extrinsicè ciet urinam, uterumq; emollit
(fuffitio) Schrod.

2. È foliis hujus & Ophioglophi contusis inque oleo oliva-
rum bullitis, addito cæræ, refìnæ fìcæ & Terebinthìnae
tantillo, unguentum five emplaèrum efficitur farcoticum
praestoßìmum, Gerardo spìpìus probatum.

Agnum caftus Offic. Ag. folio non ferrato J. B. Vitex fòlis
anguïtoribus Cannabis modo dispositis C. B. Vitex five
Agnum


2. Athenis Thefmophoriis Cereris facro mulieres caftita-tem cuftodientes foliis Vifcis cubitus fibi flernere folebant, unde ei Aγνοs nomen.

Alzoon v. Sedum.


Alchimilla minor quinquefolia C. B. v. Pentaphyllum.

Alcyonium 4 Diofcoridis  v. Burfa marina.

Alcyonium 5 Diofcoridis, fieve Auricula marina Cæf. Fun-gus auricularis Cæfalpini C. C. In rupibus aqua marinâ teêsis propè Portum Liburnum & alibi juxta Italianam & Siciliam.


Allium Alpinum v. Victorialis.
Allium sphaerocephalum purpureum sylvestre J. B. Allium feu Moly montanum purpureum elegantissimo flore Clus. 


Allium sylv. bicone flore obsoleto C. B. bicone proliferum flore intus albecente, cum fريا purpurascente externè J. B. Genevae inter fegetes freq.

Allium sylv. perpusillum v. Moly moschatum.


N. 1. Succus hujus plantæ, Aloe diētus, vim praeter purgantem binet & excitantem, calefacientēmque; proritāt hemorrhoidās & mensēs, roborat ventriculum, eene cat & expellit lumbricos, arct putredinem, aftringit, confolidat, exterget, adeoque vulnerarium eff inſigne. Schrod.


3. Quōd frequens Aloes usus haemorrhoidum venas appe- riat, ego (inquit Fuchfius) millies observavi; & vos ex 100 eorum qui Aloe ad excernendas fæces utuntur videbitis 90 haemorrhoidarum fluxum pati; omiſso verò Aloes usu venas illas claudi.

4. Caetērum tria Aloes genera in Officinis habentur, (1.) Socotrina, omnium optima & purissima, ab insula Sco- cotora unde advehitur diēta. (2.) Hepatica, colorēm he- patis referens, priore impurior. (3.) Caballina, quæ eft Aloes crassamentum, feu pars impurior, arenosa & fordi- bus confpurcata, ideōq; caballis feu equis exhibenda. His addit Schroderus (4.) Lucidam, adeo depuratam ut trānsparentēs sit: Alii non diftinguunt Socotrinam ab Hepatica, ut neque Lucidam à Socotrinâ; adeoq; duo tantum genera faciunt, Hepaticam fibriceam & Caballinam.


Aliſe baccifera Ger. fcondens baccifera C. B. repens bac- cifera Park. Cacubalum quibusdam vel Aliſe baccifera J. B.
In Exteris Regionibus.

J. B. In sepibus, primò non longè à Francofurto ad Moenam, postea in Italia quoq; & Gallia Narbonensi observavimus.


Alfine mufcofa quibusdam J. B. tenuifolia mufcofa C. B. Locis humidis ad fontes & aquarum ftaturigines in mon- tubis Stiriae, ìtemque; in Jura & Saleva mox diètis. Flòs hujus tetrapotales eft.

Althæa frutex Clufii Ger. Alth. frutefcens folio rotundiore incano C. B. Alth. arborefzens J. B. Hæc eadem non eft cum Althæa Oblii Ad. licet Lobelius velit, féd diversa, ut rectè Clufius; quamvis & hanc quoq; speciem circa Oblium Gallo-provinciæ observaverimus spontaneam. Foliis eft Malvæ vulgaris rotundis, at incanis; flore majore incarnato. Inrupibus non longè à specu Frontignana & propè Tolonam.


N. 1. Semen Ammeos veri (quod ab hoc diversum est) partium est tenium, incidit, aperit, diff. Hinc convenit in dolore colico & uterino, in mensibus & urina obstruètis, in inflatione ventriculi, usuq; praecipue interni est, hinc & externi. Schrod.


2. Amygdalæ (inquit Galenus & experientia confirmat) nihil prorsus habent facultatis adstringentis; unde non audiendi sunt qui in febris lactis Amygdalinæ dièti usuem i dei vetant, nè sc. alvum alfringat.


in Exteris Regionibus.

camen: quibus etiam recens natis exhibetur ad torrana ven-
tris compescenda cum Saccharo penidiant ad 3ij.

5. Magma reliquum post expressionem olei ad extensio-
num & faciei, & cutis lavigationem quovis fapone
pretantius est.

6. Amygdalae amaræ calide sunt & sicæ, atten. aper. 
exterg. diureticæ sunt, obftruccionis jecoris, lienis, mefen-
teri, uteriq; conferunt. Extrinsecus lentigines tollunt si
masticatæ illinantur, capitis dolori subveniunt (in frontalibus.)
Schrod.

7. Am. amaræ ebrietatem arcere dicuntur. Novimus

tamen (inquit J. B.) qui amuletum illud in ufu habentes
nihilo fecius à Bacco vincentur, &c.

8. Amygdalas amaræ vulpeculis if comedantur lethales
esse tradunt. Marcellus Virgilius in felæ pestiferam
carum vim expertus est: Jo. Lutzius in gallinis, quæ ex ufu
magnatis poit olei expressionem projeci mortuæ sunt. J. B.

Anagryis Lob. fœtida C. B. Park. Ger. vera fœtida J. B.

In montibus prope Messanam & alibi tum in Italia, tum
etiam in Sicilia.

Anagryis Ger. non fœtida major vel Alpina C. B. non fœtida
five Laburnum majus Park. Laburnum, arbor trifolia Ana-

gryidi similis J. B. In montibus Jurâ & Salevâ prope Ge-

nevam & albi in Alpibus Sabaudicis.

N. i. Folia Anag. fœtidae trita & imposita tumores re-
primunt: sicca in passo pota mensæ & secundas movent,
fœtum mortuum ejiciunt. Semen commanducatum vomitus
movet. Hæc ex Veteribus, nam Officinis nostris in ufu non
est. Quod vomitiones faciant tum semen, tum folia omnes
consentiant.

2. Accidit interdum, ut capræ & oves in Creta fame
vevataæ, hujuæ folia depascant, licet odoris fit ingratiissimi, &
potæa ex harum laète caeus conciscatur: quò fit fortè ignarius
aliquis vefcatur, aut lac bibat, statim excitentur tum vehe-
mentissimi vomitus, tum fluxus ventris; & cum hoc sapissi-
mè accidat, multis in disserunt vitæ veniunt: quam ob
causam frutex hic omnibus fit exosus. Bellus.

3. Quod Laburni flores apes non attingant, Plinius eum quæ
secuti recentiores Botanici affirmant. Sæpenuerum autem
Laburnum ob ligni duritiem & nigrorem pro Ebeno vanit
ex quo pulchrae sunt pectinum thecae. J. B.

Anchusa angustifolia C. B. lignosior angustifolia Lob. Park.
minor lignosior J. B. Libanotidis specieis Rondeletio ejusdem:
bis enim describit hanc plantam. In collibus sterillioribus
agri Monspeliensis, aux Garigues, propè Castelnerf, &c.
Anchusa lutea *J. B. Ger.* major floribus luteis *C. B. lutea* major *Park.* In agris iterilioribus non longè à Lugduno quà Genevam iter est.

Anchusa Monspeliaca *J. B.* iténa; minor seu Alcibiadion & Onochiles *ejusdem.* IV, five punicis floribus *C. B.* Anchusa Alcibiadion *Ger.* minor purpurea *Park.* In colle arenoso inter Gramontiam & Castrum novum, non longè à Monspelio.

N. Plurimas virtutes Anchuse tribuunt Veteres, quos confule. Radix oleo soluta colore tingit: petroleo infusa & illita praélans est ad vulnera recentia & puncturas. *Park.*

Androface Matthioli *Ger.* Androfaces Matthioli five Fungus petraeus marinus, five Umbilicus marinus *J. B.* And. Matth. five Cotyledon marina, & Umbilicus marinus *Park.* Androfaces Chamae concha innaascens vel minor *C. B.* In fundo flagni marini Volcarem, inter Promontorium Ceti & Bale-rucb copiosissíme & alibi in eodem flagno.

Androsumum foetidum *Park.* capitulis longissimis filamentis donatis *C. B.* Ruta hypericoides quibusdam, Sicilianae affirmatis five Tragium *J. B.* In Sicilia & Calabria ad aquarum rivos & scaturigines, ubi in satis magnum fruticum adolescit.

Anemone sylv. alba major *C. B.* magna alba, plurima parte anni florens *J. B.* sylv. latifolia alba, five tertia Matthioli *Park.* In Germania superiore.

Anemone tuberosa radice *Ger.* tenuifolia simplici sere tertia, five Oenanthes foliis, sere violaceo hexaphyllo *C. B.* An Italia latiusculis spinosis foliis 3 Clusii *J. B.?* Itinere à Lericio ad Maffam Liguriæ copiosam vidimus, poilea & alibi in Italia.


N.1. Semen attenuat, diffcit, commanducatum halitum oris emendat; diureticum eft, calculos pellit; lac auget, pulmonicum ac stomachicum imprimis audit. Hinc usus in tufti & orthopœæ; in ructu & inflatione ventriculi, torminis intestinorum, &c. Oleum ejus aut Quintefcentiam ad phrenesin & morbum comitialèm commendat Parkinonius.


3. Infantibus
in Exteris Regionibus.

3. Infantibus **și** exhibitum blandè per superiorea ac inferiora faburrum ventriculi intellinorumque ejicit. Schrod.

4. Cæteris flatum diffuentibus medicamentis gratius est ventriculo, minus habet acrimoniac e plus suavitatis.

5. Pinunt hoc in panem ex quo Biscoctum parant: quin & spiritus illis tenuibus, è quibus generosiores aqvas vitae dièstas eliciunt, leviter contumuntur, ad gratum saporem iis iterata defillatione exaltandis conciliandum.

6. Anism Melitenfes Cuminum dulce appellant, unde C. Bauhinius deceptus Cuminum dulce Melitenium pro distintă specie Cumini habuit.

Anonis viscosa spinis cares lutea major C. B. lutea non spinosa, Dalechampio natrix J. B. Natrix Plini in anonis non spinosa lutea major Park. Primò illam observavimus in arenosis insulæ istiis exiguis Promontorio Sicilici Pachyno dicto nuper impetu maris abruptæ; deinde ad fluvium Arve propé Genevam, tandem circa Monspelium copiosè.

Anonis non spinosa parva procumbens lutea. In arenosis maris litoribus propè Cataniam Siciliani copiosè.

Anonis non spinosa purpurea supina minima. In steriliore Calabria juxta mare. Has duas plantas nondum descriptas putamus.

Anonis puilla fruticans Cherleri J. B. Trifolii affinis. In collibus steriliorebus Narbonensis Galliæ inter Illices, Thymos alidiq; frutices multa.


Anthyllis leguminosa purpurascens flore Clusf. Loto affinis flore subrubente C. B. In agrorum marginibus circa Liburnum portum & alibi in pasculis Italicæ.


leguminosa Hispanica v. Trifolium Halicacabum, & Auricularia muris.


Antirrhinum purpureum Ger. majus alterum folio longiflore C. B. vulgare J. B. In aggeribus fossarum & ad sepæ propè Monspelium abundè.
CATÁLOGUS STIRPIUM

Antirrhinum minus flore carneae, rictu tritio. In Italia & Sicilia.


N. 1. Radix insigniter amara est: venenis omnibus adversari dicitur, & peculiariter radici Thorae. Addit Guainerius magnae etiam esse adverius peltem efficacie, cui subscribit Matth. Solerius non modo per inferiorem ventrem, sed & per superiora largas ait Anthorae radices expurgationes moliri; modum esse ad quantitatem Phaeoli in jugulo aut vino.

2. Considerent lectores (inquit J. B.) an radix purgans conventiam commoritis a viperis & cane rabido, itemq; peste laborantibus. Quis tandem credat radicem purgantem auxiliari omnibus cordis affectibus?


Aphyllantis affinis, &c. v. Scabiosa.


Apium peregrinum v. Daucus tertius Dioscoridis.


2. Amatus
in Exteris Regionibus.


Arifarum latifolium Park. Ger. latifolium quibusdam J. B. latifolium alterum C. B. In aggeribus sepium & umbrosis, itinere inter Maftam & Lucam copiosum vidimus: poftea etiam in Gallo-provincia non longe a Tolona portu, ad montium latera.


N. Aristolochia utraq; cephalica, hepatica & pulmonica inprimis est; attenuat, aperit. Hinc prodeft ad tartarem mucilaginem resolvendam expektorandumque; ad menves ciendos, tumores internos rumpendos, venenae discutienda. Infuper longæ infuio ad feabiem exiccadam vel vulgo hie ustitatifima est. Extrinsecus adhibetur ufu creberrimo ad exiccanda & mundificanda vulnera. Rotunda tenuiorum est partium quàm longa, adeòq; efficacior, & in primis mensebus ac fecundinis ciendis celeberrima. Schrod. Aiunt & radici huic vim purgatricem inesse.


Armeria rubra Ger. Betonica coronaria five Caryophyllus sylv. vulgatissimus J. B. Caryophyllus sylv. vulgaris latifolius C. B. Cum priore & magis etiam vulgaris.

Artemisia tenuifolia v. Abrotanum inodorum.

Arum venis albis C. B. magnum, rotundior foilo Park. majus Veronense Lob. Primò in insulis circa Venetias nobis consequent, etiam Novembri mense virens, folis viridibus, vulgaris duplo majoribus, venis albis; vidimus & alibi in Lombardia.
Catalogus Stirpium


N. Craflam pituitam & utramq; bilem per vomitum ac nonnumquam per seceffium violenter expurgat. Diureticum est & emmenagogum insigne. Epar, hie nem, vesicæm; felliis aperit. Hinc utile est in arthritide, hydropo, febrisbus, praecipue tertiana ac quartana, íctero, &c. Folia exhibentur n. 6, 7, 8, vel 9, infusa aut cocta & expressa.


Asparagus sylv. aculeatus Ger. aculeatus, fpins horridus C. B. ßspinofus, five Corruda ßspinis horrida Park. In infusa Pro- montorio Pachyno adjacente, & alibi in maritimi Siciliiæ.


Asperula


After purpureus montanus J. B. Alpinus caeruleo magno flore Park. Atticus caeruleus III, vix montanus caeruleus magno flore, foliis oblongis C. B. After 7 Clusii Ger. In summis b 4 jugis
Catalogus Stirpium

jugis montis Juræ, itémque in montibus maximo Carthusianorum coenobio imminetibus. 

After montano purpureo similis f. B. Videtur J. Bauhinus describere plantam quam inveni in montibus sylvosis max. Carthusianorum coenobio vicinis, quamvis per omnia non respondet Figura aut Descriptio; & quid mirum! cùm sicca jam delineata & descripta fuerit. 


After supinus Park. luteus supinus Clusio Ger. After luteus supinus spinosus f. B. perperam spinosum appellat. After luteus XII, five supinus C. B. Circa Massilia ad maris litus. 


Aftragalus quidam montanus vel Onobrychis aliis f. B. Onobrychis X, seu floribus Vicée majoribus caruleo-purpure- -scentibus, vel foliis Tragacanthæ C. B. In altissimo vertice montis Juræ Thuiri dicó. 

Aftragalus
Exferis Regionibus.

Astragalus major Fuchsi o. Orobus sylvaticus.
Astrantia nigra Lob. nigra, five Veratrum nigrum Dioscoridis Dod. Ger. Helleborus niger Saniculæ folio major Park. C.B. Sanicula ferminia quibusdam, alis Helleborus niger J. B. In sylvis quibusdam non longè à Monachio Bavariæ; necnon in salevæ pratis montosis urbì Genevæ vicinis.

N. Hujus radici vim per alvum purgatricem Hellebororum albo similèm sed mitiorem multò ineßè Gesnerus primùm se expertum refert.


N. Hujus folia succum sanguineum præbent, quemadmodum Theophrastus de Astratylide refert, qui tamen tuis & expressis non elicuit, sed avulsis dum adhuc tenera sunt & suffo prægnantia; sponte è venis effluvit; quo modo etiam ex Aloes plantæ foliiis se Aloen purissimam & optimam Neapolii collegisse scribit F. Columna.


Auricula muris pulchro flore, folio tenuissimo J. B. In monte Thouiri non procul à Genevâ.


Auricula leporis v. Bupleuron.

Barba
B


Balsamita v. Ageratum.


Bellis fylvatica f. B. media sylvæ, Ger. VI, fvee sylv. media, caule carens C. B. In montibus circa Genevam.


Blitum
Blitum rubrum minus J. B. C. B. Ger. minus sylv. rubrum Park. In vincis, hortis & simetis circa Monspelium & alibi. Quomodo & an omnino specificè inter se different album minus & rubrum minus, mihi non satis constat. Quod in Germania circa Basileam & alibi tam copiosè provenit videitur esse Blitum minus album J. B.


2. Nonnulli inter vestes eam reponunt ad tineas abigendas, & odoris suavitatem communicandam.


Bugula v. Consolida.


N. Ufus sum hâc herba in vino decoctâ adversâs inverteratam follicis suffusionem, potu illam decoctionem calidam hoc morbo laborantibus tangan concoshens & diffusiens remedium exhibui, certòq; deprehendi eam extenuandi, difcutiendiq; & educendi circa dolorem & periculum vi préditam. Trag.
Catalogus Stirpium


Bupleurum angustifolium; An Bupleurum III, five angustiffimo folio C. B. ḟ. Figura Bupleuri angustifolii Monspelienis Ger. optimè convenit huic planta quam circa Monspelium invenimus. Eft a. specie diintincta à nostrate Auricula leporis feu minimà ḟ. B.


Burfæ pastoris minor foliiis Perfoliatae ḟ. B. v. Thlæpi oleraceum.

C


Cacubalum Plinii v. Alfine baccifera.


Caltha
in Exteris Regionibus.


N. Flores cardiaci cenfentur, hinc & heptiaci & Alexipharmaci, fudores movent, variolas expellunt, ictero medentur, menfes ciant, partum promovent (fumus subditus parturienti.) Aqua defillata ocularum rubedini & inflammationi medertur. Folia in olere fumpta alvum leniant.

2. Decoctum florum Calendulae in Zythogalo seu liquore vulgo præscribitur ad variolas expellendas; ejusq; usus a longo tempore ferè inter omnes increbuit.


Campanula repens flore minore cæruleo Æ. B. An Trachelium five Campanula hirfuta VIII, i.e. Ùrticae foliis oblongis, minus aperis C. B.? Hujus meminit Clufus in Hift. cap. de Trachelio, quem adi. In aris inter fegetes prope Genevam & alibi.


N. Florum
N. Florum gemmæ antequam explicantur decreptæ & muriā conditæ ad nos transportantur, & intinitūs ferē loco ad carnes & pīces affatīs adhibentur: appetītum augent, hepatī & lieni conferunt obstruētiones eorum referendo. Memorabile est (ūsā modō verum) quod scribit Plinius. Ferunt eos (inquit) qui quotidie Capparinītum edunt Paralyphi non periclitari, nec Lienīs doloribus. Cortex, radīcis imprīmis, lienes iudaratos juvat, tum intus affumptum, tum foras impositum; menfes educit, ulcera exterget & desiccet, ad dolorem ischiatricum valere dicitur, & affectus Arthriticōs.

Cardamine Alpina v. Nafturtiolum Alpinum.

† Cardamine impatiens vulgō. Sium minus impatiens Ger. minimum Alpini: minimum, Noli me tangere dicētum, five impatiens Nafturtii fylv. folio Park. An Sifymbrii Cardamines species quaedam insipida J. B. Certē & icon & descriptio huic ad amuffium quadrant. In Germania juxta Rhenum, locis glariosis ubi aquae scaturiunt.

Carduus chryfanthemus Narbonensis Ger. Scolymos chry-
fanthemus C. B. Spina lutea J. B. Scolymus Theophrasti, five Eryngium luteum Montpelienfium Park. In Italia, Sicilia & Gallia Narbonensi, ad mare præsertim frequen-
tissimus.

Carduus chrysanthe mus Dod. Scolymus Theophrasti Hispanicus Clus. Propē oppidulum S. Lupiani, eundo ad Pe-
denatium, & alibi circa Montspelium. Hæc planta reverà species differt à præcedente, quicquid contradicit C. Bau-
hinus.

N. Salmanticenses tenellam adhuc plantam & primum germinantem, cum ipsa radice elotam aut etiam coētam cum carnibus edunt: ipsius laēteo succo omne laētis genus coagulant; etiamque ejus flore. Crocum adulterant, ut quaedam nationes Cnici flore. Hujus autem radice Sues non minus libenter vescurunt quàm Eryngii Clus.

Carduus chrysanthemus procērus caule eduli. Ad radices montis Ætnæ 8. mil. supra Catania, urbī vulgus cum aceto & pipere caules ipsius crudos acetarii loco comedit. Hæc planta an à præcedente species diversa sit subdu-
bito, quamvis duplo altius assurgat. At fortē illud solo debitur.

Carduus ceruleus spherocephalus minor C. B. Crocodilium Monspelienfium Lugd. Card. globosus minor Ger. Echi-
nopus minor J. B. In Gallia Narbonensi vulgarissimus.

Carduus galactites J. B. Apud alios Botanicos hunc non invenio. In Sicilia & Melita insulis, itemque in Italia propē
Exteris Regionibus.


Carduus lanceolatus ferocior J. B. Primò invenimus eum proximè fontem quem vocant ardentem, à Gratianopoli duabus circiter leucis remotum, deiinde in itinere ad Au- rantia ad Nemausum; tandem propè montem S. Lupi, tribus Monspelio leucis distanter. Est ei flos albus & major quàm Lanceolati vulgaris.

Carduus parvus J. B. In Siciliae agris non longè à castello Pushzall ex adverso Melitæ.

Carduus Cirsiun dictus folio laciniato nigrius J. B. In montibus propè Genevam. Hic an ab aliis descriptus fit video J. Bauhinum dubitare, proinde & ego ἐπεύω.

Carduus pretensis Asphodeli radice latifolius C. B. bulbo- sus Monspelienium Park. bulbosus Monspelienfis, five Acanthus sylv. quibusdam, foliis laciniatis J. B. In pra- tis Monspelio vicinis.

Carduus pretensis latifolius C. B. Park. pretensis Tragi- mollis Lapathi folio J. B. In pratis Rheno vicinis circa Argentoratum, Basileam, &c. 

N. Hujus folia in cibis ut reliqua olera expetuntur, undè à mulierculis Brasso pratenfis, nominatur. J. B. Trag.

Carduus solstitialis Ger. stellatus IV, five luteus foliis Cy- anii C. B. Cardui stellati varietas, Jacea lutea Clufii Lob. Spina solstitialis J. B. In Italia & Gallia Narbonensi ubique ferè.

N. Herba haec in morbo regio efficacissima est expe- rientiâ Fontanoni; valet & ad cachexiam, hydropem, febres diurnas, virginum decolorem faciem, &c. J. B. 


N. 1. Re-
Catalogus Stirpium

N. 1. Refert Gefnerus, hujus floris calicem tum recentem, tum etiam fictum noctu claudi, ad Solem verò aperiri. Germanis Eberwurtz dictur, i.e. Apri herba, quia nimirum Apri ejus radices appetunt; non (ut vult Fuchfius) quòd fues, si in polenta exhibeatur, perimat; hoc enim experiemtia repugnat.

2. Hujus capitula carnola, calice, floribus ac femine refecitis, ex aqua cum butyro, salepipere suave edulium prebent. Gesi.

3. Chamaeleonem albumideo Ixiam appellatum ait Dioecorides, quod quibufdam in locis Vifcum ad ipsius radices inveniatur, quo etiam pro Maffiche utuntur mulieres. Hac appellatio ab aliis Chamaeleoni etiam nigro rectè tribui dicitur: quin & plantae cuidam venenate ab utroque Chamaeleonte DISTINCTAE, cujus meminit Dioecorides lib. 6. competit, autore Guillardino, quem consule alióisque herbários, qui plura de hac voce habent.

Carthamus v. Cnicus.

Carlina sylyest. vulgaris Clus. Cnicus syly. spiniflorus C. B. An syly. spiniflor polycéphalos ejusdem? Hujus plantae radix est diuturna, cum vulgaris nostraris annua ferè fit; plures quoque ab eadem radice caules si exeunt, cum vulgaris unus tantum: Denique floris color in hác flavus est, in nostrate pallide luteus. v. Cat. Ang.

Caryophyllata montana Park. Ger. montana florae magno luteo Æ. B. VI, five Alpina lutea C. B. In montibus actissimis maximo Carthusianorum cœnobio imminentibus.

Caryophyllus arvensis umbelliferus Æ. B. arvensis umbellatus Park. holoëteus arvensis Ger. holoëteus arvenis. V, five arv. umbellatus folio glabro C. B. Inter segetes propè Loveniam.


Caryophyllus simplex laciniatus I, seu florae tenuissimè diffusò C. B. Bétonica coronaria tenuissimè diffusa, five Caryophyllea superba elatio vulgaris Æ. B. In montibus Genevæ propinquiss, minus tamen frequens; invenimus & in Germania, non longè a Weissenberg Francionie oppido.

Caryophyllus montanus major florae globofo C. B. Caryophylleus flos aphyllocauleus, vel junceus major Æ. B. Caryophyllus mediterraneus Ger. In collibus propè Moguntiam
in Exteris Regionibus.

guntiam. Non alia in re quam magnitudine omnium partium à vulgari five maritimo noftrate diffère videtur.

N. Mirum alcius videri poftit, plantam hanc, quae nullibi apud nos quàm in maritimis oritur, in regionibus tranfmarinis tam procul à mari provenire. Verum nos alias præter hanc marítimas in mediterraneis nascentes observavimus, v. g. Tragon Matthioli five Kali 'spinosum in arenosis propè Viennam Auftriae; Rhamnum secundum Clusii non longè ab Augúta Vindelicorum; Althæam vulgarem variis Germaniæ in locis. Quin & Tragus lib. i. cap. 39, fcribit se invenisse magnà copià in agro Vangionum inter fegetes Papaver corniculatum Iuteum, quod in Anglia nulquam nifi in arenosis Oceani litoribus provenit.

Cardophyllus holofusus Alpinus tenuifolius Lini flore albo. In ascenfus montis Juræ propè supræmum verticem Thuirí.

N. Aqua florum fylvestris Cardophylli distintata singulari experimento ad pellendum calçulum menfurâ trium aut quatuor cohlearium bibitur. J. B.

Cardophyllus fylv. vulgatissimus & Car. fylv. prolifer a. Armeria.

Cafia poetica Lobelii Ger. poetica Monspelienfium Park: Ofyris frutefcens baccifera C. B. Caffia lignea Monspelienfium J. B. In Italia ad mare inferum, itémque circa Monspelium plurima.


Caucaalis albis floribus Ger. vulgaris albis floribus Park. IV, five arvensis echinata magnò flore C. B. Lappula canaria flore pulchro magnò albo J. B. Inter fegetes in Germania paffim, itémque circa Genevam & Monspelium.

Caucaalis maritima supina echinata magnò fructu. Lappula canaria five Caucaalis maritima J. B. XI, five pumila maritima C. B. In arenosis Siciliiæ litoribus propè Messanam & alibi.

Caucaalis minor pulchro femine five Bellonii J. B. Seféli Creticum minus C. B. Ger. Tordylium, five Seféli Crethicum minus Park. In Sicilia intra ipsa urbis Messanæ moenia.

Caucaalis Peucedani folio Ger. XII, five folio Peucedani C. B. Park. Saxifragiæ tenuifoliiæ affinis, quibusdam Cau-
ter fegetes non longè ab oppido Jay Genevam versus. Haec planta (me judice) ad Glycyrrhizam sylv. proprius accedit quàm ad Cicer.


N. Quod cicera urinam & mensces cieant, calculos pel·lant, ad Venerem stimulent, flatus gignant, ferè omnes tum Veteres, tum Recentiores consentiunt. Extrinfecès adhibetur farina in cataplasmatis.


Cichorium pratense vesicarium Park. Col. prat. hirsutum ves- ficarium C. B. In sepibus & agrorum marginibus à Liburno portu non longè.


in Exteris Regionibus.


Ciftus ladanifera Monspelienfium C. B. ladanifera, five Le- dum Monspelicam angusto folio nigricans J. B. Ciftus ledon 5 Clufii Ger. An Ciftus Ledon IX, i. e. folii Olææ fed anguflioribus C. B.? In iisdem cum priore locis, & multò etiam copiofior.


2. Cifti radicibus adnascitur Hypociftis dìcta, quemad- modum Rapum Genifse; Hæc magis adstritoria est quàm Cifti folia, unde ad omnes fluxiones, hämorragiam, pro- fluvia muliebra, coeliaeos, dysentericosque affeeus pro- deft. Succus ejus in utù est. Cæterùm Hypociftin, qua pasim utuntur Officinae, ex Hirci barbse radicibus impofores conficiunt, succum indè exprimentes, ac ut con- crescat infolantes. Errandi causam dederunt Arabes, quàd Cifto Hirci barbulum appellent. J. B.

3. E folii Cifti (Ledon appellati) exudat liquor quidam, Ladanum dictus, in massas graves ex purpura fucfas coætus, odore valido sed suavi, inflammabilis, accenfùque

c 4

gratum

Chamelæa Germanica *v. Mezereon.*

Chamaémelum vulgare leucanthemum Dioscoridis *C. B. vulgare amarum *J. B.* Inter segetes circa Genevam.


Chamaémelípus *J. B. Cotoneafter folio oblongo ferrato *v. Bupthalmum vulgare *Ger.*

Chamaépåthyss *môschata foliis ferratis *C. B.* Cham. five *Iva môschata Monspelienium *J. B.* Iva môschata Monspeliana *Ger.* Anthyllis altera herbariorum *Park.* In saxosis collibus circa Monspelium & alibi in Gallia Narbonensii; itémeque in infusa ad Promont. Pachynum.


N. i. Species illa quam nos observavimus spinosa fuit, prout recte eam describit Matthiolus, diversa ergo à Palma humilio Hispanica non spinosa. Figurae a. apud Par-Kinfunum transpositæ sunt.


Chondrille vel Chondrilla cærulea *J. B.* Ch. cærulea five purpurea *Park.* cærulae *Ger.* cærulea altera Cichorei sylv.-folio *C. B.* In Germania superiore inter Confluentes & Moguntiam fucus Renum flumen.

Chondrilla lutea *J. B.* Coronopii aut Cyani facie, tenui-folia lutea vinearum *Lob.* In aggeribus & vineis circa Monf-
in Exteris Regionibus.

Monspelium & ad muros ipfius urbis. Ad Sonchum lœvem vulgarem proximè accedit.


Chondrilla foliiis non diffuseis, caule nudo J. B. Ad radices montis Salevæ, & in arenosis ad fluv. Arve propè Genevam.


Chondrilla viscosa, caule foliis obducento C. B. viscosa faxatilis caule χρυσίδοφρυ Col. In Sicilia circa Messanam, & in Gallia Narbonensi circa Monspel.


Chondrilla caerulea cyani capitulis C. B. vul. Catanance.


Chrysanthemeum Valentinum Chis. vul. Buphthalmum Cotulae folio.

Chrysocome vul. Stœchas citrina.


Cicer fylvestre Matth. Ger. fylv. multifolium J. B. fylv. foliiis oblongis hispidis majus C. B. fylv. majus Park. In-
CATALOGUS STIRPIUM

calis J. B. In planitie quadam propè Augustaem Vin-de-
licorum in Germania.
Cedrus Lycia retufa Bellonio dicit J. B. baccifera I, seu
folio Cupressi major, fructu flavescente C. B. Cedrus Pho-
nicea folio cupressi Park. Oxycedrus Lycia Ger. Ab
hac non diverfam exiftimamus secundam speciem Cedri
bacciferae C. B. ut neque tertiam, cum ipse afferat eas
magnitudine foliâ differre. Fortè etiam Sabina baccifera
dicit ab hac non fuerit diverfa: certè hac nobis Mon-
pelii oftesta fuit pro Sabina baccifera. Et nos quoque
in eadem planta observavimus inferiores & primos in te-
nellis plantis ramulos foliis pungentibus & acutis, superio-
res verò & in adultioribus obtusis & rotundis veftitos.
Centaurium luteum pufilum C. B. minimum luteum
luteum novum Col. Centaurii lutei varietas Ger.
emac. In tefto veteris ædificii Baiani Pifcina mirabilis
dicit. Solo floris colore à minore purpureo differre videtur.
Centaurium minus spicatum album C. B. Park. In agro
Monfpelienfi & alibi in Narbonenfi Gallia flore purpu-
reo frequens.
Cerinthe asperior flavo flore Ger. major flavo flore
florio major flinofo folio, flavo flore J. B. florio asperior C. B.
In Italia & Sicilia admodum frequens.
Cerinthe major Ger. major floro luteo & rubro Park. quo-
randum major, versicolore floro J. B. Cerinthe, feu Cyno-
glofium montanum majus C. B. In montibus sylvosis
max. Carruth. cenobio imminentibus. Perennis mihi visà
eft haec planta: femina a. ei minora sunt quàm vel pur-
pureæ vel flavo.
Ceratus sylv. amara Mahaleb putata J. B. Cerasus XV,
five Ceraso affinis C. B. Macaleb Gfneri Ger. Machaleb
Germanicum Park. qui C. Bauhinum reprehendit, quòd
confundat Machaleb Matthioli & Gesneri. In sepibus
propè Gratianopolin quà itur à la grand Chartruf. Nu-
clei hujus fructus calefacient & emolliunt, faponarios glo-
bulos ingreduntur, pilolique horridiores & durores emol-
liunt affrictu crebro Matth. Ex ìis etiam oleum conficitur
jucundi odoris, quo ad illinendas manicas utuntur. Lugd.
Ceratia v. Siliqua.
Cerrus minore glande Ger. Haliphlaes, five Cerrus femina
minore glande Park. Quercus Burgundica calice hispidi
J. B. VI, five calice hispidi, glande minore C. B. In
Etruria ad lacum Volfinienfem. Vidimus Venetiis Cerri
glandium calices maximos, quos Vallonia ibi appellant,
ab Apollonia Dalmatæ urbe vulgo nunc Vallonia dicitâ,
unde adferuntur. His coriarii utuntur ad coria sua den-fanda. J. Bauhinus horum ufum esse ad inificiendos atro colore pannos Gallarum vice scribit.


2. Ex huju floribus aquam distillant quidam, qui ita rofaceam eminentur, ut pro illa nonnunquam vendi solet. Cam.

Chamaebuxus flore Coluteae v. Anonymus flore Coluteae.
Chamaeyparifius v. Abrotanum foemina.
Chamaecisfus v. Helianthemum.
Chamaecerasus Alpina v. Periclymenum.
Chamaedrys major Park. major latifolia Ger. major repens C. B. Itinere a Vienna ad Venetias.
Chamaedrys vulgaris Park. minor Ger. minor repens C. B. Chamaedrys vulgo vera exiliimata J. B. In Italia & Gallia frequens.

Chamaedrys falsa maxima, an Teucrum I, seu majus Pannonicum Clusio J. B. Chamaedrys spuria major altera five frutecens C. B. Ch. ma. fp. frutecens Park. Teucrum majus Pannonicum Ger. emac. In sylvois Germaniae atque etiam circa Genevam plurimis in locis.


Chamaegenista v. Genistella minor.

C 2

Ch2-
gratum odorem halans. Tradit Dioscorides succum hunc hircorum varbissum fruticem depascuntur adhaerescere, indeque depeceit. Quidam etiam (inquit) funiculos per frutices trabunt, & adhaerentem inpsis pinguedinem in de-radam efformant. Bellonius hujus colligendi rationem, quam ipse in Creta observavit, ita descriptit, Graeci (inquit) colligendo Ladanum peculiare instrumentum parant rafr horum coelebs, adepsque, indeque depedis. Quidam etiam (inquit) funiculos per fructices trahunt, & adlHerentem iplis pinguedinem ita defamant. Bellonisius hujus ilis dictum. Huic affixae sunt multae ligulae sive zonae: è corio rudi nec preparato confectae, eas leniter affirrict ladaniferis fruticibus, ut in-haerat liquidus ille humor circa folia concretus, qui deinde à ligulis per summos ardores folis cultris eff abra-dendus.


N. Hujus olea facultatis sunt acriis & adurentis, impota cutem exulcerant: intra corpus vix tutò assummuntur.


Cneorum Matth. v. Thymelæa minor Cordi.


N. 1. Flof
in Exteris Regionibus.

N. 1. Flosculis tuis condimenti vice utuntur nec male, cibos namque croceo colore commendant, & alvum emolliunt: dicuntur & ictero mederi.


4. Ex femine faeta composicio diaearthami insigniter confert hydropicos.

5. Seminis succus lac cogere dicitur, & magis ipsum resolvendæ aliæ facultate donare.


Colutea scorpionis Ger. J. B. Scorp. major Park. silicosa five scorpionis major C. B. In collibus circa Genevam, Monfapelium & Salernum.


N. Hujus folia, sed præcipue semina, non solûm purgant per inferiorem, sed & vomitiones movent, velut semina Genistæ; sunt autem ventriculo & viferibus inimica, ideœque nonnisi robustioribus exhibenda.


Confolidæ regalis v. Delphinium.

Convolulus Althææ folio Park. argenteus Althææ folio C. B. Ger. emac. peregrinus pulcher folio Betonicae J. B. Circa Messanam in lingula inter fretum Siculum & portum Meffanensem procurrente, inter frutices copiose.
Amafonium v. Helleborine.


Daucus glauco folio, similis Fœniculo tortuoso f. B. In collibus inter vepres juxta Castelnou; Montspelio non longè.


Daucus felinoïdes v. Saxifraga Venetorum.


N. Ventris tineas necare; coli dolores mitigare; vires reficere & nutrire; Venerem excitare; ex aqua pueros Epilepticos juvare dicitur. *F. B.* è Clufio & Lob.


*Dentaria aphyllae* purpureae cespitis denfo. Ex singulis squamis singulos promit flores, pediculis femuncialibus insidentes, & calice amplo in quinque lacinias diviso, galeatos, magnos, purpuracentes cum flaminitis intus purplimis, Calix friatus, turgidulus. In Italia eundo à Gerem ad Lucam in umbrosis vidimus.


*Dentaria pentaphyllos* $C. B. Park.$ pentaphyllos Clufii Ger. quinguefola $F. B.$ In sylvosis jugis montis Jurae copiosae.

*Dentellaria Rondeletii* $v.$ Plumbago.

*Dictamnum albus* Officinarum $v.$ Fraxinella.

*Digitalis lutea* magnio flore $C. B.$ lutea folio latiore, flore majore $F. B.$ ampio flore *Park.* In montibus circa Genevam & in Germania.


Cyclaminus folio rotundiore elator *J. B.* Cyclamen orbiculato folio infernè purpurascenente *C. B.* orbiculato folio *Ger.* Autumnale vulgare folio rotundo *Park*. In montibus circa Genevam Junio & Julio florét; inveniētum etiam in Alpibus Stiriacis.

N. Cyclamini hujus caput interdum in longitudinalen excrescit, & in duo velut cornua dividitur, ut nos cum J. Bauhino observavimus, cum in Alpibus Stiriacis aliquot ejus radices ereremus. Proinde frustrā multiplicāt species. C. Bauhinos, cùm Cyclaminum longius radicatum Gejn. & Cycl. radice inflar captitis arietini ejsudem species ab hac distinctas facit.


Cyclamen vernum *Lob. Ger.* folio angulofo *C. B.* In sylvis quas transvivimus itinere à Mafă ad Lucam primo vere floruit.

N. Hujus radix potenter incidit, aperit, abßterg. errhinum est. Utas precip. in obstruētis mensibus, impellendo fætu mortuo; in ìctero, in calculo expellendo, frīmis ac tuberculis dīscutiendis. Internè cauto opus est; externo usfi praes. Adeò vehement ejus facultas est (inquit Galenus) ut abdomine illito ventrem subducat & fætum interi mat. Isterum sanat experientiâ certâ prodente Meśuă. Ad timitum aurium singularé eft remedium oleum, &c.

Cymbalaria: *C. B.* Italica hederaceae *Park*. Italica *Ger.* flofculis purpurascenctibus *J. R.* Bafileae in iphus urbis muris; At in Italia nihil frequentius.

Cyminum five Cuminum fativum J. B. vulgare Park. fativum. 
Ger. feminine longiore C. B. In insula Malita seritur.

Cyminum five Cuminum feminibus hirsutus seu villofos. In insula praeclata cum praeclende succedere, sed rarius. Hoc necio an & quoquam haecenus sit descriptum.

N. Semen refolvit ac flatus dicuit, ide6q; utile est in colica, tympanite & vertigine: tussim fedare & thoracem expurgare dicitur. Utiliter pani incoquit, & cafeis inditur, ita concoctionem juvat & flatus dissipat.

Cynoglossum minus J. B. C. B. minus Acere, femine longiore C. B. In infla Melita ferkur.

Cypurus longus Ger. longus odoratus Park. odoratus radice longa, five Cyperus Officinarum C. B. paniculà sparsa speciosa J. B. In pratis circa Monpelium; observavimus etiam in Italia & Sicilia.


Cytisus Hispanicus 1 Clusii, folio virecente J. B. minoribus foliiis, ramulis tenellis, villofos C. B.? Dubitat J. Bauhinus an Cytifus fuus montis Calkaris sit idem huic primo Clusii nècne, & an uterq; sit idem Cytifo Lobelii in Adv. descripto.


Conyza mas Theophrasti, major Dioscoridis C. B. major verior Dioscoridis Park. major Monspelienlis odorata f. B. odorata Ger. in Italia, Sicilia & Gallia Narbonensi passim.


Conyza quaedam marina. Propè Peroul non longè à Monspelio.


2. Condiuntur muriâ ut Olive; fit etiam ex iis fapa quemadmodum ex cerasis; itemq; est pulpa electuarium, ad febres, ad fluxiones biliofas, ad fitim, ad excitandam appetentiam utilia. In diarrhoea & dysenteria exhibentur fructus exiccati & pulverisati ad 3i.


4. Hujus lignum omnibus lignis durius perhibetur, ad radios rotarum utilissimum; quin & eundem habet effectum in demoris à cane rabido quem femina Cornus.

Propè Messanam in lingula quæ portum efficit, & alibi in Sicilia.


Coronopus maritimus Rainaudeti f. B. Coronopi & Sedi montani media planta Maßiliënium Lob. In arenoxis ad mare propè Maßiliam.

Corruda v. Asparagus sylvestris.


Cotyledon media foliis oblongis ferratis C. B. v. Sedum.

Crithum 4 Matth. v. Eryngium.


Crocus vernus latifolius flore purpureo Ger. vernus minor purpurascens C. B. vernus latifolius flore purpureo minore f. B. In agris & pasçuis Romæ vicinis; inque montosì pastiçus circa Curiam Rhætorum, necnon in fummìtabus montis Jure.


Echinopus v. Carduus Sphærocephalus.
Echium majus & asperius flore albo C. B. flore albo majus f. B. In agro Salernitano & Romano, inq; Etruria & Gallia Narbonensi. Hæc revera tota specie distincta est à vulgari Echio, & non floris colore tantum.
Echium procumbens flore parvo cæruleo. In Sicilia circa Messanam.
Catalogus Stirpium

pelio ad oppidulum S. Lupian secus vias. Seriūs & sub finem æstatis, ïnq; multum Autumnum floret. Hanc speciem non ita pridem invenimus in Cornubia Angliæ, v. Cat. Ang.


Erica procumbens herbaeæ C. B. supina herbaeæ Park. parva foliis coriois quaternis, flore herbaceo, foliaceis capitulis J. B. In sylvis montosis non longè à Lindavia Germaniæ urbe ad lacum Acronium sita, sub finem mensis Augusti jam tum floreare incipientem observavimus. Primæ speciæ similis est sed minor.

Erinus Cæs. & Col. v. Alfine oblongo serrato folio.

Erotica echinatæ filiquâ C. B. Monipeliaca filiquâ quadrangulâ Park. Sinapi echinatum J. B. Lugd. Inter sgeetes non longè à Lucâ, secus viam quæ indè ad Pisas ductit.

Ervilla v. Ochrus.

Eryngium luteum Monspeliensæ v. Carduus Chrysanthemus.


Eryngium caeruleum J. B. montanum Amethystinum C. B. In montibus Stiriae. Solo summitatum colore à vulgari campesiæ differre videtur.

Erysimum Matthioli alterum Lob. alterum Italicum Ger. verum five cantunum Park. alterum Matthioli, filiquis parvis, quibusdam Dentaria J. B. Ery. polyceratæ five corniculatum C. B. In ipso maris litore ad Rhegium Calabrice urbem.

Eufula v. Tithymalus.


4. E ferulis primâ tantum gesminatione corculum quod dam pastores eximunt, ovi luteum induratum referens, quod sub cineribus affiatum, prius tamen charta aut linteo madefactis involutum, mox pipere & sace consperrsum, non modò gutuli gratissimos est cibus, sed etiam ad excitandam Vere- rem valentissimum.

Ficus f. B. Ger. vulgaris Park. communis C. B. The common Fig-tree. In Italia & Gallia Narbonensi frequentissima, non tamen sponte.
Catalogus Stirpium

Ficus sylvestris Dioscoridi C. B. Caprivicus Ger. J. B. Park. The wild Fig-tree. In Italia & Gallia Narbonensi passim provenit.


2. Ficuum frequentem esum pediculos generare prater Galenum Paulus Aegineta, Oribafius, & recentiorum quamplurimi sibi perseaum habent: quæ opinio & apud vulgus nostratrum viget. Cæsus rei caufam turn demum inquiremus cum de experimento nobis confiterit.

3. Ficus recentes modo matures sunt à ventriculo ocyysimè & facilimè conficuitur, imò quovis alio fructu horario cereriis coquentur. Quod vel índ conflat, quod non solò citra noxam copiouis alii fructibus eas ingerimus, sed etiam illis præfumptis, si confectum & parem cibi modum addamus id nihil incommodat J. B. Nos certè in Italia ante prandium ficus fapenumero fine ullo incommodo copiosè ingessimus. Galenus, ut salubrem vitam degeret, ab omnì fugacì pomo abstinuisset, se tradit a 28. anno ætat. ad feneætuteni usque, exceptis exatle maturis etq; uvis: Quin & amicos qui ejus monitu ab usu fructibus abstinuissent fine morbis sufficerit. J. B.

4. Quæ de caprificatione Veteres tradunt sic brevibus complexus est J. Bauhinus. E putrefcente Caprivici fructu culices geniti, in urbane fructus evolant, eosq; morfu aperientes superfluam humiditatem depascuntur, radioseque una solares intromittunt, adeoque eo runde fucco, siccus aceto, succo monium aliisq; commune est. Acri es et & causticus hic succus, lac coagulat, &c.

5. Literæ qua succo fæt lache turionum hujus arboris in charta exantar omnino inconspicuae sunt, donec charta igni admota vehementer caelebat; quod etiam aceto, succo limonum aliíq; pluribus commune est. Acri es et & causticus hic succus, lac coagulat, &c.

6. Ficus a plurifque botanici florae carere traditur. Verum (inquit J. Bauhinus) Fructus cùm ad medium magnitudinem pervenerit, flores intra se concipt, figurà confertis flaminibus similes, colore in candido purpurascentes, undè; e carne
in Exteris Regionibus.

carne exeuntes, atq; ad medium fruuitus cavitatem se diri-
gentes: quod Cordus primum observavit.
Felix laxatilis non ramosa minima, an Dryopteris Dalechampii
\textit{f. B.}? An Dryopteris five Felix querna repens \textit{Adv.}? In
rupibus squalidis montium \textit{Juræ} & \textit{Salevæ}.
Flos Adonis flore rubro \textit{Ger.} Adonis vulgo, alias \textit{Eranthemum}
\textit{f. B.} Adonis fylvefrīs, flore phœniceo ejusq.; foliis lon-
gioribus \textit{C. B.} Circa Liburnum inter segetes.
Felix laxatilis corniculata \textit{v.} \textit{Adianthum}.
Flammula \textit{Jovis} \textit{v.} \textit{Clematis}.
Fœniculum tortuosum \textit{f. B.} Scelii Maffilienfe Fœniculi folio
quod Dioscoridis cenetur \textit{C. B. Park.} In Sicilia circa
Meffanam primò, postea circa Montpelium copiosissimum
vidimus. \textit{Serìüs floret}.
Fœnum Burgundicum \textit{v.} \textit{Medica}.
Fraxinella \textit{Ger. Park.} Cordi & Officinarum \textit{Lob.} \textit{Dictamnus}
albus vulgo, five Fraxinella \textit{C. B.} Fraxinella, Officinis
\textit{Dictamnus f. B.} In præruptis montium Rheno vicinorum
non semel vidimus.
N. 1. \textit{Radix cordialis} est, alexipharmaca, uterina, cephalica.
Vermes necat, menses & urinas movet, secundas
& fætum mortuum educit, valet ad alvi tormiones & ejicien-
dos renum calculos in vino pota. Usus precip. in pellis &
morbis malignis, in \textit{Epilepsia}, aliisq.; affectibus capitis.
2. \textit{Silique} & flores contacu pruritum faciunt, \& in cali-
dioribus regionibus cutem exulcerant.
Frumentum \textit{Indicum} \textit{v.} \textit{Maiz}.
Fucus marinus rotundifolius \textit{C. B.} \textit{v.} \textit{Opuntia marina}.
Fumaria bulbofa flore albo \textit{C. B.} bulbofa, radice cava, flore
albo \textit{f. B.} Radix cava major alba \textit{Ger.} Ubiq; ferè ad
fepes, inq; serobibus umbroisisq; sepibus Alpium Helveti-
carum.
Fumaria bulbofa flore purpureo \textit{C. B.} radice cava, flore pur-
pureo \textit{f. B.} Radix cava major purpurea \textit{Ger.} Cum
priore sed magis frequens, nec aliter ab ea differre vide-
tur quàm folo floris colore. Invenimus hanc in agro
Mediolanensi, cùm vere primo Mediolano Taurinum iter
faceremus.
Fungus auricularis Caælapini \textit{v.} \textit{Alcyonium}. 

\textbf{Galeopsis}


N. 1. Celeberrimum eft alexipharmacum ac sudoriferum, venenum imprimis peilitentia insigniter difficiens. Ufus ejus præcipua in petechiis expellendis, aliisque morbis peilitentiales, ipfâ; pete curanda; in morbillis; in Epilepsia infantum (exhibetur succi cochlæar 1.) in ictibus serpentum; in leumbricis, quos etiam extrinsecus applicata fugat. Eftr a. herba ipfâ cruda vel cocta, ad hos ufuos.

2. Foliorum succus vel etiam folia ipfâ tufa & imposita tumoribus apum aut vesparum ictibus excitatis, dolorem statim mitigant & tumores difficiunt.


Gallium flore albo majus v. Mollugo montana.

in Exteris Regionibus.

Geniflata argentea J. B. In planitie non longe ab oppido S. Lupiani quam transimus eundo a Montspelio ad montem Lupi.


Gentianula lanugine ad singulorum foliorum floris lacinias donata, flore quadriparitto J. B. Gentiana angustifolia Autumnalis major, itëmq; minor floribus ad latera pilosis C. B. Gentianella Autumnalis fimbriato flore Park. Itinere ab Augusta ad Norimbergam.

Gentianella Autumnalis minima calice turcido pentagono. In planitiie ad fluvium Lyicum non procul Augusta Vindeliconum copiose, exeunte Augusta florens.

Gentianella omnium minima v. Muscus Alpinus.

Geranium Althææ folio C. B. Althæodes majus Park. malacoïdes Ger. malvaceum J. B. Circa Genuam in Italia, Monspelium & alibi in Gallia Narbonensi.


Geranium nodosum Park. Anemones folio rotundo XII, five nodosum C. B. nodosum Plateau Clus. Ger. magnus folio trifido J. B. Ad fepes, itinere à Gratianopoli à la fontaine que brusse.


Geranium Romanum versicolor five striatum Park. In sylvis montosis Salernum inter & Cavam in Regno Neapolitano.

Gingidium v. Viñagia.


Globularia
Globularia Monspeliensis v. Bellis cerulea.


Gnaphalium ad Stoehadem citrinam accedens J. B. In pratis non longe a Calvuo Monspelio vicino.

Gnaphalium rofeum Park, roseum fylv, C. B. Xylon frutecens annuum J. B. Xylon five Gnaph. frutecens albo C. B. Xylon ivve Gnaph. herbaceum J. B. In infula Melitenii quotannis magno proventu feritur.

N. Seminis medulla tussientibus & difficulter spirantibus mirificè auxiliatur, Venerem stimulat; oleum indè expressum lentigines, varos, alphos, cæteraque cutis infectiones delet. Lanugo utta sūltīt fanguinis profluvia.


Gramen digitatum hisfutum J. B. Gr. daétylon five Ischæ- mum V, i.e. Daétylon anguifolium spicis villosis C. B. Ifchæmon sylvétre spicis villosis Park. Ab hoc non diversum putamus Gramen scoparium Ifchæmi paniculis Gallicum, ex cujus nimirum radiculis scopulae funt. Gramen illud è quo Cremæ præfertim in Lombardia scopulae hujusmodi sunt Capriola ibi appellant: unde Mathiolum falsum esse spicamur, qui Gramen Manne pro Capriola habet, quod annua est planta, cujúque radices huic usui nec adhíbentur, neque idoneæ sunt. Fortè Capriola nomen commune est huic generi Graminis digitati; vulgus enim non distinguunt.


Gramen daétylon Messianense geminà ab eodem exortu spicâ. An Gramen diístachophoron Col.? Habet a. in eodem caule (ni malè memini) plura spicarum paria.
CATALOGUS STIRPIUM

In montibus Messanæ alteri Siciliae metropoli adjacentibus.


Gramen amoris alterum paniculis frigofioribus magisque sparsi.

Gramen minimum Dalechampii f. B. minimum paniculis elegantissimis C. B. In vinèis circa Monfpelium sub ini-tium veris, imò ipfa adhuc hyme floret.


Gramen paniceum spicâ aristis longis armatâ C. B. panic- ceum Ger. paniceum aristis longis armatum Park. Est hoc (ut rectè monet J. Bauinus) naturæ duntaxat luftus: in eadem enim planta observavit spicârum urticulós alios des-
definientes in aristam, alios eadem destitutos. Adyenire autem illud dicit ratione foli atque statis, quod & mihi probatur. Unde meritō reprehendendus videtur C. Bauhinus qui fine necessitate entia multiplicat.

Gramen parvum echinatum J. B. canimum marinum asperum Park. canimum maritimum spicā echinata C. B. In arenosis circa Monpélion copiosē; Vidimus etiam in Arni fluminis alveo Florentiae.


Gramen alopecuroidēs spicā asperā C. B. alopecuroides spicā asperā brevi Park. Gr. cum cauda leporis aspera, five spicā murinā J. B. Circā Monspélium collegimus.

Gramen arundinaceum ramosum plumosum album C. Bauhini J. B. quod asserit circa Perault & Magallonam repirī, ubi & nos illud invenimus, uti etiam propē lūtus Calabriæ.


N. 1. Effi-
CATALOGUS STIRPIUM

N. 1. Efficax remedium est in humoribus aquosis, lentis bilioïïque specieïïc evacuandis, quos vel ex remotissimis partibus trahit, atque tum per secellum, tum per vomitum expurgat. Hinc magnus ejus usus esse poterit in hydropoe, ëctero flavo, &c. Et quia amaritudine infuper dotata est insigni, fugat lumbricos, eorumque faburram expurgat. Haeïfeus Schröderus.

2. Prodeïfe dicitur adversus diutinos coxendicis dolores & inveteratas febres five ficca five recens decofa; verùm quoniam nimis violenter nec fine molestia purgat, corrigenda est.

Groïïïularia v. Uva crispa.

H.


Hedyfarum minus Park. v. Securidaca minor.

majus filiiquis articulatis Ger. v. Securidaca.
in Exteris Regionibus.


Helianthemum tenuifolium glabrum flore luteo \textit{f.} B. Chamæcitus \textit{Ericæ} flore \textit{C.} B. Chamæcitus \textit{Ericæ folii} \textit{Park.} Ad radices montis Juræ, inque collibus saxosis circa Genevam. Ab hoc diversum factit \textit{J. Bauhinus}.

Helianthemum folio Thymi incano, quod putat Lobelium miscere cum Helianthemo tenuifolio glabro. Has similes esse plantas, differentes tamen diligentius considerant, et nos idem cum Bauhino aliquando sensimus, poetae tamen in eadem planta vidimus inferiora folia tenuissima, quâlìa ferè Camphoratae Monsplenfium: superiòra autem longè diversa, viridia & Helianthemi proximè scripti folius omnino eadem. Invenimus tamen circa Maffilium cujus omnìa folia tenuissima, camphoratae similia & glabra. q. ult.

Helianthemum Alpinum folio Pilosellæ minoris \\textit{Fuchsii \textit{f.} B.} \\
Ad latera & radices montes Salevæ prope Genevam copiose. Hoc an ab aliis descriptum sit necne mihi nondum confiat. Confuse \textit{f.} B.

Heliochrysum \textit{v. Stæchæs citrina}.


Heliotropium tricoccon \textit{C.} B. \textit{f.} B. \textit{Ger. Park.} Circa Monspelium cum priore sed rariùs.

N. 1. Hujus capita five silique pannis affrictæ, florido viridi colore eos inficiunt, qui temporis mōmente in caeruleum cūmque elegantem mutatur. Hujusmodi panni aquam cui immersuntur vini rubri colore imbuunt; eorumque usus est ad gelatinas alíásque confectiones purpuræ colore tingendas.

2. Heliotropium dicitur non quòd ad Solis diurnum motum convertatur, sed quòd aëstivo solstitio floreat, cùm Sol longituûdine ab \textit{Aquinoctiali} círculo digressit ad ipsum rursum trēnuûdīquòd convertionem faciat. \textit{Dod.}

Helleborine ex albo sublutea \textit{f.} B. In sylvula monti Salevæ vicina. Floret omnium hujus generis prima.

Helleborine flore albo \textit{C.} B. Damasonium Alpinum, fīve Helleborine floribus albis \textit{f.} B. In sylvothis propè summam montis Salevæ, Floret vere simul cum priore.
Catalogus Stirpium

ore, aut aliquanto serìus. Elleborine minor flore albo Park.


2. Rad. in aceto decocta, ac in ore aliquandiu retenta dolorem dentium tollit. J. B. è Trago.


4. Pulvis naribus inditus sternutamenta movet, unde & Anglice Nose-wort dicitur.


Exferis Regionibus.

N. Purgat potenter humores melancholicos, utile per consequens medicamentum et omnibus affectibus inde originem trahentibus, quales mania, infania, hypochondriaca passio, elephantiasis, herpes, cancer, quartana, vertigo, epilypsiæ, apoplexia, scabies, &c. \(v.\) Schrod. qui eam \([\text{radicem}]\) violenter purgare ait; aliis, si recte ufurpetur innoxious effe medicamentum feribunt, ut tutæ pueris, gravidis & debilibus corporibus dari possit. Corrigitur cardiacis ac stomachicis ut Cinnamomo, Anifo, Foeniculo, &c. Dosis \(\text{\textae}\) ad \(\text{\textae}\) ad \(\text{\textae}\).

Helleborus niger Saniculæ folio major \(v.\) Astrantia nigra.


Herniaria hirsuta J. B. C. B. In arenosis primò circa Sylvam Duciæ in Brabantia, deinde per Germaniam, Italianam & Galliam Narbonensem copiosè.

Hesperis sylvæfris latifolia floræ albo parvo Park. Hesperidi Alpinæ murariæve similis surrecta & magna J. B. In monte Sa-
Catalogus Stirpium

Salevâ copiosè, collegimus etiam in montibus non longè à Luca versus Maffam.

Hesperis v. Viola matronalis.

Hesperis Alpina v. Draba.

Hieracium Alpinum glabrum, flore singulari magno, cauli cubitali insidente. In summo montis Jurae dorso La Dole dicto. Hoc an à quoquam descriptum sit inquirendum.

Hieracium aperum v. Hypocharis.

Hieracium montanum latifolium Genevensê, folio Conyzae majoris Monspeffulanæ J. B. In ascenfu montis Jurae prope Thuiri.


Hieracium calice barbato Col. falcatum barbatum Park. proliferum falcatum C. B. Maffanæ & Monspeffulani passim. Hieracium parvum hirtum caule aphyllo, crispum ubi ficcatum J. B. In agro Monspeffulanono non longè à Sella nova in arvis.

Holoëtum Maffilense C. B. v. Coronopus.


Hyacinthus caeruleus Ger. racemosus caeruleus minor juncefolis C. B. vernus botryoides minor caeruleus, anguifloribus foliis, odoratus J. B. In agro Pedemontano ad vias.

Hyacinthus comosus Ger. comosus major purpureus C. B. maximus botryoides comæ caeruleae J. B. Inter segetes circa Liburnum & Genevam copiose.


Hyssopoides major flore grandiore. In palustri planitie propè Syracusas, itémque non longè à Meffanà Siciliae. Hujus floes quadruplo major est vulgaris flore. Quin & utramque speciem una crescetem observavimus propè Meffanam, uti eas specie differe amplius non dubitemus. J. Bauhinus duas habet Hyssopofiliae species: verùm quam ille minorem inscribit est vulgaris nostras: quam Hyssopofillum aquaticam simpliciter vocat planta est de qua agimus.
I.


Jacea Oleae folio v. Xeranthemum.


Jacea cum spinofo capitulis purpurea tenuifolia J. B. Stæbe IX, five squamis aperis C. B. Circa Montpelium & alibi in Gallia Narbonensi. Habetur & in Etruria.


Jacobæa marina Ger. marina, five Cineraria vulgaris Park. marina, five Cineraria J. B. maritima C. B. Ad littorā maris inferi ubique.


Jasminum luteum v. Polemonium.


N. Tufa
in Exteris Regionibus.

N. Tusca cum modica axungia & coxendici imposita 4 horarum spatio, & deinde ablatà dolores iACHIADicos & podagricos lenit, &c. vide Plinimum aliosque Veteres.

Ilex arboreæ J. B. major aculeata & non aculeata Park. IV, five folio rotundiore mollī modicēque finuato C. B. ējusdem. I, seu folio oblongo serrato; Ego enim has non distinguo. In arbusculis junioribus folia finuata sunt, aculeata & Aquifoliī æmula; in vetuſtoribus sblonga, neque aculeata, neque finuata, & Oleaginis similía. Ilex major glandifera Ger. In Italia & Gallia Narbonensi in fylvis & fepibus paßim.

Ilex coccigera J. B. Ger. aquifolia, five coccigera Park. aculeata & coxiglandifera C. B. In collibus faxonis circa Monspelium, Nemaufum, Avenionem, N. Huic arbusculae seu frutici innascitur granum illud tinctōrium seu coxus baphica tantum peter celebrata; & tinctoribus expetita, ex quo paratur confeclio illa cardiaca Alkermes Officinis dicitā.


præstet. Cæterum ut facie externa & odore Angeliacam refert, ita idem cum illa facultatibus dotata est.

Iris humilis latifolia flore violaceo J. B. Chamaeiris II, fve variegata C. B. Primò in rupibus quibusdam maritimis non longè à Liburno portu cum obsevavimus, flore purpureo atque etiam albo : deinde circa Monspelium aux Garigues, ubi & Lobelius.


Iris Florentina Ger. latifolia V, fve Florentina alba C. B. flore albo J. B. In muris urbis Florentiæ magna ejus habetur copia.


2. Iridis radix in vino aut cerevisia suspenfa, hanc dulcem conservat, illud juçundo tum odore tum sapore commendat, illius planè æmulo quem mora Rubi Ídaei communicant, ut nos in vino rubro sæpius experìti sumus. Sed & piltoribus ad paradum fermentum triticiæ panis magnopere uìtata est. Hæc partim à Trago, partim nostræ sunt observations.


in Exteris Regionibus.

K

Ali semper virens grandius perpetuum C. B. Pröd. geniculatum majus J. B. C. B. Solicornia sive Kali geniculatum Ger. In palufribus ad Mare Mediterraneum valde frequentis. Multò lignosis eft nostrate h. e. minore; per multos annos durat & in fatis magnus fructicem adolefsit, inqve hortis cultura patitur, experimento J. Bauhini.


L

Aburnum v. Anagyris.


Lagopus altera anguifolia Lob. major anguifolius Park. Trifolium anguifolium spicatum J. B. Trifolium montanum anguifolium spicatum C. B. In montibus Supra Meffanam; atque etiam circa Monfpelium, utrobique co-piose. Flores dilutè rubent. Ab hac non diversam speciem puto Lagopum anguifoliam Hispanicam Claus.

Lagopus maximus Ger. max. flore rubro Park. Trifolium spicâ subrotundâ rubrâ C. B. Trif. albo incarnatum, spicatum, sive Lagopus J. B. Quod circa Neapolin venit flores habet pulchrè rubentes aut coccineos; quod propê Genevam albo-incarnatos aut pallidos.


Florentiam, Liburnum & alibi. Magnam habet similitudinem seu convenientiam florum respektu cum Lyfimachia galericulata; unde eam primo aspectu Lyfimachiam galericulatam Urticae folio denominavit.

Lamium w. Galeopis.

Lanaria five Struthium Dioscoridis Imperato f. B. Sapnaria Lychnidis folio, flosculis albis C. B. In præruptis montium Meffianæ proximorum aut ipsum Imperati Struthium, aut plantam ei simillimam collegimus, necdum ineunte Junio floruerat.


2. Hæc sola arbor ex Resiniferis folio est deciduo. Flolia a. monente J. Bauhino, non decidunt Autumno, nec antequam alia initio Veris succedunt.

3. Hujus trunco seu caudici innascerit Fungus illæ purgatrix Agaricum dicitus.

4. Quæ Plinii aliique Veterum tradunt, non ardere eam, nec carbones facere, nec alio modo vi ignis consumi quàm lapides; omnino falsa esse vel indé confatat, quod apud Vallesianos quibusdam in locis non alia ligna in usum foci adhibentur, ac alicubi etiam in Alpibus ad ferrarias folidas carbones ex eâ fiant. f. B. Matth.

Lathyrus major Narbonensis angustifolius f. B. angustifolius Park. Circa Momfelpium non longè à Sella nova, & alibi.

Lathyrus fativus flore purpureo C. B. angustifolius flore purpureo Ger. angulofo femine f. B. Circa Genevam copiosè; feritur & in Germania.


Lathyrus sylvestris flore vario ex albo & coccineo. Et hunc etiam circa Genevam inter segetes copiosè enatum vidimus, necon circa Liburnum.

Lavendula major, five vulgaris Park. Lav. flore cæruleo Ger. Lavendula latifolia C. B. Pseudonardus, quæ vulgo spica
in Exteris Regionibus.

spica f. B. In Gallia Narbonensi passim & copiose silvís. Provenit ibidem & Pseudonardus quae Lavendula vulgò f. B.

N. Saporis est subacris & subamari, partium tenuium, cephalica ac nervina: Usus præcip. in catarrhis, para-

lyfi, spasmo, vertigine, lethargo, & tremore artuim. In urina, mensibus ac foetu pellendo (unde & parturientibus exhiberi solet) in torminibus ventris flatulentis. Extrin-

feciis in lixivias capitis ac artuum, in masticatoris pro catarrho exicando ac revellendo ad palatum, ne in pul-

mones defluat. Odore sua fugat pediculos. Schrod.

Laureola folio deciduo a. Mezerœon.


N. Bacca: paulò calidiores sunt, emolliunt, refolvunt. Usus præcip. in mensibus & urinis ciendis; in affectibus

nervorum, paralyfi; in colica, in dolore post partum, in cruditatis ventriculi. Extrinsecus conferunt folia ad

iœs vesparum, mollient tumores, promovent menses (in suffitu & balneo) leniunt dolores, odontalgiamque mitigant (in gargarism.) Schrod.

Laurus Tinus caerulea bacca Lob. fylv. Corni faemina fo-


circa Romam, Tybur & alibi frequens. Invenimus quoque in sylvâ Valenâ propâ montem Lupi non longè à Mon-
pelio.

Ledum Alpinum hirfutum C. B. Ledum Alpinum, five Ro-

fa Alpina Park. Nerium Alpinum quibusdam, aliis Led-

um hirfutam f. B. In Alpibus propâ Pontieban.

Ledum Alpinum folis ferrea rubigine nigriscentibus C. B. Nerium Alpinum quibusdam, aliis Ledum glabrum f. B.

Chamaœrhododendros Alpigena Ger. Ledum Alpinum five

Rosà Alpina Park. In summis jugis montis Jura propè Genevam.

Ledum Alpinum hirfutum minus, An Cifus pumilus mon-
tis Baldi fortè Auftriacus myrtifolius f. B.? Unà cum Ledo Alpino hirfuto; cui quoad folia fatis similis est,

multis tamien numeris minor, & flore (quantum nemini) luteo.

Lentifcus Lob. Ger. Park. f. B. vulgaris C. B. In saxofis
collibus Italiæ, Siciliae & Narbonensis Galliæ, ubi nun-

quam (quod equidem viderim aut audiverim) justam arboris e 4

flatu-
Catalogus Stirpium

Aloctus Stirpium

Naturnam & magnitudinem assequitur, sed frutex perduxat; quamvis alibi, tete Bellonio & aliiis, in arborem flatis proceram adolefact.

N. i. Partibus suis omnibus (fructu, foliis, cortice) adstrictoria est, unde utilis est ad fluxiones cujuscunq; generis, hemorrhagiam, sanguinis expusionem, alvi profluvium & dysenteriam, mensae immodicos, procidentiam uteri & sedis. In summa Acaciae & hypocistidis vices supplet; urinam ciet.

2. Dentiscalpia ex Lentisco parata tum priscis, tum hoc seculo magnatibus ac deliciatibus in usu quotidiano pro optimis & praefantissimis habentur.

3. Lentiscum in sola insula Chio Mastichem præbere tunt Bellonius, tum Hermolaus Barbarus affirmant. Alli in Italia quoque Mastichem ferre sed non copiosam tradunt, ut v. g. Matthiolus, Cæsalpinus, Lacuna. Schroerus refora se habere ex donatione Glaferi fructu mastichum ex Helvetici Alpibus transmittit. Nos cum in Italia & Gallia Narbonensi peregrinaremur nuncum Mastichem fundentem vidimus hanc arborem; nec quis fide dignus nobis unquam retailit se vidisse.


Lentopodium Död. v. Gnaphalium Alpinum pulchrum.

Lepidium annuum Ger. Park. II, five glatlifolium C. B. non repens v. B. In agris prope Ratifponam; ibidem Fœnum gracum aut fatum aut fponte provenit.

Lepidium Dentellarium Död. v. Plumbago.

Leucoium bulbofum præcox minus Ger. bulbofum minus trithyllum v. B. In convallibus Alpium, via quæ Baffiano Tridentum itur.

Leucoium bulbofum vulgare C. B. bulbofum hexaphyllum cum uno flore, rarius binor. v. B. bulbo fertoimum Ger. In umbrosis Helvetias paucis pluribus in locis; quin & in Italia propè Taurinum, fylvis montosis, itemque inter Baffanum & Tridentum.

Leucoium bulbofum majus polyanthemum Ger. Leuconarciro-lirion pratenfe Lob. Leuc. bul. polyanthemum tardius florens,
In Exteris Regionibus.

florens, floribus minoribus f. B. L. b. majus five multiflorum, quod aliqui Acrocorion Plini iatuum C. B. In pa-
luftribus propè Piras.
Leucoium maritimum angustifolium C. B. f. B. marimum minus Park. marimum minus Lobelii & Clufii Ger. In are-
nofis maris Mediterranei litoribus propè Frontignanam.
Leucoium spinosum v. Thlaspi spinosum.
Libanotis altera Theophrasti nigra v. Saxifragia Venetorum.
Libanotis Theophrasti minor Park. latifolia altera five vul-
gatior C. B. Lib. Theoph. quorumdam, five Sefeli Æthi-
opicum Matthiolo, Cervaria alba f. B. In montibus circa
Genevam copiofê.
Lichen marinus rotundifolius Ger. v. Opuntia marina.
Ligusticum v. Siler montanum.
Lilium aureum v. Martagon Chymiftrum.
Lilium floribus reflexis montanum C. B. montanum minus
Ger. flore mutante fergusine majus f. B. In colle La
Bafie & in monte Saleva propè Genevam copiofê.
Limonium folio finuato Ger. peregrinum Rauwolfii Park. pe-
regrinum folis Asplenii C. B. Lim. quibusdam rarum f. B.
In insula ad Promontorium Pachyunum, & ad Punto Cerciolo
in Sicilia, utroque copiofê.
Limonium parvum Narbonenfe oleæ-folium Lob. minus f. B.
minus maritimum oleæ folio C. B. parvum Ger. Narbonenfe
parvum Park. Ad maie prope Monfpelium copiofê. Inve-
nimus quoque in Etruria circa Liburnum.
Limonium alius parvum Narbonenfe floribus majoribus. An
Limonium minimum C. B. Park. ? In iisdem cum priore
locis.
Linariae aliquatenus similis folio Bellidis f. B. Lin. erec-
ta latifolia VII, seu Bellidis folio C. B. Linaria odorata Park.
purpurea odorata Ger. In agris quibusdam Lugdunum inter
& Gratianopolin 5 aut 6 leucis Lugduno remotis.
Linaria aurea Tragi Ger. L. foliolo capitulo luteo major
C. B. Heliochrylos Tragi, five Linaria $ f. B. In monti-
tibus propè Ratifponam & alibi in Germania. Hanc
plantam ad Virgam auream rectiûs retuleris quàm ad Li-
nariam.
Linaria purpurea magna f. B. L. erecťa angustifolía X, five
purpurea major odorata C. B. Circa Neapolìn & ad ra-
dices montis Vefuvii. Maxima eft omnium quas haftenus
vidimus; flore parvo, intensè purpureo.
Linaria graminea floribus conjectis purpureis, Linaria ca-
rulea calcaribus longis f. B. Ad radices montis Vefuvii
copiofê.
copiose. Altitudo ei dodrantalis, folia graminea; flores in fummo caule densè filipati velut in brevi fpicâ.


Linaria parva purpurea foliiis fine ordine dispositis J. B. Lin. foliiis carnosis cincere C. B. In alveis fluviorum Alpestrium & torrentum.

Linaria lutea parva annua J. B. pumila feu repens II, i.e. pum. foliiis carnosis, flocululis minus minions flavis C. B. In cæcum montis Lupi, duobus à Monspelio leucis distantis. Autumno florentem inveni.


Linum sylv. angustis & densoiribus foliiis, flore minore C. B. Haec species an eadem fit nostrati Lino tenuifolio, an diversa inquirendum. In selerioribus circa montem Lupi Septembris florentem observavimus. Eft autem iis in locis perexigua, foliiis angustiff, denis, flore fatì grandi, coloris ex purpurâ albicantis.


Lithospermum Linariae folio C. B. v. Pafferina.

Lonchitis aspera C. B. asp. major Ger. asp. major Matthioli Park. altera cum folio denticulato, five Lonchitis altera Matthioli J. B. In surnmis rupibus montis Jurae. Lotus
Lotus filiqua quadrata Ger. quadrupinnatis filiquis Park. ruber filiqua angulosa C. B. flore fusco tetragonolobus J. B. In Sicilia propé Messalam in olivetis.
Lotus filiqua lutea filiquis strictioribus & longioribus. In Italia propē Tybridis fluvii oftia.
Lotus filiquis Ornithopodii C. B. J. B. Circa Messalam ad latera montium urbi proximorum.
Lotus filiquis rectis incana vulgaris major. Neap. in rupibus maritimis.

Lotus

Lychnis vifcosa erecta annua caryophylloides. In marginibus Grammontiae fylvæ propè Monspelium.


Lyfimachia filinquosa speciofa v. Chamænerium.

M


Panis hic confeclus lents est & gravis, nec fermento intumesceit dum pinitur aut coquitur, pròinde obtinentis naturæ fit neceffè est, &dificilis concoctionis, velut panis azymus.

Marrubium album fatuum C. Cajielli in Cat. plantarum Melissaenium. An Marrubium album peregrinum brevibus & obtusis foliiis C. B. ? In glareofis ad mare non longè à Melissa. Hæc planta à nonnullis credita est Pseudodidamnus alter Póne; verùm non respondent acetabula, quæ Moluccæ simila esse dicit.


Marrubium


Martagon v. Lilium floribus reflexis.


Medica scutellata f. B. Trifolium cochleatum Ger. cochleatum fruĉtu latiore C. B. Ad agrorum margines propē Liburnum Etruriae portum.


Medica orbiculata fruĉtu minore. Propē Messanam. Hujus orbiculi dimidio minores sunt quàm praecedentis; & plures simul in eodem ramulo sive communi pediculo confertim nascuntur.


Medica coronata Cherleri parva f. B. In Sicilia circa Messanam; itēmq; circa Monftpelium & Neapolin.

Medica dolīata spina. In arenofis maris litoribus ad Messanam & alibi tum in Sicilia, tum etiam in Italia.

Medica dolīata lenis. Ubi invenimus jam non recordamur.

Medica orbiculata elegans fruĉtu circūm oras rugis veluti criptato. In Sicilia non longē á Puzallu vico & Punto Cer¬ciola.


Medica echinata, fruĉtu ovato, spinulis brevibus, crebris, rigidis. Propē Messanam Sicilie.

Medica Cataloniaca elegans vulgō dīcta. Hanc ubi collegimus jam non recordamur. Fruĉtus figurâe doliaris eft & crebris tuberculis scaber, persimilis ligne illi quo brachia manuq; muniunt Itali ad pilam defendenda & feriendam propellendâmve in ludo diēto.


Medica


Inter segetes per Germaniam & Galliam vulgatissimum.


Melampyrum erectum flore luteo amplo. Ad latera montium Messanæ imminantium.


Melanthium v. Nigella.


Melilotus quinta Tragi v. Securidaca.


Melilotus Messanensis procumbens folliculis rugosis sublongis, spicis florum brevioribus. In loco humido, in lingula illa inter portum Messanensé & fretum Siculum.

Catalogus Stirpium

memoratam. Hic Matthiolius à Botanicis injuste arguitur, quasi Melissophyllum suum sylvetra à sativo non set effet dis tintum.

Melissae similis foliiis minoribus, floribus albis, labello punctato. Circa Messanam, in insula ad Prom, Pachynum in Sicilia.


Mespilus f. B. sativa Ger. vulgaris sive minor Park. Germanica folio laurino non serrato C. B. In Etruriae sepibus non procul Viterbo.


Meum alterum Italicum quibusdam f. B. alterum Italicum Ger. spicum Italicum Park. latifolium adulterinum C. B. In collibus & clivis maritimis Regni Neapolitani.


Milium arundinaceum C. B. v. Melica.


in Exteris Regionibus.


N. 1. Fructus nigrae (moræ Cefi officinis dicti) immaturi refrig. succ. astringunt validè. Ufus præcip. in diarrhœa, dysenteria, fluxu menstruo, expulsione sanguinis: Extrinfecus in faucium ac oris inflammationibus ulceribús q.; Schrod.


Mucus capillaceus longissimus, i. e. Mucus arborescis II, C. B. Hunc longissimis capillaceis filamentis deníe stipatis ex Abietibus dependentem in Germania vidimus & collegimus. Chartas in quibus compôsita fuit colore flavo ad rufum tendente infecit.

Myrica 1 Clus. Tamariscus folio tenuiore Park. Narbonensis
Ger. Tamarix altera folio tenuiore, five Gallica C. B. major
five arborea Narbonensis J. B. Ad mare propè Monspe-
lium abundè.
Myrica fylv. altera Clus. Tamariscus folio latiore Park.
Germanica Ger. Tamarix fruticofa folio crassiore, five
Germanica C. B. Germanica, five minor fruticofa J. B.
Ad ripas fluviorum, v. g. circa Augusta Vindelicorum,
Genevam, &c.
N. i. Absterg. ac subastringit. Usus præcip. in ob-
structione ac tumore lienis. Adeò mirabilem antipathi-
ami contra solum hoc viscerum faciunt (inquit Plinius)
ut affirment, si ex alveis faetis bibant fues fine liene in-
veuri. De ligno Ægyptii (tefle Alpino) decodum pa-
rant ad lucem Veneream curandam non secus ac nostrì
de Guaiaeco, quod exhibent leprosis, scabiosis, &c. cum
fulici succéufi. Idem faciunt in melancholici, icterici-
nigris & hydropicis. Extrinfecùs in tinea capitis & ob-
structione mentium valet.
2. Doliola è Myricæ affiliis Francofurti ad Moenum
venalìa memorat Clusius, quibus contentus liquor lienis
prodest.
3. Curæ Edmundi Grindalli Archiepìcopi Cantuariensis
Tamaricem Angli debent, quam induratam lienis passionem
eximiè jÜvare expertus primus in Angliam transulit.
Myrtus communis Italica C. B. An Myrtus fructu albo Ger. ?
Myrtus vulgaris nigra & alba, sativa & fylvefris J. B. In
Italia & Gallo-provincia frequentissima, ad mare inferum,
itémque in Sicilia.
N. i. Hujus tum folia, tum baccae (myrtilli Officinarum)
refrigerant temperatù, faciant validè astringúntique. Usus
internus rarior est, nihilominus tamen adhibentur in fluxù
alvi ac expuìtione fanguinis. Extrinfecùs usus utriusque
crebrìor.
Folia emendant faetorem sub axillis ac inguinibus (pulvis
asperus) sudorem corporis immodicum fìlìunt (fricìone)
membris catarrhos is opitulantur, alvi fluxùi succurrunt, de-
fensìvùm exhibent in herpetibus, putredinem oris fàntan,
hemorrhagiam narium fìlìunt; polypo medentur (cum
melle ac vino.)
Baccae mitigant oculorum inflammationes; juvant luxa-
tos articulos ac ofìa fraction; subveniunt procidentiae uteri ac
ani; capitis tineas sùrfuraceaque excrementa abigunt.
Schrod.
Præcipiæ
in Exteris Regionibus.

Præcipuæ eorum vires dependent ab adftrictione & suavitate odoris, ut singulas examinanti manifestum sit.

2. Bellonius refert Ilyricos Myrtili folii coria parficzere; quemadmodum Macedones Rhoe; Ægyptios Acaciae siliquis; Asiae minoris incolas glandium Æsculi calicibus; Gallos Quercis libro; Phryges sylvætris Pini corticibus. Clus. hist. lib. 1. cap. 43.

N.


2. Radix fīcit propriate sua hæmorrhagiam, si dehitibus mafticetur, naribusque imponatur. Idem.

3. Expromitūr ex femine isto oleum, quo imperiti Pharmacopoei plerique pro oleo nardino non abique gravi utuntur errore. Dod.

f 2

Ocymafrum
Ocymafrum Valerianthon v. Valeriana.
Ocymoides repens v. Saponaria minor.

2. Oleum quod exprimitur ex olivis maturis calefacit & humecat moderatè (N. vetus calidius est recenti) emollit, digerit, vulnerarium eft, alvum laxat (cum cerefìa calida assumptum 3) ariditatem pectoris corrigit, tormenta ventris mitigat, meatus urinarios laxat, erosos abfergit & confolidat. Exrinseucus creberrimi usus eft in ÿlysteribus, tumoribus calidis, &c. Cum aqua tepida assumptum movet vomìtum.


4. Oleum piceam e pannis extrahit, quod aqua non facit. Vulgatum est, (inquit Sennertus) ut fìquis manum pice inquinet, eam aqua non mundet sed oleo aliquo aut pinguedine, quae piceam liquefaciat. Hypomn. 1. cap. 5.

5. Scribit
5. Scribit F. Licetus, se vidisse Rechi in horto patrui sui stipitem oleae fativae aridum ferre ac levem, per decennium & ultra a trunco separatum, neque posthac unquam terrae implantatum, ad alterius ligni fulcrum in terram demissum, & ligno cui fulcimentum praetabat clavis ferreis affixum, pullulasse, germinasseque eodem anno, plures olivarum novellas folii & fructibus onuutas, atque in posterum etiam per plures annos protulisse. Sennert. Hypomn. 5. cap. 7. Unde abunde confirmatur illud Poetae, Truditur et fisco radix oleagine ligno.

6. In Hispania oleas admotis scalis manu legunt, & non decutiunt ut in Gallia Narbonensi; ne sc. sequentis anni spem decussis germinibus praeripiant. Vehementer enim laborant percussae & detrimentum Cluf. 7. Olivae quamvis per maturitatem nigrae sunt, sapore quoque acri, amaro & nescio quid nauseos admixtum habente; oleum tamen quod inde exprimitur fere nullum est, nonnihil flavicans, sapore dulci & grato, unde parte saporem hunc ude & odorum parti aqueae seu amurcae inhære. Laudatissimum autem apud nos habetur oleum, quod coloris omnis & formati maximè expers est.


Onobrychis spicata flore purpureo Park. C. B. flo. purpureo Ger. quibusdam, flore purpureo f. B. In loco quodam glareoso non longè à Vienna Austriae.


Onobrychis arvensis C. B. v. Speculum Veneris.

Onobrychis femine clypeato aspero v. Hedysarum clypeatum.


Orchis anthropophora flore fusco. In marginibus agrorum quorundam propē ripas Rhodani non longē à Geneva.

Orchis macrophyllus Columnæ Park. Orchis five Teticulus maximo flore ʃ. B. Orchis montana Italica flore ferrugineo, lingua oblongā C. B. Per totam ferè Italian ad mare inferum, vidimus enim Mafœ, Liburni, Neapoli in pafsuis ficciortibus.


Orchis fratreumatica minor Ger. ʃ. B. Cynosörchis mili-
taris minor C. B. Park. In pafsuis ad latera montis Salevæ.


Oreoœlinum v. Apium montanum nigrum.


Orobus receptus herbariorum *Lob.* Ger. vulgaris herbariorum *Park.* filiquis articulatis, femine majore *C.* B. Orobus five Ervum multis *J.* B. In agris circa Monspelium & Genevam.

Orobus sylvaticus purpureus vernus *C.* B. Pannonicus & Clus. sylvaticus purpureus major *Park.* sylvat. vernus *Ger.* emac. Galega nemorensis verna *J.* B. In dumetis à la Basîe, & alibi circa Genevam, inque Germaniae & Helvetiae sylvis frequens.


Oryza *Lob.* *Ger.* *Park.* *J.* B. Italica *C.* B. In Italiae palustralibus Ferrariam inter & Bononiam fatam vidimus.

N. In cibus admodum est familiaris, gratissimi saporis; multum nutrit & semen auget: verum obfruentis naturæ est & alvum leniter adstringit. Proinde datur in cibus utiliter dysentericis, cœliacis & diarrhœæ affec-
tis: Oryzâ nunc dierum vescitur (si Americanos excipias) humani generis pars maxima, Turcae, Persæ, Indi, Afri-
cani, Sinensês, &c.

Oxalis maxima sylvatica *J.* B. Acetosa montana maxima *C.* B. Acetosa max. Germanica *Park.* In monte Thrïe propè Genevam.


Oxy lutea *Ger.* *J.* B. lutea corniculata repens *Lob.* lutea flore *Park.* Trifolium acetosum II, luteo corniculatum *C.* B. In Italia & Sicilia, umbrosis praefertim, ubique fère obvium.

Oxycedrus *v.* Cedrus Lycei retusa *J.* B. & Juniperus.
P


Palma five Manus marina J. B. Urtica marina X, five Manus marina C. B. Habuimus ex sinu Adriatico, & mari infero circa Romam.

Palma humilis v. Chamaerhphes.

Palma Chrifi v. Ricinus.


N. Ex hujus vulnerato circa radicem caule succus æstivis menibus manat æflate fervida, etiam in Belgio. Dod. In Opopanacis grumis reperta femina in Belgio fata hanc plantam produxere. C. Hoffman.


Panicum sylvestre v. Gramen paniceum.


Paftinaca marina Lob. v. Crithmum.


Peganum
in Exteris Regionibus.

Peganium Narbonensium Lob. v. Ruta sylvestris minima.
Pentaphyllum v. Quinquefolium.
Peplus minor J. B. In agris propè Ladum Monspeliacum amnem non longë à Caflèneuf.
Periclymenum perfoliatum Ger. J. B. C. B. perfoliatum calidum regionum Lob. perfoliatum five Italicum Park. in Italia & Gallia Narbonensi.
Periclymenum rectum fructu nigro Park. rect. fructu gemino nigro J. B. Chamaecerasus Alpina fructu nigro gemino C. B. In sylvis juxta Sacellum Brunonis, à la grand Chartruse.
Phalangium pulchrius non ramosum J. B. An Phalangium flore Liliij ejusdem? Phalangium I, five magno flore, & fortè
CATALOGUS STIRPIUM

fortè etiam II, five parvo flore non ramosum C. B. Phalangium non ramosum Ger. | In monte Sabaudiae Genevæ vicino, Salve dióto.


Phillyrea ferra ta 2 Clufii Ger. & Phillyrea latifolia spinosa C. B. feu 1 Clufii. Phillyrea folio Alaterni, & Phillyrea folio Ilicis J. B. Phillyrea latifolia aculeata, & Ph. folio lato ferrarò Park. Exístimo enim has duas non diffère fpecie. In Etruria copiosisìmè, ítemque circa Monspélhum in præruptis clivis non longè à specu Frontignana; ad montem Úpli & alibi.


Phthora v. Thora.


Picea Latinorum v. Abies mas Theophrasti.
in Exteris Regionibus.

Pilosella minor folio angustiore minus piloso repens J. B. major repens minus hirutae C. B. In pasuis & collibus circa Genevam.
Pilosella minore flore hirsutior & elatior non repens J. B. Pil. major erecata C. B. major Ger. altera erecata Park. Et hanc circa Genevam inveni.
Pilosella five Pulmonaria lutea angustiiori folio, valde pilosa altera J. B. In monte Saleva Genevae propinquuo.
Pilosellae majoris seu Pulmonariae luteae laciniatae species minor J. B. In praedicto monte Saleva, in rupibus Willis.


N. 1. Hæc arbor vulnerata Resinam fundit liquidam, quæ postea coquendo se arida.

2. Pix liquida seu navalis è Pinu vi ignis excoquitur hoc modo. Pinuum vetustarum stipites pingues & Resinâ adeò prægnantes ut accensi infaer facis ardeant, (hujusmodi arboris Antiqui tædas appellant) assulatim celós super area seu pavimento è luto usto aut lapidibus antea praeparato, & à centro undique ad circumferentiam paulatim declivi,
Catalogus Stirpium
declivi, in strues aut acervos componunt, iis similes quos extruunt qui carbones faciunt. Strues hafce ramulis fagin-nis pinesève circumcircum congetung, & deinde pulvere aut luto superimposito curiosè foricant, ne quâ fumus aut flamma exire possit. Ignem potea desuper accidendunt, quemadmodum carbonarii solent, qui liquorem ligni oleo-fum inferiùs fubficere ad ima compellit. Is autem ob pavimenti declivitatem, in canalem, (qui acervum undique corone infar cingit) promptè delabitur, indéque per alios ductus in foveas aut vasa eí recipiendo definiata, deriva-tur. Ex hoc in cornis infe captivating, & tandiuro decofò donec humor omnis abfumatur, fit Pix arida & rafillos, Græcis \( \text{παλίμπια} \) dícta. Nostrates Picem liquidam Tarre vo-cant; fìccam verò fe aridam \( \text{Pitch} \).


4. Decoélum aut infumum summìtatum Pinus in cerevìa alióve idoneo liquore ad calculus renum & vesicæ plu-rimum valere creditur, necnon ad scorbutum aliófque tho-racis affectus.

N. Refina omnis confert præcipùe tufii aliófque pul-monum affectibus (cum melle) urinae ac alvo ciendæ; calculus pellit, arthriticus affectus juvat, gonorrhœam sìftit. Extrinsicus Chirurgius utìstatìfima est in emplastris; movet enim pus, maturat, & ñcabiei medetur. Sunt qui Terebenthinam vulgarem (eft autem ea larcis refina) in cerevìa infundunt, atque simul deferveræ finunt, pro potu ordinario in præservatìone calculi viscerûmque obstruccionibus.

Plantago quinquennervia cum globulis albis pilosis \( \text{f. B.} \) angustifolia VIII, five paniculis Lagopi \( \text{C. B.} \) angusti-folia paniculis Lagopi \( \text{Park} \). Circa Meffanam. Habetur quoque Monspelii & Nemaufi.

Plantago angustifolia Alpina \( \text{f. B.} \) Holofteum III, five hir-futum nigricans \( \text{C. B.} \). In fummis jugis montis Juræ.

Plumbago Plinii \( \text{Ger.} \) Dentilaria Rondeleti \( \text{f. B.} \) Lepidium Dentellaria diètum \( \text{C. B.} \). Lep. Monspeliacum, Dentel-laria diètum \( \text{Park} \). Circa Syracufas in Sicilia, Romam & elibi in Italia, Monspelium in Gallia Narbonensi.
Polemonium five Trifolium fruticans Ger. Polem. five Trif. 
frut. vel Jasminum luteum vulgare Park. Trifolium fru-
ticans, quibusdam Polemonium, flore luteo J. B. Jafmi-
num V, five luteum vulgo dictum, bacciferum C. B. In 
sepibus circa Monspeliacum; vidimus etiam in Regno Nea-
politano propè Scaleam.

Polium montanum album C. B. Ger. Monspeliacum Park. In Italia & Gallia Nar-
bonensi. C. Bauhinus malè, meo quidem judicio, distin-
guit. Inter Polium montanum album & P. maritimum 
eredum Monspeliacum, cùm una & eadem planta sint.

Polium montanum Levendulae folio Park. montanum I, feu 
Lavundulae folio C. B. Pol. Lavundulae folio, flore albo 
Ger. In montosis circa Basileam, Genevam & alibi.

N. Polium cùm acre sit & amarum, urinam & menfes 
ciet, venenatis moribus auxiliatur, Hydropicos & iètericos 
juvat, secundùm veteres. Theriacam & Mithridatum in-
greditur.

† Polygonatum Lob. Ger. latifolium vulgare C. B. Polyg. 
vulgò Sigillum Solomonis J. B. In Belgio, Germania, 
Galia & Italia, in faxois & ad fèpes ubique. Hæc 
planta in Angliae Australibus sponte provenit. V. Cat. 
Ang.

† Polygonatum floribus ex singularibus pediculis J. B. lati-
folium z Clus. latifolium IV, flore majore odorò C. B. ma-
jus flore magiore Park. latifolium z Clusii Ger. In rupibus 
montis Salevæ. Et hæc Angliae indigena est. V. Cat. Ang.

Polygonatum minus Lob. Ger. anguittifolium Park. J. B. 
anguittifolium non ramofum C. B. in sylvìs circa Spadam 
oppidulum acidulis celebref copiosissimìd. Vidimus & in 
lyvofolis montis Salevæ.

Polygonum montanum niveum Park. montanum Ger. minus can-
dicans C. B. Paronychia Hispanica Clusii five Anthyllis nivea 

Polygonum vel Linisilia per terram fparfa, flore Scorpioidis 
J. B. In Etruria non longe à Viterbo, cum Roman 
contenderemus, copiosam observàvimus. J. Bauhinus extra 
foçopum jaculatur, cùm hanc refert ad Millegranam mini-
mam Lobelli, à qua longè differt.

Polygonum bacciferum maritimum v. Tragos.

Portulaca sylvéstris Lob. Ger. Park. sylv. minor five spó-
tanea J. B. anguittifolia, five sylvéstris C. B. In Italia, 
Sicilia, Gallia Narbonensi & Germania, in vervaçìs & 
ad vias. Sativam ab hac culturae tantùm ratione differre 
exìtimò, quamvis in magnitudine omnium partium insignis 
sit differentia.
CATALOGUS STIRPIUM

N. 1. In acetariais frequens uhus est Portulaca, stoma-
chi ardorem lenit & bilis fervorem, & hinc in febris putridis ac malignis, ardore urinae, & Scorbuto prodet; venerem inhibet, venerifique infomnia. Dentium ftuporem commanducata tollit, & mobiles dentes ftabilit. Ven-
ni tantibus pueris cum succeftu exhibetur; Verum efus ejus
nimiis cavendus est quoniam ob frigiditatem fumum & hu-
miditatem in ventriculo putrefcere aptum est, ejufque & vi-
ferum reliquorum tonum diffolvere.

2. Solet apud nos condiri ad intinctus eodem modo
quo Cappares, Geniftae flores, Lingua avis, &c. condi-
tur.

Prunella angustifolia J. B. hyypofolia C. B. Circa Monf-
pelium varii in locis.
Prunella caeruleo magno flore C. B. magno flore purpureo
Park. flore magno folio non laciniato J. B. Primo ob-
servavimus hanc Moguntiae, pothea circa Genevam &
alibi.
Prunella laciniata flore magno purpureo J. B. Prunella Lo-
Pfeudo-afphodelus quibusdam J. B. Afphodelus Lancashriæ
verus Ger. emac. minimum Norvegicus luteus palufris Sco-
ticus & Lancaftriensis Lob. Pfeudo-afphodelus minor folio
Iridis anguoffolias Park. Pfeudo-afphodelus palufris Scoti-
cus, & Pfeudo-afphodelus Alminus C. B. qui hos duos (ut
mihi videtur) malè separat. Ad radices montis Saleve in
aquosis. Vidimus quoque nonnufquam in Germania.
Pfeudo-melanthium glabrum. In Sicilia inter fegetes propè
castellum Puzallu, & in montibus Meffiane imminentibus.
Simile est Pfeudo-melanthio vulgaris, diverfum tamen, &
uputo, nondum descriptum.
Pfeudo-flachys Alpina C. B. Park. In fummis jugis montis
Jure.
Pfyllium majus fupinum C. B. J. B. majus Semper virens
Park. Semper virens Lobelii Ger. Pliniwm fortè, radice
perenni, fipunum Lob. Circa Monfpelium & in Italia
frequens.
Pfyllium vulgare Park. majus erectum C. B. J. B. Pfyllium
five Puficaris herba Ger. Circa Monfpelium in agris co-
piofè. Pfyllium dicitur quia femina ejus pulicipus fimilia
funt.
N. Evacuat bilem flavam, mucilagineque fua acri-
moniam humorum obtundere aptum est. Hinc convenit
maximopere in Dysenteria & corrosione intestinorum.
Semen Pfyllii hoc peculiare præ cæteris purgantibus habet.
in Exteris Regionibus.

quod qualitate refrigerandi sit prædictum. Verum enim-
verò non tamen extra reprehensionem posuitum est, quam 
incursit ratione virulentiae suæ. Schroä. Nimio usu fló-
 machum offendit, & animi deliquium inducit.
Ptlarmica Imperati, v. Xeranthemum. 
Pulegium angustifolium Ger. C. B. angustifolium five cer-
 vignum Lob. Park. cervinum angustifolium f. B. Primó 
vidimus ad Rhodanum proximè pontem S. Spiritus dictum, 
deinde circa Montpelium in humidioribus.
Pulmonaria maculosa Lob. Ger. maculata Park. Symphytum 
maculosum, five Pulmonaria latifolia C. B. Pulmonaria 
Italorum ad Buglossum accedens f. B. In sylvis propè 
Coloniam Agrippinam primò, postea in omnibus fere mon-
tosis dumeis juxta Rhenum & propè Genevam in con-
Spectum fe nobis dedit.
Pulmonaria Gallorum v. Pilofella. 
Pulsatilla alba f. B. Park. flore albo C. B. Ger. In sum-
mis Jure montis jugis. Haec non floris colore tantum, 
seit etiam tota specie distincta est à vulgari Pulsatilla, 
quam memini me alicubi vidisse flore albo. 
Punica malus sylvestris C. B. Ger. Punica sylvestris major, 
five Balanustium majus Park. Malus Punica f. B. The 
N. Poma in genere contentur boni succi, ventriculo 
convenientia sed pauci nutrimenti. 

Dulcia eorúmque syrups adhibentur in tussi chronica 
& pleuritide : in febrivibus minus commoda sunt, quia Ven-
triculo inflationes causant. 

Acida frigida sunt & adstringentia, flomachica. Ufus 
præcip. in febrivibus biliosis, in Gonorrhæa, pica gravida-
 nemum compesceda, crúisque putredine corrígenda & fim. 

Vino (acido-dulcia, Granata musae) medice sunt naturæ 
inter dulcia & acida, cardíaca ac cephalica. Usus præcip. 
in syncope, vertigine, &c. Ex malis hiic ad usus supra-
dictos succus exprimitur & fermentatus depurâtique vim 
dicitur. 

Flores, tan. Balaujlia quàm Cytini, ejußdem sunt na-
 turæ, terrestris sc. validè adstringentis ; unde creberrimus 
eorum usus esse fater in omnis generis fluxionibus v. g. 
diarrhæa, dysenteria, fluxu uterino, &c. in fangeine vul-
nerum cohíbendo, gingivarum laxitate emendanda, in 
hernia curanda, &c. Haec omnìa Schroderus. 

Cortex (malicorium, pidi²um) ejußdem naturæ cum flo-
ribus ess. Usilis etiam ad coria præparanda, & ad atra-
mentum vice gallarum. Addit Consistantibus, Malicorium 
vino
vina decoctum ac potum omnes ventris tineas necare, maximè eas quas Ascaridas vocant.


Ex malis Punicis contuìs cum suis corticibus exprimir tur succus qui purgat bilem flavam, ut scribit Caesalpinus.


Pyrola folio serrato J. B. folio mucronato serrato C. B. tenerior Park. 2 tenerior Cluïi Ger. In montibus Genevæ vicinis, inque sylvis montosìs non longè à Constantinìa versûs Scaphuïam.

N. In flore Pyroïæ vulgaris insignem observavì varietatem. In una enim planta inferior florìs lacinìa sive labellìum magìs propendet quàm in altera: Stylus etiam in unà magìs dependet & delòrìum incurvar t quàm in altera. Fortè una inòcunda est, florès duntaxat profèren, illa nimìrum cujus labellìum & stylus propendent, cùm & caulis exuccus & evanìdus videatur, altera foécunda, cùm & caulis robustior fit & succulentior.


Quinquefolium minus repens luteum C. B. An Quinque- folium minus repens lanuginosum luteum ejusdem? Pen- taphyllum incanum Ger. repens minus Park. Pentaphyl-
in Exteris Regionibus.

Ranunculus albus implici flore J. B. Alpinus albus *Ger. montanus albus minor simplex Park. mont. Aconiti folio, flore
Catalogus Stirpium

flore albo minore C. B. In Jura & Saleva montibus copiose. Maius floret.

Ranunculus montanus albus hirsutus \*J. B.\* montanus Pennæi \*Park.\* mont. hirsutus purpureus \*Ger.\* \*emac.\* montanus VI, vix montanus hirsutus purpureascence flore C. B. In sylvosis Jure montis prope verticem Thuiri.

Ranunculus teuifolius montanus luteus \*J. B.\* In montis Jure præalta parte Thuiri J. Bauhino & nobis etiam inventus.

Ranunculus montanus lanuginosus foliis Ranunculi pratenlls \*C. B. Park. Ran.\* magnus valde hirsutus, flore luteo \*J. B.\* cujus descriptio quæ desumpta est è Phytopinace \*C.B.\* nostro Ranunculo (quem in Saleva copiose invemimus) adamusfium respondet.

Ranunculus \*\*\*v.\* Aconitum.

Refeda alba \*J. B.\* maxima \*Ger. C. Bauhini\* quæ sequitur Parkinsonus) mentem non capio; nam Refedam siam majorem cum floribus luteis describit. In Italia fatis frequens.

Refedæ affinis \*v.\* Phyteuma.

Rhamnus \*Clusii\* flore albo \*Ger. secundus Monspeliense\* vix primus \*Clusii Park.\* cujus figura plantæ huic non respondet. \*Rham.\* spinos oblongis, flore candicante \*C. B.\* Rh. cortice albo \*Monspeliensis \*J. B.\* Circa Florentiam & Monspelium.

Rhamnus folio subrotundo \*v.\* \*Paliurus.

Rhododendron \*v.\* Oleander.

Rhus folio Ulmi \*C. B.\* coriaria \*Dod. Ger.\* obsoniorum \*Lob.\* Clus. \*Sumach,\* vix Rhus obsoniorum \*coriariorum Park.\* Rhus \*five\* \*Sumach \*J. B.\* in collibus circa Monspelium propè \*Castelneuf, aux Garigues, \*etc.

N. 1. In agro Salmanticensi (referente Clusio) quæstus gratiâ diligenter colitur. Creduntur singulis annis enati furculi cubitales ad radicem ufque deinde deficcantur, in pollinem rediguntur, \& ad coria densandæ adhibentur.

2. Semen \& folia refrigerant \& astringunt, unde fluxum quemcunque alvi, uteri, menstruum, hemorrhoidium compecent, vomitum siffunt, bilem obtundunt, \& intus in juculis \& forditionibus sumpfa, vix extus adhibita. Dentes denigrant; putredini Gangraenæ reßiffunt. Gummi dentibus inditum odontalgiam fedat. \*Schr.\*

Rhus myrtifolia Monspelica \*C. B. myrtifolia \*Ger. Plinii putata \*J. B.\* Plinii myrtifolia \*Park.\* Circa Monspelium copiose, præcipue ad ripas Ladi amnis. Ad coria férmanda cunctæ Narbone notissimam \& usitatissimam dicit \*Lobelius.\*
Exteriis Regionibus.

Ricinus major vulgaris J. B. C. B. Ricinus five Palma Chri-

flī Ger. Ricinus five Cataputia major vulgarīor Park.

Circa Meffanam Sicilīae & Rhēgium Calabrīae in spēibus

frequens, ubi in fruticem sātīs grandem, Sambuci āēmu-

lum adolescit, & multos annos durat. Semen Ricino in-

fecto fīmile, unde plantae nomen.

N. Semen seu nuclei potenter bilem & pituitam ēnu &

udjō pellunt, verūm ob vehementiām rariusiīmi usūs sunt.

Ex femīne oleum exprimitur ad multa utile, v. g. tumo-

res & flatus præsertim ventris, coli & ieli dolores, artūs

contraētos, duritiem alvi & ventris tineas in pueris, tu-

mores & duritias mammārum, si partes eo illinantur, &

duæ aut tres guttulæ in laete aut pingui alioqu jure su-

mantur. Oleum hoc fīcis internālis oleum vocant. Hæc

fēre Monardes & Cluφius.

Rōfα rubello flore parvo, simplici non spinofa J. B. sylv.

minor rubello flore C. B. In montībus circa Genevam.

Rōfα sylvēstris rubēlā parva fruticē J. B. In collībus pro-

pē Genem, v. g. la Baftie, Champe, &c.

Rōfmarinus coronarius fruticofus J. B. spontaneus latiore

folio C. B. Rōfmarinus coronarius Ger. Libanotis coro-

naria, sīe Rōfmarinum vulgare Park. In Italia & Gal-

lia Narbonenfī in collībus saxōfis propē mare affātīm.

N. In usū sunt foliā, flores (Anthos officinis diēti)

semen. Cephalica sunt è praeceptus ut & uterina. Usūs

præcip. in affectibus capitis ac nervorum, Apoplexia, 

Epilepsia, Paralyfi, Vertigine, Caro, &c. viūm acuunt, fo-

torem haliēs emendant; Epatis, Lienis ac Uteri ob-

fructiones resolvunt, ìctero ac fluorī albo mulierum me-

dentur, córque confortant. Herba ipsa suffitū & va-

pore fuο pēltis tempore aereem emendant & salubrem re-

dit.

Rubia anguifolīa spicata Park. C. B. Circa Monspelium

plurimis in locīs, v. g. collībus juxta Caeselneuf : Agris

Gramantīz sylvāe vicinis, &c.

Rubia marīna Ger. Park. marina Narbonenfīm J. B. mari-
tima C. B. Ad Mare Mediterraneum, in lītoribus arenōfis

propē Syracusas; Cataniam, Terracinam, Monspelium

collēgīmus.

† Rubia erēcīa quadrifolīa J. B. In pāciis quībūdām

propē Genevām trans Rhodanum fluvīum. Hāc non

itā pridem in Westmorlandia Angliē Provincia in-

veni.

Rubia leavis Taurinenfīm Park. Rubīa cruciāta leavis

Ger. quadrifolīa, vel latifolīa leavis C. B. quadrifolīa

Italica
Catalogus Stirpium

Italica hirfuta f. B. In Italia à D. F. Willughby inventa.
Rubia echinata Saxatilis v. Cruciata minima.
Rubia sylvatica laevis v. Mollugo.
Ruta capraria v. Galega.
Ruta canina v. Scrophularia.
Ruta pratensis v. Thalictrum.

N. Ruta Alexipharmaca est, cephalica ac nervina. Ufus præcip. in peffe alisqüe affectibus malignis præservandis ac curandis (unde & Theriaca pauperum nonnullis dicitur) vicu-ruendo; lascivià reprimendà (Ruta facit caustum. Schol. Salern.) pleuritide curanda, imbécillitate ventriculi corre-genda, colicà difcutiendà, morfu canis rabidi debellando. Schrod. qui plura habet de ufu ejus extrínseco, quem adi ut & Parkinsonum. Summatim Interne fumpta ad tria præcipuè celebratur, viz. 1. peftem præservandam aut arcendam; 2 oculorum caliginem difcutiendam, & acuen-dum visum; 3. appetitus venereo cohibendos.

S

Abina baccífera v. Cedrus Lycia.

Salvia fruticosa lutea v. Verbascum IV. Matth.

N. Cervum Sambucum racemosum ficut & Solanum lethale magno desiderio inquirere didici. Ubi namque locorum eas stirpes provenire intellexit eò se confert. Quòdque mirari subit, solent binae hæ stirpes plerunque cofundem.
in Exteris Regionibus.


Sanamunda prima Clusii v. Tarton-raire.


Sanicula guttata Ger. Park. Alpina guttata f. B. montana rotundifolia major C. B. In Alpibus Helvetici; item in montibus Jurâ & Salevâ.

Sanicula fœmina Matth. v. Acrantia nigra.


Satureia æstiva hortensis Ger. hortensis Park. fativa f. P. hortennis, five Cunila fativa Plinii C. B. In agris circa Caftelneuf, non longè à Monspelio copiose.


N. 1. Saporis & odoris eft acris & calidi. Ufus in affectibus ventriculi, cruditate, anorexia, &c. pecloris, affhmate; uteri, menfibus obstruètis; visum acuit. Ex-trinsècus diffcutit tumores, dolorem ifchiadicum lenit; ejufque succus cum tantillo olei rol. auribus inftillatus tinnitus & furditatem auert.

2. Germanis in ufu eft ad Brasicas capitatas con- diendas, qui fit, ut illæ jucundissimum odorem & saporem gratissimum acquirant; quin & fabis, aliisque leguminibus incoqui foler, àd eorum flatuofitatem corrigendam. f. B. Schrod.
Catalogus Stirpium


Scabiosa argentea angustifolia Park. C. B. graminea argentea J. B. In planis Fori Julli depressis, que aqua ex Alpibus ubertim delabentes hyberno tempore aliquoties late inundant; alveos torrentum dicere posses nisi latitudino obstatet.


Scabiosa multiïido folio, flore albo vel potius Scammonia superioi, ideoque non immerito ejus icon pro priore usu est Parkinsonus.


Scolymus Theophrasti Park. v. Cinara sylvætris.

Scorpioides Bupleuri folio Ger. C. B. Scor. filiquâ cam- poïde hispidâ J. B. Scorp. Bupleuri folio minor plu- ribus cornicularis asperis Park. quamvis ille hanc à nemine aut
Exteris Regionibus.

ante se editam glorietur. Messanæ in collibus, & Montpelii in fossis & aggeribus ipsius arcis.
Scorpioides leguminosa v. Orinthopodio similis.
Scorpioides leguminosa altera f. B. In vineis & hortis ad latera montium Messanæ iminentium. Hanc plantam à nullo alio scriptore proditam censemus.
Scrophularia folio Urticae C. B. peregrina Park. flore rubro Camerarii f. B. Circa Piis copioso in muris ipsius urbis, & alibi in Italia.
Scutellaria f. B. v. Opuntia marina.
Securidaca major articulata Park. dumetorum major flore vario, filiquis articulatis C. B. Melilotus 5 Tragi f. B. Ad agrorum margines in Germania passim.
Sedum ferratum f. B. Cotyledon media foliis oblongis ferratis C. B. Umbilicus Veneris minor Ger. in montibus Tyrolenfibus & Helveticis, itèmque in Jura & Saleva Genevæ vicinis.

Sedum Alpinum minimum foliis cinereis, flore candido J. B. Saxatile & Alpinum II, five album foliis compactis C. B. minimum Alpinum Muscoides Park. In montibus non longè à Balzano Martio mente floruit.


Sedum echinatum vel fiellatum flore albo J. B. In musco-fis sepium aggeribus non longè à Genevæ, fucus viam que indè ad oppidum Day ductit. Meffanae quoque similibus in locis invenimus. Descriptio J. Bauhini planta huic nostræ per omnia exactè non congruit.


Sedum montanum filiosom flore albo, an Hesperidis Alpinae species ? In suprema parte montis Salevaæ ad aquarum scaturigines.

Sedum montanum minimum non acre flore purpurascente parvo. In altaïsimis rupibus Juræ montis.

Sedum minimum non acre totum rubrum flore hexaphylo purpureo. Cataniae in muris & teæs copiosè.

Sedum medium flore albo flaminibus luteos apices geßtanti-bus. In muris quibusdam propè Meßanam Sicilie.


Sencio folio non laciniato J. B. folio non laciniato Myconi Park. VI, five folio non laciniato C. B. In fabulosis inter oppidum Rot & Norimbergam Germanæ urbem. Bundem etiam Meßanae in ascension montium observavi.
Sertolaria Imperati v. Opuntia marina.
Sefeli Æthiopicum Salicis folio C. B. Sef. Æthiopicum frutex Park, Ger. Sef. Æthiopicum fruticofum folio Pericymeni f. B. In rupibus oppido S. Chamas in Gallo-provincia vicinis: Aiunt & circa Monspelium fponge provenire; verum nos ibi non vidimus.
Officinarum v. Siler montanum.
Sideritis vulgaris Ger. vulgaris Clufii Park. vulgaris hirsuta f. B. hirsuta IV, five vulgaris hirsuta erecta C. B. Per Germaniam, Italianam & Galliam in agrorum marginibus vulgatissima.
Sideritis genus verticillis spinosis f. B. In Italia & Gallia Narbonensi propè Monspelium in agris. Icon Sideritidis procumbentis non ramoæ Clufi. huic non diffimilis est.
Sideritis praenesis lutea v. Euphrafia praenesis lutea.
Sigillum Solomonis v. Polygonatum.
N. Siliquarum (ut rectè Plinius) cortex ipse manditur, &que dulci & melleo sapore, per fuccitatem inelligere, nobis tamen nonnihil naufetis & ventriculo ingratus. Miro a. Veteres scripsisse quod astringat & ventrem fitat, cùm nobis (quotquot de eo commerimus cùm effemus Venetiis) alvum solvit non secus ac Caffia. Non tamen negaverim posse eos qui huic fructui affueverunt eo innoxìe velci.
Sinapi Genevene fylvestre f. B. In alveo fluvii Arve propè Genevam copiofe. Hac planta an ab alio quoquam descripta fit nelcio.
Catalogus Stirpium

Sinapi echinatum w. Eruca echinata.


N. Succedaneum est Sarsaparilla in curanda lue Venerea, inque articulorum & nervorum doloribus; noxios humores per sudorem & tranpirationem evacuat, cutis vitia expurgat. Datur vel in pulverem redacta vel in aqua alióve liquore decocta.


N. Vulneraria insigne cenfetur, nec Saniculae aut Bugulae inferior, ufu interno & externo adhiberi apta.

Solanum halicacabum v. Alkekengi.


Sonchus caeruleus latifolius f. B. montanus I. i. e. laevis laciniatus caeruleus five Alpinus caeruleus C. B. Alpinus caeruleus Park. In monte Jura, inque montibus max. Carthusianorum cœnobio imméntibus.


fructum anteab nobis incognitum in foro primùm venalem vidimus.

N. Sorba sed præcipuè immatura valde astringunt, unde fluxui cujuscunque generis conveniunt, & vomitum etiam siftunt. Pueris quibus ob dentitionem alvus fluit commodè exhibentur.

Sorghum v. Melica.


Spartum max. maritimum Hollandicum spicà fœcalinà. In arenosis ad vicum Schevelingam, uno ab Haga Comitum milliari.

Spartum arborefscens v. Genista Hispanica.


Stella leguminosa v. Glaux peregrina anua.


N. Hujus flores vino decoeti & poti lumbricos ventris expellant, quod ego experientia verum effe didici. Trag.


Steechas citrina altera tenuifolia five Italia Ger. Elichrysum folii oblongis, Steechas citrinae similis Dod. In montibus Liguriae non procul Gavia oppido, & alibi in Italia.

Steechas

Stoechas citrina altera odora Park. v. Chrysocoma.

Stoechas five Spica hortulana Ger. vulgaris Park. purpurea C. B. St. Arabica vulgò dicta J. B. In sylva Gramontia & alibi circa Monspelium, itémque medio circiter itinere inter Monspelium & Arelaten.


2. Stoechadis citrinae flores diuretici sunt & vulnerarii; usus præcip. in obstruccione urinae, epatis, lienis, mensium; conglatum sanguinem resolvunt, catarrhos exiccat, menues nimios fissunt, lumbricos fugant: Commendantur & inprimis ad exiccatas defluxiones aceris pulmonum, &c. Extrinsicus faciunt ad emolliendum uteri duritionem (in balneo) lendes abigunt (in lixivio) capitis defluxiones fiscant & difficuunt (suffit.) Schrod.


N. 1. Cortex tritus ex aqua calida potus sanguinis fluxum fissit. Eujdem cinis ad idem valet. Usus ejus est ad anchoralia navium, pificantium tragulas, cadorum obturamenta, fœminarum calceatum hybernium, alvearia, &c.

2. Detrahendis corticibus haec est ratio. Quà stipes telluri committitur, circumfendidur ad lignoam uque materiam, pariterque in fummis humeris antequam in brachia dividat sefè: mox à summo ad imum finiditur detrabiturque
hitürque cortex. Non explanatur aqua sed igni, nec de-
muntur cortices nisi tertio mox anno. Quod si paucis die-
bus à tonfura largi imbræ supervenerint, arbor interit:
quod rarò evenit nimium regione calida & sicca, & tem-
porum observatione rarò fallente. Clus. è Quinquerano.
Sumach v. Rhus.
Symphytum maculosum v. Pulmonaria macularia.
Syphryynchium majus Ger. Clus. Park. majus flore luteâ ma-
culâ notato C. B. Iridi bulbofæ affine Syphryynchium majus
J. B. In lingua illa que Portum Messanenfem à Freto Si-
culo dividit, & in insula ad Prom. Pachynum, utrobiqve
copiose.

T

Amarix v. Myrica.
Tanacetum inodorum Park. non odorum Ger. monta-
num inodorum minore flore C. B. album J. B. In colle la
Bafie propè Genevam & ad Rhodani ripas.
N. Hæc planta florem habet radiatum Bellidis majoris
æmulum, ideoque cùm nec odorum Tanaceti habeat,
rectius ad Bellides refertur, & Bellis leucanthenmos Tanaceti
folio à D. Morrifono denominatur.
Maffil. Sanamunda t Clusii J. B. Thymææ foliis candi-
cantibus, Serici infar mollibus C. B. In rupibus maritimis
non longè à Salerno.
Telephium Scorpioides J. B. v. Scorpioides.
Terreæ glandes v. Chamaæbalanus leguminofa.
Terebinthus Ger. J. B. vulgaris C. B. angustiore folio vulga-
N. i. Terebinthi folia, frutus, cortex (tradente Dios-
coride) quâ pollent adstringendi vi, ad eadem ad quæ Len-
tificus conveniunt. Ejus frutus effulentus eft, at òmochò
noxius, urinam verò ciet & excalèfacit. Eft & ad excitan-
dam venerem aptissimus : ex vino verò potius contra Pha-
langiorum morfus prodeìt.
2. Species sunt Gallæ, magnitudine Avellææ, intus
cave, provenientes ex crescensciis foliorum Terebintho-
rum masculum. Has colligunt Ruffici Thraciæ &
Macedonie, ac carè vendunt ad tingenda fericâ sub-
tilia diversis coloribus in urbe Eource. Colligunt a.
vere quo tempore nisi colligerentur, in longitudinem semipede-
dalem excrecerent ad formam cornu. Bollon.

3. Quæ pro Resina terebinthina in officinis habitur vel
Laricis resina et vel abietis, nam vera terebinthina ad nos
hodie non adfertur, Botanicorum unanimi sentientia. Res-
inae autem vires & usus vide sub Pinu.

Teucrium C. B. majus vulgare Park. latifolium Ger. Teu-
crium multis J. B. In Sicilia & Italia perquam fami-
lare.

Teucrium Baeticum Ger. Baeticum & Creticum Clusii J. B.
Teucrium Creticum & Teucrium Baeticum Park. nam pu-
tamus haec duo non differre specie. Teucr. peregrinum
folio sinuoso C. B. & Teucrium Creticum incanum C. B.
Propè Syracusas, in infula ad Promont. Pachyynum, circa
Puzallu, & alibi in Sicilia. Invenit D. Wollugby in itinere
à Neapoli ad Roman.

N. Ut facie sic viribus cum Chamaedry convenit. Ve-
teres liem absumendi validam vim ei attribuunt.
Teucrium majus Pannonicum v. Chamaedrys falsa maxima.
Alpinum cisti flore v. Chamaedrys.

Thalictrum angustissimo folio Park. pratense angustiss. folio
C. B. Prodr. Ad fluvium Lycum propè Auguflam Vinde-
licorun in Germania.

Thalictrum majus Hispanicum Ger. emac. majus album His-
panicum Park. maj. folliculis angulois, caule lâvi J. B.
4, five majus florum staminulis purpurascustainibus C. B. In
fylvos Juræ montis circa Thuiri.

Thapsia latifolia Hispanica Park. latifolia Clusii Ger. Thapsia
et Clusii latifolia, flore luteo, femine latoo, semilis Seléi Pe-
oponnenfis Lobelli J. B. An Thapsia five Turbith Gar-
ganicum femine latissimo ejusdem? Meßfâne pro Turbith
utuntur hac planta, ut recte notat Imperatus. v. J. B.
Meßfâne in lingula fæpius memorata.

N. Haec planta violenter admodum purgât, ideóque in
ea exhibenda cauto opus est. Meßfânetes, ut dictum
pro Turbith cà utuntur, cujus vires notæ. v. Schroderum
& alios.

Thlaspi clypeatum hieracifolium majus Park. biseutatum
asperum hieracifolium & majus C. B. clypeatum Lobelli
Ger. Lunaria bisecuta J. B. In Germania, Italia, Sicilia
& Gallia variis in locis.

Thlaspi minus clypeatum Ger. clyp. minus Serpylli folio
Park. clyp. Serpylli folio C. B. Lunaria peltata minima,
quibusdam ad Thlaspi referenda J. B. Circa Monspelium
fed rarius.

Thlaspi
Thlaspi Candie \textit{Ger.} umbellatum Creticum Iberidis folio \textit{C. B.} Creticum quibusdam flore rubentem \textit{J. B.} In sylvis montosis propè Salernum in Regno Neapolitano, \& Viterbium in Etruria.

Thlaspi umbellatum arvense amarum \textit{J. B.} umbellatum arvense Iberidis folio \textit{C. B. Park.} Thl. amarum \textit{Ger.} Inter fegetes in monte Saleva, \& circa \textit{Thuiir} duabus à Geneva leucus copiòse.

Thlaspi umbellatum Nausturii folio Monspeliacum \textit{C. B. Park.} umbellatum Narbonense \textit{Ger.} umbellatum, tenuiter divisio folio, amarum Narbonense-Lobelli \textit{J. B.} In agris \textit{Castris novi} Monspelio vicinis, \& alibi circa Monspelium.

Thlaspi spinofum \textit{Ger.} spinofum fruticosum \textit{Park. C. B.} Leucoium spinofum, five Thlaspi spinofum aliiis \textit{J. B.} In summis ripibus montis Lupi, tribus Monspelio leucus diffantis.

Thlaspi capulis sublongis incanum \textit{J. B.} fruticosum incanum \textit{Ger. C. B.} incanum Mechiniense \textit{Park.} In agro Romano abundat, ad hyemem uique florense.

Thlaspi Narbonense Centunculi angusto folio \textit{Ad. Narbonense Lobelli \textit{Ger.} Nausturium vel Thlaspi maritimum \textit{J. B.}} Thlaspi. Alysson dicitum maritimum \textit{C. B.} Ad Mare Mediterraneum ubique ferè.


Thlaspi Alpinum minus capitulò rotundo \textit{C. B. Park. petræum minus \textit{Ger. emac. petraum myagryodes \textit{Pone.}} In ripibus humidoribus montium Jura \& Salevaë.

Thora Valdensis \textit{Ger. Phthora} folio Cyclamini \textit{J. B. Aconitum pardinianches \textit{Il, seu Thora minor \textit{C. B. Park. itémque \textit{I, seu Thora major} erudendum. Non enim conceaffeim has duas specie differre. In altissimis jugis montis Jura propè \textit{Thuir.}}

Thymelæa \textit{Ger. Park.} folius Lini \textit{C. B. Monspeliaca \textit{J. B.} In Italia \& Gallia Narbonensi, agris deprelloribus, inter alios frutices passim.

N. Hujus plantæ fructum coccum seu Gramum Gnidium vocant herbarii peritiores. Ait Officinis nostris Mezerëi Germanici baccæ Cocci Gnidii appellantur, monente Schrödero. Cocco Gnidio vis ardens ef \& sauces adures, Undè
Unde mirum nobis videtur quod scribit Clufius, Fructu Thymelaeæ maturo & rubro Perdices & aviculas avidissimè vesci.


Thymelææ quædam incana Genevensis. In sylvoquis rupibus ad latera montis Salevæ ex parte quæ Genevam respicit, è saxorum fissuris.

Thymelææ tomentosæ v. Sanamunda.

foliis candidantibus v. Tarton-raise.


Tithymalus folio longo glauco, caule rubro, seminibus verrucois. Propè Melíanam. Elatior & major est multò Thymalo verrucofo vulgari.


Tithymalus myrfinites anguifolius C. B. Ger. Parkifonus hujus iconem ponit pro Tithymalo myrfinite Lob. Verùm hæ duct plantæ specificè inter se different: hæc enim minor est,
Ex Regionibus,


Tithymalus Amygdaloïdes five characias Æ. B. characias II, five rubens peregrinus C. B. characias Monspelienium Ger. In faxosis circa Monspelium, quin & in Italia circa Lericium, & alibi sapientiæ nobis conspectus.


Tithymalus verrucosus Æ. B. verrucosus Dalechampii Park. myrsinites, fructu verrucae similis C. B. Circa pagum Thuiri duabus à Geneva leucis, quin & in Germania aliqua quoties eum invenimus.

Tithymalus magnus multicaulis, five Esula major Æ. B. Pityufa five Esula II. i. e. Tithymalus palustris fruticosus C. B. Esula major Germanica Ger. Park. In Germania ad Rhe-num copiosissimum; circa Genevam quoque & in planis campis agri Lugdunensis, per quos Genevâ Lugdunum iter ést.

Tithymalus palustris Fihanus. An Tithym. myrsinites incaner herbariorum Æ. Frequent in paludibus Pifanis, unde non du-bito hanc esse quam intelligit Caesalpinus per fuum Ti-thymalum palustrem. Folia ejus hirsuta sunt, & ad Tithy-mali characias amygdaloïdes nostratis folia accedunt.

Tordylium minus v. Caucalis minor pulchro femine.

Trachelium parvum folio Bellidis subrotundo. Radix el albe, simplex, liguofa, annua: Caulis erectus, friatus: Folia alternatim ãspita, subrotunda, fine pediculis caulibus adnexa.

Flores Tracheli majoris. Circa Messianam.

Trachelium Alpinum &c. v. Echium Alpinum luteum.


N. E radicë liius plantae incisa, vel (ut alii volunt) sponte sua exudat gummi Tragacantha pariter dictum, cujus usus præcip. ad tussim inveteratam, fauces exasperatas, res- h tufas
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tus voces, cæteràque destillationes, cum melle fit linéclus, sublitürve linguae ut liquefact) contra renum dolorem & vesicae rostones (in passio vel brodio) in dysenteria. Exirin-
fecs ad dysenteriam in clýsteribus, ad rubedinem & aeres
destillationes oculorum (foluta in aqua rosaeve vel lacte) ad
dalpebrarum scabritiem. Dof. 3j. Schrod.

Tragium v. Androfænum fœtidum.

Tragorchis v. Orchis.

Tragopogon perenne, five Scorzonera fol. angustis incanis, flo-
ribus dilutè purpureis. In infusa ad Prom. Pachynum.

Tragos five Uva marina marior herbariorum Lob. Uva marina
major Ger. Tragos five Uva marina major f. B. Polygonum
bacciferum maritimum majus C. B. In Sicilia prope
Punto Cerciolo, ubi humanam altitudinem æquat. Polygonum
bacciferum five Uva marina marior Park.

Tragos five Uva marina minor f. B. Uva marina minor Ger.
Polygonum bacciferum maritimum minus C. B. Polygonum
bacciferum minus, five Uva marina minor Park. In arenosis
litoribus propè montem Ceti & Frontignanam, atque etiam
in faxosis collibus vicinis.

Tribulus terrestris f. B. Ger. Park. terrestr. ciceris folio,
fructu aculeato C. B. In Sicilia, Italia & Gallia Narbonensi
passim. Seriùs & sub Autumnum floret.

Trifolium bituminosum Ger. Asphaltites five bituminosum
Park. bitumen redolens C. B. Asphaltites five bituminos-
um odoratum f. B. In Italia, Sicilia & Gallia Narbonensi,
in faxosis collibus non procul à mari.

Trifolium Alpinum argenteum Park. Alpinum argenteum,
Perfici flore C. B. In præruptis altissimorum montium
max. Carthusianorum cenobio imminentium.

† Trifolium capitulis globosis fine pediculis caulis adnatis.
Circa Messinam Sicilia metropolin alteram. Hanc speciem
nuper invenimus in agro Suffocienfi.

Trifolium cochleatum echinatum, peltatum, orbiculatum, &c.
v. Medica.

Trifolium fragiferum five vesicarium floribus nitidis rubellis.
Circa Liburnum portum & alibi in Italia. Non longè ab-
simile est, imò fortè idem Trifolio folliculaceo five vesicario
mini purpureo f. B.

Trifolium fruticos v. Polemonium.

Trifolium pratense album à Fuchio depictum five mas f. B.
Alii Botanici speciem hanc cum Trifolio albo vulgari con-
fundunt, à quo tamen diversissima est. Circa Genevam in
pafiuis & ad agrorum margines.

Trifolium stellatum C. B. stellatum Monspelienium Park.
stellatum purpureum Monspeliulanum f. B. Ad radices
Vefuvii
in Exteris Regionibus.

Vesuvii montis copiosè; nec minus circa Mesflanam in Sicilia, & Monspelium in Gallia Narbonensi.

Trifolium annuum erectum capitulis è glumis acerosis conflatis. Hanc speciem in Regno Neapolitano ad maris litus collegi, cum Mesflanà Neapolìn redirem.


N. Ratio seu modus quo (ut nobis relatum est) rustici tubera exquirunt, aut si vis venantur, perridicus est: Porcellum fìlicet funiculo ad alterum pedem alligato praè fe agunt in pacifica ubi horum proventum esse nòrunt, qui ubi ad locum venit in quo tuber latitat, odore mox id percipit, rostróque è terra eruit, erutum qui insequuntur furripiunt, & ad alia indaganda porcellum abigunt.


Tuffilago Alpina folio longo J. B. Alpina folio oblongo Park. IV, fìve Alpina folio oblongo C. B. In montis Juræ partibus altissimis Thuiri & Dole dictis. Hæc planta Alímati Matthioli fìve Plantaginì Alpinae dictae persimilis est, non tamen eadem, & ad Doronica potìus quàm ad Tussilagines referri debet.

Accaria *Ger.* v. Lychnis segetum rubra.
Vaccinia *v.* Vitis Idaea.
Valeriana Mexicana *Ger.* Indica five Mexicana *Park.* peresrina seu Indica *f.* B. Valerianella echinata C. B. circa Mannam Siciliae copiosæ.
Valeriana Alpina *f.* B. XI, five Alpina altera C. B. Alpina major five latifolia *Park.* in Monte Salevæ supra Carthusianorum coenobium.
Valeriana Alpina altera foliis integris, inodora, An Alpina prima *C. B.?* in montibus circa Genevam copiosæ.
Verbacsum latis Salviae foliis C. B. Matthioli *Ger.* sylv. salvifolium exoticum folio rotundiori *f.* B. Salvia fruticosa lutea latifolia, five Verbacsum sylvvestre quartum Matthioli *Park.* circa Taurum in Sicilia.
Verbacsum angüsto Salviae folio C. B. *Ger.* Monspelienfis flore luteo hiante *f.* B. Salvia fruticosa lutea anguïtifolia, five Phlomos Iychnitis Dioecoridis Clusio *Park.* in collibus faxofis circa Monspelium.
Verbacsum crispm & sinuatum *f.* B. laciniatum *Park.* nigrum, VI, five nigrum folio Papaveris corniculati: & Cam. C. B.
Exteris Regionibus,

In Italia ad vias passim. J. Bauhino circa Monspelium; nos illud ibi non observavimus.

Vermicularis s. Sedum.


Veronica faxatilis parva caulibus nudis. In pastulis in summitate montis Jura. An planta haec a quoquam descripta sit mihi nondum est compertum.

Vicia sylvatica maxima Pisó sylvestris similis. J. B. In sylvois in ascessu montis Salevæ, ab eo latere quod Genevam spectat.

Vicia feu Lathyrus gramineus flore coccineo. Ad radices montis Vesuvii non longè a mari: necnon circa Genevam inter segetes.

Vicia maritima multiflora alba Meffanensis, In Sicilia circa Messana & alibi ad maris littus.

† Vicia luteo flore sylvestris J. B. Circa Liburnum & alibi in Italia inter segetes.

Victorialis longa Cluj; Allium Alpinum J. B. Alpinum latifolium, seu Victorialis Ger. anguinum Park. IX, five montanum latifolium maculatum C. B. In summis jugis altissimorum montium max. Carthusianorum coenobio proximorum & velut imminentium.

Vinca pervincæ u. Clematis daphnoides.

Viola bulbofa u. Leucouium bulbosum.


Viola lunaris longioribus filiquis Ger. lunaria III, five major filiqua oblonga C. B. Lunaria major filiqua longiore J. B. In montibus Saleva & Jura, sed parciùs.

Viola matronalis flore purpureo Ger. matronalis, five Hesperis hortensis C. B. Hesperis J. B. Cùm à Salerno Neapolin iter facerem, hanc in pratis observavi.

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bellâ longâ C. B. In pratis quibusdam non longè à Miravalle, secus viam quæ Monspelio Frontignanam ducit; copiofè etiam in Etruriae agris, & circa Cataniæ Siciliae.

N. Pediculi seu umbellarum radii pro dentifcalpis multis in usum veniunt, præcipuè Hispanis, ob rigiditatem suam & suaveolentiam: unde & nofratibus Spanis ê Picktooth appellatur.

Vitex v. Agnus caulis.


Vitis Ídæa v. Diospyros.

Ulmaria major v. Barba capræ.

Unifolium v. Monophyllon.


N. Uvæ crîspæ immaturæ refrigerant, unde febri tantibus & choleris utiliter exhibentur, fitim fедant; astringent quoque, unde ad omne ventris profluvium & hæmorrhagiam quamcunque conducent; Urinam infuper ciere, & calculo aut arenulis laborantibus prodetur discourte. Saccharo condite gratâ suâ aciditate appetentiam conciliant, & febriles ardores reftinguent. Conci nantur & in placenta cupediarum & scitamentorum vice; vulgò Tartas vocant.

Uva marina v. Tragos.

Ursi v. Vitis Ídæa.
in Exteris Regionibus.

X

Ylon v. Goffipium.
Xeranthemum f. B. Jacea Oleae folio, flore minore

Z

Acynthia v. Cichorium verrucarium.
Zea monococos v. Briza.

Explicatio
Explicatio Nominum abbreviatorum.

A
C. B. Caspari Bauhini Pinax.
Cufs. Cæsalpinus.
Cam. Camerarius.
Cat. Ang. Catalogus Plantarum Angliæ.
Clus. & Clus. hist. Caroli Clusii historia.
Col. Fabius Columna.
Dod. Dodonæus.
Fuch. Leonardus Fuchfius.
Gefn. Conradus Gefnerus.
J. B. Joannes Bauhinus Caspari frater.
Idem in Iconibus à Plantino editis.
Lon. Adamus Lonicerus.
Lugd. Historia Lugdunensis.
Matth. Matthiolus in Dioscoridem.
Park. parad. Eujudem Paradifus terrestris feu Hortus.
Schrod. Schroderus in Pharmacopœa Medico-chymica.
Tab. Tabernæmontanus.
Tbal. Thalius in Harcynia.
Trag. Hieronymi Tragi historia.

Nota hæc † cuicunque plantæ præfigitur indicat illam in Anglia ãponte provenire.

FINIS.