In Memoriam
STEPHEN BRIDGES
1909 - 1977
President SGAA 1968-1970

Given by
THE STAINED GLASS ASSOCIATION OF AMERICA
1979
THE TIMES, FRIDAY. JANUARY 15, 1857.

STAINED GLASS AS AN ART (Macmillan).

For an artist to consider for the public the motives and methods of his work is of somewhat unusual daring, but when he is a man of originality like Mr. Henry Holiday, and has for years followed his own path without turning aside to seek for popularity, such an apologia is welcome, and the more so that its personal character is a happy accident due not to the author's self-conscious but to his mode-sty. For the book is, as it professes to be, an essay on a subject not as such it needed illustrations, and these Mr. Holiday found he could only take from his own work, for there only could he speak with confidence of the objects aimed at, or of the means adopted to attain them. Any other course would have involved adverse criticism and possible misinterpretation of the work of fellow-artists. The purpose of this essay is to draw the various threads in the fabric of the modern treatment of stained glass, which has produced the Arts and Crafts Exhibition. Far too much of the modern glass has been designed by clerks working in any style required, and in that style merely reproducing the mannerisms of the original draughtsmen. The fault has not been peculiar to glass painting, it may be seen in all departments of modern architecture, and points to the inevitable result of the Gothic revival. Now, however, that we have seen the effect of this formal imitation of ancient work, and have discovered that a dead copy of a 15th century church is no more interesting than an Italian villa constructed according to the rules of Vitruvius, there has been for some time past an effort on the part of architects and craftsmen to infuse a more spiritual to their work, and to regard the ancient buildings as examples to be studied as the basis only of their modern work. And the present volume is likely to be useful in educating public opinion, and so bringing about a greater sympathy between artists and their clients. For an appreciative public opinion is almost a necessary condition of the production of works of art.

With most of Mr. Holiday's views, probably few artists would disagree. He points out that the principal beauty of glass is due to its brilliancy, and that therefore this quality should be the guiding principle in its treatment. Shadows and lines other than those necessary to define the forms should be introduced mainly with the object of enhancing the apparent brightness of the lighter parts, and so increasing the beauty of the glass. No attempt at realism should be made to represent the background or failure. The heavy leads and the sharp contrasts of colour between adjoining pieces of glass are like nothing in nature, and if chiaroscuro is introduced it involves large masses of heavy shadow which are clearly inappropriate to a window intended to admit light. Besides, every passing cloud will alter the illumination, so that the picture can only be properly seen in the form in which it is intended to be seen. The simple plan is to keep the subject (as in a bas-relief) as nearly as possible upon one plane, to group the figures for decorative rather than pictorial effect, and to shade each object separately so as to bring out its form without attempting to work out the relative lights and shadows as they would appear in actual fact or in an oil painting. But subject to these restrictions the drawing should be made as perfect as possible, as in copying or engraving. Then anatomy would be an obvious anachronism. The composition should be inspired by modern ideas, and the style should be such as results from the natural expression of the artist's thoughts and tastes.

So far we may all agree with Mr. Holiday, but perhaps the most interesting feature in the book is an omission which goes far to explain why his glass is with its subject, its thought and colour and sentiment, still so unattractive. "Beginning with design," he writes, "the first all-important consideration for the glass-painter to keep in mind is that he has to decorate a window." This is his second duty; his first (so strangely overlooked) is to decorate the building. When glass painting was a living art, the window was regarded as part of the wall and ornamented in the same sort of way as a piece of wall might have been ornamented, the only difference being that the one was transparent, the other opaque. In early times the entire window was filled with a geometrical pattern enclosing figure subjects in a series of circles or quatrefoils. Later the figures stood alone, absolutely without background, or they were enclosed in geometrical or architectural compositions. And the drawing is generally restful and sculpturesque. The eye passes naturally from wall to window and on again to wall without being necessarily arrested by the glass. Indeed, the best glass is perhaps the least conspicuous. But Mr. Holiday's glass asserts itself at once as something apart from the building. His coup de grace in Salisbury Cathedral is beautiful, but it is an addition to the building. You may look at the glass and enjoy it, you may look at the architecture and admire that; but there is no pleasure to be got from looking at the architecture and glass at the same time. And the same is true of the west window of St. Saviour's, Southwark. Vaguely, it is clear, Mr. Holiday feels for this, for he dwells on the beauty of the light on the wall, but most he is true to his own style, urging that different styles, so long as they are honest, always harmonize together, while to copy the pre-existing style of the building always results in failure. Though there is much truth in this it is not the whole truth. The nave of Westminster Abbey is a copy of the choir and a failure, while the mixture of Norman and Decorated in the nave of Albans is almost grotesque. The truth seems to be that the artist should think first of the building and only secondly of his own art. The real trouble, however, comes from the fact that Mr. Holiday's style is not architectural. The rounded forms and rapid motion in which he delights require a strong setting of architectural or at least geometrical borders to make them harmonize with the rigid lines of a stone building, and such borders he rarely introduces. But the plates at the end of the volume show how the most modern glass may be given the true architectural character. Mr. Richmond's windows at St. Paul's are comparatively simple examples, since they consist almost wholly of geometrical ornament, but Sir Edward Burne-Jones's Birmingham windows are masterpieces of design. The subjects occupy the whole space. The vertical and horizontal lines are so strongly marked, that the figures so stiffly yet grandly drawn, that the composition looks almost as if it would stand by itself, and needs no adventitious aids to make it harmonize with the surrounding architecture.
STAINED GLASS AS AN ART
Stained Glass as an Art

BY

HENRY HOLIDAY

WITH

A COLOURED REPRODUCTION OF THE DRAWING FOR 'THE CREATION'
TWENTY COLLOTYPEs, AND MANY ILLUSTRATIONS IN THE TEXT
FROM DESIGNS BY SIR EDWARD BURNE-JONES
W. B. RICHMOND, R.A., AND THE AUTHOR

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PREFACE

THIS essay will, it may be hoped, sufficiently explain itself without introductory remarks, but a few words are wanted about the illustrations.

In the first place I desire to express my sincere and cordial thanks to my friends Sir Edward Burne-Jones and Mr. William Blake Richmond, for their courtesy in allowing me to reproduce some of their designs, and thus to give specimens of the best work in stained glass of the nineteenth century. In the next place I must explain why the direct illustrations of my text are taken from my own work only.

Considerations of convenience and of good taste determined me to take this course. I am quite convinced of a general accord between my brother artists and myself as to the main principles laid down in this treatise, but it is more than probable that we may differ on minor points; and I might find myself quoting some features in their designs in illustration of an argument of my own, with which they might not wholly agree; I might read something into their work which was not really in their intention.
On the other hand, there are some few matters about which we do not absolutely agree, and by employing my friends' designs in direct illustration of my principles, I might appear to be guilty of an inconsistency, unless I adopted the objectionable alternative of calling attention to the points in question for the purpose of adverse criticism.

But the consideration of convenience alone would almost have compelled me to make the decision. Obviously my own designs, whatever their demerits, express my own ideas, and will accord with my text, for the illustration of which alone they are introduced; and they were all at hand. If I wanted an example of any point, I knew where to find it, and could get the drawing out and have it photographed. As I proceeded with my work, I found any other course would have been impracticable.

Of my friends' designs let me say that if they indicate any views slightly differing from my own, the difference is not such as to affect my admiration of them. I have selected them as instances of beautiful design and workmanship, and as such I commend them to my readers if they desire to see to how high a level the beauty of stained glass can reach.

HENRY HOLIDAY.

Oak-tree House,
Branch Hill,
Hampstead,
Dec. 1896.
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STAINED GLASS AS AN ART

INTRODUCTORY

A LARGE number of persons in every civilized community frequent picture galleries, and most of these claim to understand something about the art of painting. Some make the claim justly; they may not be productive artists, but they have the receptive faculty. Possessing powers of observation and using them, they have a keen eye for truthful presentations of nature, whether as regards form or colour, action or expression. Others pay little attention to nature, and passing unnoticed most of the more subtle and delicate beauties she presents to them daily, bestow their admiration chiefly on scenes which impress them from their novelty: an exceptional sunset, the sun breaking out after a storm, an imposing piece of mountain scenery, &c. These will be most attracted in an exhibition by clever imitations of the more cheap and obvious effects.

If their powers of thought have been generally cultivated, they will be aware that no faculty can
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be matured without study and practice, and they very commonly disclaim any special right to pronounce opinions or pass judgments on works of art. All the same, they have opinions, and in their secret hearts they consider these opinions very sound, and probably they would be much more worth hearing than the ‘æsthetic’ jargon of the would-be critic who used to talk about ‘chiaroscuro’ and ‘impasto,’ and now talks about ‘values’ and ‘relations.’

An artist ought to meet respectfully those who modestly define their position in the familiar words, ‘I don’t profess to understand art, but I know what I like?’

As regards stained glass, very few have arrived even at this unpretending stage. Very few know even what they like, or if they have preferences they could give only a very vague account of the meaning of those preferences. All would agree in condemning the garish performances of certain tradesmen who, in the earlier part of this century, defiled nearly all our cathedrals with their stained glass; but if they find in a window tolerably good taste as to colour, and fairly good drawing, they hardly know what more to look for. If it were a picture they could appeal to nature as their standard of comparison, but that is out of the question here, and they are at a loss how to prove that one window is better than another.

The case is further complicated by the prevailing vague impression that stained glass should be rather mediæval. How mediæval it should be, or why it should be mediæval at all, or which of the totally dissimilar mediæval styles it should resemble, is not clear, but that it should be mediæval in some undefined way is a popular belief. Little wonder then
that the amateur feels no firm ground under his feet when approaching the subject of stained glass.

The following pages are addressed mainly to those who have cultivated their perceptive faculties generally, but find themselves thus bewildered by uncertainty as to the essential factors determining the nature of the particular art here discussed.

There is no royal road to anything worth having, and those in whom the sense of beauty has been undeveloped, will gain nothing by reading a treatise, but it often happens that where technical arts are concerned, many whose sense of beauty is by no means dormant, find the free exercise of that sense impeded by lack of knowledge concerning the materials employed, and by misapprehensions arising from the unfortunate conditions by which in the present day all technical arts are heavily handicapped—none more so than stained glass.

The nature of these adverse conditions need only be briefly referred to. In a picture, a poem, or a musical score, the conception and its development are the work of one man, but in the technical arts, mosaic, tapestry, metal work, carving of wood and stone, and other crafts, the element of manufacture enters; furnaces, looms, &c., and workmen are wanted. There is an opening for the investment of capital and the running of a 'concern.' Profit begins to peer in with his greedy eyes, and when Profit comes in at the door, Art flies out at the window.

Thus when stained glass was revived with the Gothic movement early in the century, it was taken up as a trade. The first crude idea of the Gothic revivalists was that a Gothic church must have Gothic figures, and thus for Gothic figures there was a large demand. Art could not meet so absurd
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The artist omitted.
The cheap and nasty.
Consequent general desecration of churches.

Nearly all commercial stained glass designed by unknown employés.

a requirement, because an artist only draws figures as he knows and feels them, not as someone else felt them five or six centuries ago, but this gave rise to no difficulty. Trade rushed in where artists scorned to tread, and the supply was soon equal to the demand. As the artist was dispensed with there is little doubt that the stuff supplied was cheap; there is none that it was nasty. In the whole black list of offences for which trade is responsible there is probably nothing which for its enduring odiousness can compare with the sacrilegious desecration of our noblest buildings unblushingly carried on for money-profit through a considerable part of this century.

The subject will have to be touched upon again at a later part of our inquiry, but it was necessary to say thus much here to assist us in rightly understanding the difficulty which besets the amateur in forming any standard in his mind which he can apply to stained glass: for though matters have greatly improved, the fundamental evil still remains. Growth of public taste compelled the more prominent firms to seek the help of artists in their more important works, and some of the firms established in more recent times contain among their members men of artistic ability, but the bulk of the work done by all the commercial stained glass manufacturers is designed by unknown employés who have been unable to make a position as original artists, and it is done to order in a prescribed style.

The prescribed style of the earlier period was intolerable. Under the more exacting demands of an improved public taste the prescribed style of to-day is 'tolerable—but not to be endured.'

For it is still trade and not art. Now and then an artist is called in and given a free hand, and
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a genuine work of art is produced; but such cases are exceptions, and the bulk (probably ninety-nine hundredths) of the stained glass which now fills our churches is produced for profit like any other manufacture. Where then can the inquiring amateur arrive at an artistic standard with reference to stained glass? He can find the kind of drawing, the sort of colour, and the degree of sham mediaevalism, demanded by the philistine and supplied by the trade, and, as a rule, he can find little else. A few exceptional cases apart, he cannot find the original conceptions of artists produced with the single-minded desire to give the best that is in them.

In the better picture galleries he will find every variety of excellence and incompetence represented, and among other varieties I fear he will find works by men who so far descend to the commercial level that they paint for the market, but even these are not working under another man’s control and for that other man’s profit. What they give is their own, such as it is; it will not find a market unless it excels in some way, possibly only in the more superficial qualities, such as satisfy no cultivated artistic mind, but if the work has acquired popularity, it must be owing to some kind of originality, some degree of exceptional ability, something personal to

With a few exceptions commercial stained glass is merely kept up to the average public taste. Pictures good and bad are the work of the artists.

Employés of stained glass firms all trained

1 It need hardly be said that Profit must not be confounded with Pay; under existing conditions all work must be paid for. Profit is where a man does not do the work, but pays so much for it and sells it for so much more, and whose income depends upon how much he can make out of the transaction. It is a question of Capital and Interest qualified by the amount of personal superintendence involved, only this superintendence is not paid for according to value, but depends upon how much the capitalist can get out of the workman, with the obvious result that it is to his interest to get the cheapest work available that will just satisfy popular requirements.
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the painter. He has not been trained with a dozen others to produce one cut and dried style of work that will satisfy the requirements of a business firm.

Our inquiring amateur, if he really pursues the subject, will soon discover this cut and dried sameness in the commercial stained glass of the day, and will feel the difference between the splendid work of the thirteenth, fourteenth, and fifteenth centuries, and the modern shams which profess to be in the styles of those periods, but he may easily find himself much at sea as to what he should look for, and may possibly not reject a helping hand offered by one who can speak from long experience.

I have endeavoured to divine correctly the difficulties which beset the educated outsider who desires to look at stained glass intelligently, because this seemed a necessary preliminary to their removal, and will now address myself to the more interesting task of showing what the material can do and ought to do.

For this purpose three things are indispensable:

1. A brief but clear account of the technique and methods pertaining to the material.

2. An examination into the artistic possibilities inherent in it from the point of view of its technique.

3. A consideration of the artistic question in relation to the situation and purpose of the work.

We will take these three divisions in order, and treat them as clearly and simply as the subject permits.
STAINED glass window consists of pieces of white and coloured glass, on which lines and shadows have been painted and burnt in, joined together with grooved leads.

The colour is in the glass itself, being introduced while it is in a state of fusion. It would be quite foreign to the present inquiry to treat of the ingredients employed or any of the processes of glass-making, but a few words will be necessary to explain exactly what kind of material the glass-painter has to deal with. The colour as a rule equally pervades the whole of a sheet of glass, so that the only variety in any one sheet arises from its unequal thickness, the thick parts appearing necessarily deeper and the thin parts lighter. There are, however, some exceptions to this rule: ruby glass, for instance, is so intense that no light would pass through a piece thick enough for practical purposes, and to meet this difficulty the glass-blower dips his rod first into melted white glass and then into ruby, so that the knob of white
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glass is coated with the ruby. When this is blown out the result is a sheet of thick white glass covered with a thin superficial layer of ruby. This ruby face is often very unequal in thickness and streaky in character, qualities which are useful to the artist. Flashed glass (as it is called) has this further advantage, that the thin film can be bitten out with fluoric acid, partly or entirely, so as to lighten the colour or remove it altogether and expose the white glass.

Beside ruby there is a flashed pink made with gold, rather cold in colour, but by flashing it on pale yellow glass instead of white a very glowing beautiful colour is produced. Some blues also are flashed.

The beauty and variety of the colours now obtainable is very great, and the belief entertained by some that stained glass is a lost art is wholly without foundation. Some few colours which were in use in the early periods have not been yet reproduced, but we possess many of great beauty which were not known then, and artists owe much to the well-directed efforts of the leading glass-manufacturers who supply them with such excellent material.

It has been said that the colour of any sheet of glass equally pervades the whole, varying only in depth, according as the sheet is thicker or thinner. Occasionally, however, 'spoiled' glass is to be had where a little of one colour has remained at the bottom of a pot in which another coloured glass is melted, in which case the old colour gets streaked into the lowest part of the new, sometimes with very charming results. No good art ought to depend on accidents, but every true artist ought to be able to utilize a happy accident when it offers itself. The
pure coloured glass in which the hue penetrates the whole material is known to the craft as 'pot-metal.' Streaked sheets of blended colour are euphoniously styled 'streaky pot.'

In the most ancient stained glass the only colours obtained were those of the pot-metal, but early in the fourteenth century a mode of imparting to the glass a charming yellow stain was discovered, and the artists of the time soon learnt to make excellent use of it. It enabled them to give great variety to white glass, and, as a natural consequence, white glass was henceforth used much more freely, but the stain can be used on many other colours, and when applied to blue glass gives many agreeable varieties of green.

In later years glass was painted on the surface with enamel colours, but this was in the decadence of the art; the colour so obtained lacks the richness and transparency of the pot-metal, and the endeavour to avoid the use of leads by getting several colours on to one piece of glass, injured the work in a way which will be more conveniently considered when treating of technique.

A few words must be said about the lead. This will be familiar to most readers in ordinary lattice-windows, and it is only necessary to say that it is made in thin flexible strips, grooved on both sides so that the section is as shown in Fig. 1. The projecting portion which encloses the glass is called the leaf; the centre portion which lies between the adjacent pieces of glass is called the heart. The leads are made of various sizes; that which goes round the outside of a window to bind it together being necessarily thick.
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and strong. In old windows the leads which unite the pieces of glass are narrow, not thicker than most of the outlines. Much wider leads are often used now, for no good reason that I can perceive; they certainly have a coarse and clumsy appearance.

There is another important material essential to the construction of a stained glass window, and that is the iron. Small pieces of glass united with flexible leads would be unable to stand any pressure of wind without the support of iron-work. In Early English buildings, where the windows were often very broad and without mullions, the iron-work was a very important feature, and it was usually disposed in geometrical figures, which were made the basis of the design of the window (see Fig. 2). Mullions and narrow lights gave neither occasion nor scope for such treatment, and the iron-work as a rule now takes the form of simple horizontal bars with the occasional addition, if the window is rather broad, of an upright stanchion.

It remains only to mention the pigment used for lines and shadows. This has to be of a kind that can be fused in the kiln without being destroyed. The glass, when painted and put in the kiln, is watched through a spy-hole by the kiln-man, who lowers the heat just before the glass reaches melting-point; at this moment the pigment is fused, and the surface of the glass so far softened as to unite with it firmly. If properly fired, the lines and shadows will be absolutely incorporated with the

1 Mr. Richmond tells me that for windows in St. Paul's at a great height and with much white unpainted glass he has found very broad lead valuable. I can well understand this. The above remark refers to painted and coloured glass at ordinary heights.
glass, and should present a smooth, silky surface. It need only be added that there are some slight varieties of the pigment, that which is used for the lines being quite opaque, while the shadows are painted with a monochrome of a black or blackish-brown colour of so transparent a quality that it does little more than deepen the natural hue of the glass, unless the shadow be a very dark one.

We are now in a position to understand the artistic possibilities inherent in stained glass, and to consider by what technical methods these may be developed.

There are windows in existence which consist of little more than a mosaic of pieces of coloured glass leaded together without shadows and almost without lines; there are a number such in the cathedral at Pisa, in some of which even the heads are without features, and I have heard this treatment defended by very good authorities.

The designs in the glass at Pisa are good, and the combination of colours agreeable, but the effect is not impressive, being at once bald and gay, rather than mysterious and solemn, as is the case with the best early windows where lines and shadows are employed. At the same time all intellectual interest is sacrificed by the method. All that is there can be seen at once, and nothing is left to arrest the attention, nothing to occupy the thoughts. The eye alone is addressed, and the eye is disappointed.

If it were otherwise we could dismiss the subject of technique quickly, as there would be none to discuss; but if we are to aim at an art which shall possess dignity and elevation, and not content itself with being kaleidoscopic, the technique will be very important.
The difference between art proper and a technical art may be readily illustrated by comparing a picture with a stained glass window. In the former the sole object of the artist is to produce an impression on the mind through the eye by means of form and colour. The canvas and pigments are merely means to an end, and have absolutely no value or utility apart from that end. In the latter the primary object is to glaze an aperture in the wall of a building for the purpose of admitting light and excluding weather. The glass, lead, and iron are primarily means to this end, and the question whether they shall be so treated as to constitute a work of art is a secondary one. A simple desire for beauty might sufficiently account for the introduction of artistic form and colour into glazed windows, but practical considerations may have led to the same result.

When civilization moved northward, where high-pitched roofs and weather-proof buildings were required in place of hypæthral and other classic forms employed in Greece and Italy, the question of admitting light without weather became important, and the use of glass was greatly extended. But large apertures filled with white glass would give far more light than was agreeable or necessary, and the reduction of the light by making the apertures small would illuminate a large building in a very unequal and unsatisfactory way; it was desirable, therefore, to subdue the light without diminishing the scale of the windows, and coloured glass supplied an obvious means of doing this effectually, and in a manner susceptible of artistic treatment.

The treatise of the monk Theophilus on the making of glass and of stained glass windows is attributed to the tenth century, earlier than any
extant stained glass, and yet in this work he describes the designing and executing of figures, draperies, &c., in coloured glass, so that at this early age the art had reached a high development and was devoted to the representation of figure-subjects.

Stained glass is thus strictly a technical art. The glazing of the open window space and the subduing of the light are purely practical matters, and the artist, having to deal with pieces of coloured glass, has to consider how these can be treated so as to be beautiful to the eye and interesting to the intelligence.

The first obvious fact in relation to the material is the splendour of its colour. Nothing painted with pigments on an opaque surface can compare with coloured glass for intensity, glow, and brilliance, or for the width of its range from dark to light. If a painted picture is placed in a good light, the darkest colour in it is fully illuminated so that it can contain nothing really dark; and, on the other hand, the most brilliant light in a painting is dull compared with the sky. Whereas in a stained glass window the darks are very intense, being seen against the light, while the lights are the light of the sky itself, and every colour glows with that same light transmitted through it.

Thus for jewelled splendour of colour, stained glass stands alone; but, on the other hand, it is wholly unfitted for imitating natural effects, consisting as it does of sharply opposed colours separated by thick black lines.

From which considerations it follows that any treatment of the material which does not develop its capacities in the way of glorious colour, and which does aim at pictorial realism, must be a failure;
and yet such is the perversity of the modern decorator, that a school of stained glass painters was established in Munich, and a very popular school it became both here and abroad, which endeavoured to make stained glass windows look like oil paintings, with the result that they look like painted window-blinds. Except in the matter of composition and arrangement of colour, there is hardly a point in common between the beauties attainable in stained glass and those presented by nature and imitable in a picture.

Nature is full of subtle play of colour. Whether we look at the infinitely tender gradations of sky and cloud, at the equally tender and delicate transitions in the colour of the human body, at the alternations of grey light and green transparent depth in foliage, at the glitter and sheen of water, or at any other of the numberless beauties which nature offers us in such lavish profusion, we find on every hand qualities so delicate and complex that only the greatest painters, employing a material of almost unlimited subtlety, have successfully interpreted them, while stained glass offers no means of making even the most distant approach to their presentation.

The very abundance and variety of these beauties is bewildering to the ordinary observer, and it is only when certain aspects of them are selected and presented to us by a Veronese or a Correggio, a Turner or a Watts, that we become fully aware of their existence.

The people who thought they could imitate these tender and delicate gradations by means of pieces of coloured glass joined together with strips of lead can never have perceived their beauty at all, or they
would not have produced the vulgar caricatures of it, which are the distinguishing characteristic of the Munich school.

It is not surprising that men who were so blind to the beauties of nature were equally so to the splendour of the noble works in stained glass left us by the artists of the early middle ages. When one turns from one of these glorious windows in a continental cathedral to the modern Munich chromo-lithograph transparencies (for they are like nothing else) that are often found side by side with them, one marvels that such dense blindness to all that is fit and beautiful should be possible.

But with trade all things are possible in the way of vulgarity and ugliness. Profit is the aim, and as the thing pays, what more can we want?

So far I have only noted the impossibility of imitating natural effects in stained glass, and the necessary poverty of work produced by men blind enough to make such a hopeless attempt; but this is only half the question, for if it were possible by some yet undiscovered method to obtain in glass perfect representations of nature, the result when placed in a window would be absolutely ineffective, and the labour would be worse than lost. The leaded coloured glass of the windows at Pisa, without lines and shadows, would be immeasurably superior as decorative art to any such realistic work, however successful as an imitation of nature. The pearly greys, the half-tints, and the gradations, which are the delight of the painter, would all be thrown away in a cathedral window where they could not even be seen. It has been said that glass offers greater contrasts of light and dark than are possible to the painter with canvas and pigment, and it might
be contended that powerful effects of chiaroscuro would be a legitimate subject of imitation with the glass-painter, but there are at least two sound objections to this view.

1. Such effects are occasionally to be seen in nature, and have been represented with noble results by certain painters, by Rembrandt in particular; but within the strong contrasts of light and shade will be found those half-tints and subtle transitions of colour which are wholly foreign to the nature of stained glass. If these were eliminated the work would be vulgar and theatrical, as is the case in all attempts to present such effects in glass.

2. Where these strong contrasts exist, there must necessarily be large masses of very deep and even impenetrable shadow. Such masses of shadow make a window heavy and gloomy, and exclude all that glowing and glittering beauty which is the peculiar glory of the material.

I met lately with a curious illustration of the ineffectiveness which follows from any attempt to imitate nature in stained glass, when a friend at Bayreuth invited me to his house to see a 'picture,' which turned out to be a copy of a picture executed in glass. It was a piece of still life, fruit, &c., and the whole room was darkened, except the portion of window space occupied by the 'picture,' to show it off.

It was produced by a method devised to obtain variety of colour without leads or other joints. The system was ingeniously conceived and cleverly employed. It gave not only varieties, but graduated transitions of colour, and my friend was confident that it would give the death-blow to the existing mode of treating stained glass.
The method adopted was to use three sheets of flashed glass, red, blue, and yellow, and by skilfully biting out some or all of the coloured films, to get the required varieties of colour. If all the films were left intact, the result was deep neutral shadow; if all were bitten out, pure white was left; if two colours or one were wholly bitten out, a pure primary or secondary colour was shown; and finally, by the partial removal of the different films, it was possible to obtain a practically unlimited variety of intermediate tints, any of which could be graduated one into the other.

Here, then, was a fair opportunity of judging of the effect of realism in stained glass. Examined close to, as one would examine a small picture, the result was interesting, and showed some good qualities. There were no painted shadows, it was all pure glass, so that the colours were luminous, and in no part had it that muddiness and impurity so common in oil pictures other than those by really good colourists. But on looking at it from the other side of the small room in which it was exhibited, and regarding it as a piece of decoration, it was hopelessly ineffective. The mere thought of a window so treated was depressing. The contrast in depth between the solid opaque wall in full shadow and the clear space of open sky is so great that, if the space is to be treated decoratively, there must be corresponding contrasts in the work, and the lead lines are as invaluable for decorative as for structural purposes. Without them the work looked poor and flat. Another fatal defect appeared at once. It was essential to the would-be realism that the light transmitted through the glass should be clear and equal. This can never be ensured in
church or other windows where trees or buildings are always liable to obstruct the direct light.

This is regrettable in the case of stained glass proper, which is always seen to greatest advantage against clear sky, but it is fatal to a realistic picture to see objects through it. In the small specimen I saw (about two square feet) it was easy to get the whole of it against clear sky, but even so it never looked right, for the sky itself would not behave with proper consideration. It was a fine day, with blue sky and bright white passing clouds. These clouds were perfectly visible through the picture, the 'values and relations' of which were all thrown out in consequence, one part appearing to be in a cold blue shadow, and another in a bright warm light, quite foreign alike to the painter's intention and to any natural effect, since a passing light would illuminate only one side of the objects upon which it fell, making the shadows appear more intense by contrast, whereas in our transparency the cold blue and warm white cut across lights and shadows with perfect impartiality, giving an appearance of flatness and unreality to the whole.

This defect might be partly remedied by backing the picture with ground glass, but this would destroy the transparency, which is the one redeeming feature of the process.

Yet another objection of a practical kind is fatal to the method. It can only be carried out in sheets of moderate size, such as the specimen shown to me, so that a stained glass window carried out in this manner must consist of very small pictures, invisible at a moderate distance, enclosed in iron or wooden framework; or if the subject extend over several such sheets, these must be united with bars of some
kind, which, however thin, must absolutely disfigure the realistic picture, as the bars and lead lines absolutely enhance the brilliancy of the decorative work.

I venture to think that any person of artistic feeling who may have a vague sense that stained glass would be improved if it could attain to a closer imitation of nature, would be cured of such a fallacy by an inspection of a work produced by the method just described.

I have to some extent anticipated a later part of our inquiry in thus treating of the artistic possibilities to be found in stained glass, but it will be noted that I have only considered the point in its negative aspect. I have shown what the material cannot do and should not be coerced into attempting; and so much as this I felt was desirable, in order to clear the ground that we might be able to enter upon an examination of the genuine technical methods applicable to our material with a better idea of their true aim.

It will perhaps be convenient here to describe these methods categorically.

In the first place, the artist must be supplied with an accurate scale drawing of the window to be filled, and with all essential particulars as to its situation, such as its height from the ground, its aspect, the distances from which it will be seen, external surroundings, &c. The first process, then, is to make a design, a coloured sketch on a small scale.

The next, to an artist who is careful about his draughtsmanship, will be to make studies of the nude figures and of the draperies.

Then, having obtained accurate full-sized patterns of the window spaces, or 'lights,' as they are

Necessity of showing that realism is impossible in glass before opening inquiry into technique.
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technically called, cartoons on the actual scale of the window must be prepared from the sketch and studies, which should give with perfect completeness the outlines, the shadows, the leads, and even the bars, all in fact but the colour, which has been given in the small sketch; for the artist should be thinking of the work as glass from first to last, and the various structural essentials proper to the material should not only be present to his mind, but should form a part of his design. In some of the illustrations which follow, I have to some extent departed from this practice; that is to say, after so many years devoted to this kind of work that the retention in my mind of the nature of the material became automatic, I allowed myself, for particular purposes, occasionally to finish a cartoon as a drawing, in which case I made a separate tracing to show the leads and bars.

The selection of coloured glasses has now to be made, and for this purpose the artist requires a frame with specimens of all the sheets at his disposal. These are commonly leaded together, but I find it very desirable to keep them loose in a frame so constructed that the pieces can be readily shifted for the purpose of trying the effect of any one colour by the side of any others. I find it necessary to keep a large stock of different sheets, not for the sake of getting many colours into one window, but to get as much play as possible into each colour. A piece of blue drapery, for instance, will probably be made up of eight or ten different blues. If executed with one, the effect would be very monotonous and bald. A large stock is also necessary in order to get the precise harmony required for a particular design, however simple
that design may be. The sheets and samples are numbered to correspond, so as to make the reference easy for the cutter, to whom the cartoon must now be transferred.

His first step is to get a ‘cut-line’ drawing prepared. This is done on tracing cloth, and consists of black lines drawn along the centres of all the leads and bars, numbers corresponding to the sheets to be used being inscribed in all the spaces.

The cutter, having laid this drawing upon his table, takes the various sheets indicated, and placing them in succession over their proper spaces, cuts them to their required shape by letting his diamond follow the black lines seen through the glass. The cutter ought to be a man of judgment and ability, because though the artist has indicated the colours to be used, there is scope for still further variety arising from the varying thickness in the individual sheets, and, with the sketch and cartoon before him, a good cutter will know how to avail himself of the gradations in depth so as to assist the light and shade in the design.

The painter now takes the pieces of cut glass, and placing them upon the cartoon, he traces the outlines upon them with the opaque pigment before mentioned, some lines however being kept transparent in quality, where they are not meant to be too obtrusive, particularly in the case of ornamental diapers, which are often intended to give texture only to the glass, and not to assert themselves conspicuously.

The pieces of glass thus painted are now put into the kiln, where they are fired until the painted lines are thoroughly incorporated into the glass itself.

For the ensuing processes of shading it is necessary
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Setting out the glass for the painter.

that the glass should be seen as a whole against the light. For this purpose a sheet of plate-glass is taken, large enough to include the panel under treatment; this is laid on a table with the cut-line drawing or cartoon underneath it, and the pieces of glass with the outlines are fitted into their places with the aid of the cartoon seen through the glass, until the whole is set out like a dissected puzzle. It will be remembered that the pieces of glass cannot touch each other, because allowance has to be made for the 'heart' of the lead. The cutter makes this allowance, and, as a consequence, there is a narrow space between every piece of glass and its neighbours as they lie upon the sheet. In these spaces melted wax is now dropped at intervals, which make the loose pieces adhere to the plate-glass. The plate, which is always framed, can now be lifted up and placed upon an easel so constructed that no bars or legs interrupt the clear view.

Shading.

The painter, if he has proper regard for his work, will, before beginning to shade, paint black lines on the back of the plate-glass to fill up all the interstices so as to represent the leads, because the presence of these lines of bright light would greatly disturb the effect and falsify it, since in the finished work the leads would necessarily appear black. The painter having his easel now before a clear window, with the cartoon set up at his side, proceeds to shade the glass. It need hardly be said that the painter must be an expert draughtsman; indeed, he should be an artist in every sense of the word, except as regards the creative faculty, since the interpretation of the artist's design depends upon his artistic perception and his accuracy of eye and hand. The painter of a stained glass window is, in fact, to the
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designer, what the pianist or violinist is to the composer of the sonata.

We have now to consider the question of the mode of shading. In the very early glass, where the pieces were very small, the leads many, and the outlines thick, the amount of shading was small, the glass being already almost sufficiently toned by the multiplicity of leads and lines, so that much shading would have rendered the glass too dark; a slight smear shading was then employed, strengthened with cross-hatching, which let more light pass through than a heavier tone of shadow would have permitted. With the development of the art larger pieces of glass came into use, and a stipple-shading was adopted, which allowed a much more delicate finish than was possible with the earlier method. In the later decadence of the art the shading was greatly exaggerated, the architectonic conditions, depending on the destination of the work, were lost sight of, and the true genius of the material ignored; but the stipple-shading was developed when the art was at its best, and is in common use now together with another method, consisting of a series of 'matts.'

This latter method I will describe first. The more transparent shading colour is laid over the whole of the portion to be treated in a flat wash, and then lightly brushed over with a badger 'softener' till it is quite even. When dry, the lights are taken out of this with a hoghair brush with the hairs cut short, called a scrub. At this first stage the matt is freely removed so as to remain only where the shadows are darkest, graduating rapidly into the clear glass. A second matt is now laid over this. As the colour is mixed with gum, the first matt is not washed off by the second if this
latter is laid on and softened quickly enough, which requires some practice and skill on the part of the painter. The lights are then again removed, but much less freely, only small portions of the glass being left quite clear. A high degree of delicacy of gradation and modelling can be obtained with the scrub when handled by an able draughtsman, and the glass at this stage ought to look fully shaded.

The pieces are now removed from the plate and again put in the kiln, where the colour is well burnt in, so that the surface of the painted glass feels quite smooth. It will now appear much paler than before firing. For some purposes this is sufficient, but as a rule, especially in large scale work and where the light is strong, it would look thin.

The painter has therefore generally to have the glass rewaxed to the plate, and to repeat the two matt processes till he has obtained the necessary vigour and depth in his work. The strength could be obtained by painting the first matts thicker, but the scrub-marks in that case would look coarse and scratchy.

The glass has now to be fired in the kiln for the third and perhaps the last time.

In many cases, however, additional work may be required before the glass is ready for leading, or, as it is technically called, 'glazing.'

Revision and correction may be needed. Some parts may be too dark, and will have to be refired to make them lighter; some may be too light, and will want repainting and refiring. The yellow stain also generally wants a separate fire. The degree of heat necessary to fix the shading colour thoroughly would make the stain much too dark, so that the stain, which is usually applied to the back of the glass, is not added till all the shading is finished and burnt in.
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The difference between stipple-shading and the Stipple-matt system lies in the manner of laying on the shading colour. Instead of lightly brushing it to an even tint with the badger, the painter dabs the wet wash lightly with the points of the dry brush, so as to give it a granulated surface. This can be made even all over the part under treatment, or it can, by a little manipulation, be somewhat graduated so as to be thinner in the prominent and lighter parts of a figure. The stippled ground can then be treated in all respects like the matt, with the scrub, and the repeated firings. The artistic advantages of the two methods will be more conveniently considered later on.

The glass is now ready for the glazier, who begins by laying the cut-line tracing upon the glazing bench and pinning it out quite straight. Then he nails straight bars of wood along the base and one side of the window or panel of the window he is glazing, to form firm starting lines, and, beginning with straight strips of lead along these, he lays the first piece of glass in the corner, fitted into the grooves of the leads, and, cutting a fresh piece of lead long enough to cover the other edges of the piece, he fits it on to them, and so on with every new piece, inserting nails at intervals, in the interstices, to keep the pieces firmly in their places. When the glass and leads are thus set out and enclosed in a strong surrounding lead, every joint is soldered, so as to unite the hitherto disjointed pieces into a connected whole, which is then carefully turned over and soldered on the other side.

The window is now complete as a work of art, but it needs yet two processes to make it ready for.
its destination. As it stands it would not keep out weather. To achieve this necessary object, cement is laid over the whole, rubbed well into all the leads on both sides, and finally cleaned off the glass. This, when hard, has the effect of stiffening the work as well as making it weather-proof.

It will be remembered that, owing to the flexible nature of this kind of glazing, horizontal saddlebars, or other form of iron-work, have to be employed, to enable it to resist pressure of wind. In order to provide means of binding the stained glass to the iron-work, copper wire is cut into short lengths, and the middle of each piece is soldered to the leads wherever they will be crossed by a bar. When the window is being fixed, the loose ends of the wires are bound round the bars and twisted together. In the case of all but very small windows, the work has to be divided into panels, as a large piece would be too unwieldy to move about without breaking. These panels are always made to correspond with bars, so that the top of one, and the bottom of the next panel above it, shall meet at a bar, and the binding-wires of both be twisted round it.

This completes our description of the processes involved in the production of a stained glass window, a description somewhat cursory, no doubt, and insufficient to instruct the craftsman, but full enough to enable the amateur to understand the technical conditions of the work he is looking at.

Briefly, to recapitulate, we have seen that the material at our disposal consists of: (1) Glass, coloured in the manufacture, some homogeneously throughout, and some consisting of light glass, coated with a film of deeper colour, called 'Flashed Glass,' in which the film can be wholly or partially
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bitten out with acid, the available colours being many and beautiful; (2) Shading pigments, with which the glass can be deepened without greatly affecting its colour; (3) A very transparent golden yellow stain; (4) Spoiled glass, or 'Streaky Pot,' where colours have been accidentally blended in a manner often useful to the artist; (5) Grooved leads, giving bold and vigorous outlines to the glass; (6) Strong iron-work to support the otherwise too flexible glazing against pressure of wind.

We have also seen that the processes involved in the production of a window with these materials are as follows: (1) The making of a small coloured design; (2) Figure studies; (3) Full-sized cartoons; (4) Selection of glass; (5) Making of a cut-line drawing; (6) Cutting the glass; (7) Painting the outlines; (8) The first firing; (9) Setting out the pieces of coloured glass on plate-glass for the painter; (10) The first shading with 'matt' or 'stipple'; (11) The second firing; (12) The second shading process; (13) Third firing; (14) Corrections and yellow stain; (15) Fourth firing; (16) Glazing; (17) Cementing; (18) Binding.

It will be perceived that even a small piece of stained glass demands all these eighteen processes.

We have also cleared the ground by considering the insufficiency of mere leaded glass, without lines or shadows, to satisfy the eye or the intellect, and we have exposed the irredeemable vice of attempting to imitate natural effects in stained glass; so that I venture to hope we have reached a stage at which we can satisfactorily consider how best to apply the above processes to the materials at our disposal, if we desire to obtain the highest beauty which they are capable of exhibiting.
ARTISTIC POSSIBILITIES INHERENT IN STAINED GLASS FROM THE POINT OF VIEW OF TECHNIQUE

Form.

COLOUR has already been dealt with at some length for the purpose of showing what stained glass can do in a degree unequalled in any other art, and what it is absolutely incapable of doing, but form has not yet been touched upon, and we shall find that form stands upon a totally different footing to colour.

In stained glass anything can be achieved in form as well as in any other material (with the exception, of course, of sculpture, which deals with 'the round'); the glass can be just as readily cut to one shape as to another, and outlines can be drawn upon the glass as freely as upon paper or canvas. Not only so, but light and shade can be given in any required degree of strength or tenderness, breadth or finish.

It follows that deliberate inaccuracy in drawing is purely gratuitous, and when applied to the human
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Figure is a gross and ridiculous affectation. I shall endeavour to show presently that in the matter of light and shade, much that is possible to the material is not desirable from the point of view of decoration, but I propose first to deal with form in its contours.

It is a common view that colour is the one important quality to be sought for in stained glass, and that form in this material is a secondary matter. I cannot share this opinion. A moment's consideration must show that in no other material is form so conspicuously prominent as in this. The sharp opposition of the colours, the brilliancy of the lights and depth of the darks, and the vigorous outlines given by the leads, all combine to emphasise every form to a degree which even at times compels the artist to adopt methods for suppressing its aggressive prominence.

It follows that both design and draughtsmanship are of the highest importance in glass, and in the early ages this was fully appreciated.

I give a copy of a very fine window from the nave of Chartres Cathedral, which exhibits these qualities in a high degree (Fig. 2). It will be seen in the first place how ingeniously the space has been divided by the iron-work into large circles, and smaller quatrefoils, for the figure-subjects, while the intervening parts and the border are filled with ornament. The backgrounds of the figures are all of sapphire blue, those of the ornament are all ruby, but to avoid too harsh and absolute a division, there is a ring of ruby inside each iron circle, next the blue background, and a ring of blue outside the same parts of the iron-work, next the ruby ground, separated, however, from it by a thin white line. But while these rings soften the transitions of colour...
and render its distribution more agreeable, they further emphasise the geometrical design.

The small quatrefoils are made yet smaller by the inclusion of all three rings within the iron frame, giving greater prominence to the larger subjects. The ornament is chiefly in blue and white, on the ruby ground, while the figures contrast admirably with it by the quiet colours which prevail in them: deep rich greens, low-toned browns, brownish purples and greenish greys, relieved by whites, occasional light fresh greens and yellows (the latter very sparingly used), and a pleasant light pinkish colour, quieter than that of the mallow, more like the lighter fritillary. The quiet colours, however, predominate in the figures. The whole is glittering and jewelled to an extraordinary degree, but the point to which I would call attention here is the importance and the prominence of the form throughout the work.

In design and composition the window is a consummate work of art. The disposition of the figures throughout the whole, and the treatment of the separate groups, are alike admirable, but not less so is the conception and drawing of the individual figures. The draughtsmanship is archaic, necessarily so, owing to the primitive condition of the art, but the figures are full of life, movement, and grace. Moreover, it will be noticed that the form of the figure and the movement of the limbs are everywhere clearly shown, being emphasised rather than concealed by the draperies.

Whether this was a survival of the classic tradition, or was an independent northern development, matters little. It was the genuine feeling of the artist, and imparts a high order of beauty to the
Fig. 2.

FROM THE SOUTH SIDE OF THE NAVE OF CHARTRES CATHEDRAL.
(HEIGHT ABOUT 28 FT.)
Artistic Possibilities in Stained Glass

work, contrasting favourably with the tendency in later periods to envelop the figures in masses of drapery, often admirable in execution, but disguising or wholly losing the essential lines of the figure.

The unlimited opportunity offered by stained glass for the presentation of form, and the conspicuousness of the forms so presented, render it important in the highest degree that the lines should not only be fine in design and beautiful individually, but they should present that which is essential rather than that which is accidental.

In this respect, as in others to be noted presently, stained glass resembles sculpture, and bas-relief in particular, for although colour is so striking a feature in glass and is absent or subordinate in sculpture, yet they have this in common, that there is no imitative colour in either.

All ancient sculpture, Egyptian, Assyrian, Greek, and mediaeval, was coloured, but, as in glass, for purely decorative, not imitative purposes. The qualities of colour and workmanship, which in the hands of a great painter make imitative colour interesting, are unattainable in sculpture or stained glass\(^1\), such resemblance as there is between the colour in these arts and that of nature being merely suggestive; a conventional approximate flesh tint being used for faces and limbs, greens for trees, and so forth. Grotesquely false hues are naturally avoided, although realistic accuracy is not to be obtained.

It follows that, in the absence of the marvellous workmanship which imparts such interest to the

\(^1\) This statement will want qualification as regards glass. The point will be dealt with later on, but does not seriously affect the present argument.
details of costume in a portrait by Titian, Velasquez, or Holbein, the attempt to represent heavy masses of drapery in sculpture or stained glass must be more or less of a failure. For purposes of portraiture such forms may occasionally be demanded, and a true artist will find an artistic solution of the problem; but where the representation of nature is confined to form, the noblest and most essential form must be insisted on, and this, I contend, was done by the artists of the thirteenth century, both in their stained glass and sculpture.

I give a few examples on a larger scale from the Chartres window to illustrate this point, and it will be seen how emphatically the movement of the limbs is insisted on, and how little this is obscured by the draperies. The figure of Christ (Fig. 3) receiving the soul of the Virgin (whose death is represented in the circle below) is conceived almost in the spirit of a Greek statue; and the groups of mourners are full of quiet dignity (Figs. 3 & 4); on the other hand, what life and action is exhibited in

Fig. 4.
the angels, those agents of God's omnipresent power. The two who show such eager interest in the newly-risen soul of the Virgin (Fig. 3), the two swinging censers in adoration (Fig. 4), and especially the two descending head foremost with the crown in the apex of the window (Fig. 5); all alike are instinct with life and grace.

What a contrast to the lifeless caricatures of
thirteenth-century work offered in the commercial interest to meet the demand of those who were so ignorant as to imagine that an affected and meaningless angularity was characteristic of the art of that period.

The whole work is full of vitality, and I think it will be evident that this depends on the form, since the reproductions here given do not show the colour. Many early windows, indeed, contain little colour. The 'Seven Sisters' windows in York Minster, in which there are no figures, consist of delicate grisaille, with very little admixture of colour, and in many figure designs the colour is almost or wholly limited to the yellow stain; the result being very beautiful.

Thus it appears that colour, though a splendid property of stained glass, is not indispensable to it, while form is. We may omit the colour, and occasionally this must be done where light has to be economized, but we cannot omit form. The pieces of glass must be cut in some forms, and these, when picked out with leaded outlines, are by no means of a retiring character. They insist on displaying themselves in a very conspicuous manner, and the importance of the design of which they form parts is proportionally great, both as a whole and in its details.

It has been shown that there are no limits to what can be done by the stained glass painter in the way of form; that he can cut glass to any required shape, paint any outlines on it as easily as on paper or canvas, and shade as delicately as in any other material, and even more powerfully if need be. What use is he then to make of these opportunities? For we are now coming to close quarters with our material, and having shown what he ought not to do,
it is time we arrived at some positive conclusion as to both the duties and privileges of the glass-painter.

The lode-star which will guide us is always the same—the distinctive character and beauty of the material, and the destination and purpose of the work. On these two hang all the law and the prophets of the technical arts.

As the situation of the work is to be considered later, we will begin here with the distinctive beauty of the material.

As the distinctive character of glass is unquestionably its transparency, the preservation of this is the first duty of the glass-painter, who must aim at enhancing the brilliancy of the glass by his workmanship. It may sound paradoxical to talk of heightening brilliancy by means of lines and shadows, which must in some degree darken, but the paradox is of a very innocent kind, since all are familiar with the fact that white paper and canvas must be lighter than when covered with colour, and yet convey no impression of brilliancy whatever. The same is true of glass. A pane of white glass merely looks a blank; substitute for this a design of plain coloured pieces, leaded together, and a certain amount of brilliancy is introduced, but this brilliancy can be greatly enhanced by the mode of treating the lines and shadows.

In considering this treatment, one of the first points to be noted is the difference between deep colours and white or very light glass. A piece of pure white glass, without work on it, merely looks like a hole in the window, a piece of ruby or blue or any deep colour does not. The latter only wants a few bold lines and a very little shadow to relieve its flatness and to give point and value to the pure
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transparent parts, but the white glass needs more than this. It should be nearly covered with a very delicate film, from which pure lights should be only sparingly taken out, and none of the shadows should be dark. In large scale figures, where there may be

white masses of considerable size, a certain depth will be necessary in parts in order to avoid a thin and flat appearance, but the shadows should never approach blackness. In very early work thick black lines (Fig. 6) were common on white glass, and
where the shadows were very slight and the pieces of glass small, this treatment certainly accorded with the character of the whole, and was probably necessary under the conditions, but as more finished modes of shading were arrived at, and more interest given to details, these black lines were dropped, and a silvery quality of great beauty imparted to the whites by pure delicacy of workmanship. In very light glass a film, however pale, tells at any distance, and the clear glass, where a light is taken out, gleams wonderfully, whereas a black line disappears at a certain distance, the bright light on either side of it having so much greater an effect on the eye that it seems to obliterate the line. For this reason the early painters who did use lines made them very thick. Having a great admiration for the technical qualities of the old glass, I formerly defined the contours of folds in white drapery with outlines, though not so thick as the old ones, but I found that where the shading was finished and delicate, the lines were in the way, and that the beauty of the material was most fully developed and the charm of texture best secured without them.

In painting white and light colours, the matt appears to me to be better than the stipple, since the even film is susceptible of more subtle modulations than the granulated surface, but in the case of coloured glass, and particularly with deep colours, the stipple has advantages over the matt. Much shading would obscure deep colours and destroy their brilliancy, but such shading as is employed must be rather strong or it will not tell, and if a matt of any depth is laid on a deep blue, for instance, the tendency is to discolour the blue, whereas the comparatively open character of the
FROM THE SOUTH-EAST ANGLE OF TRANSEPT OF THE DUOMO, FLORENCE.

(HEIGHT ABOUT 19 FT.)
stipple allows the colour to show between the darker granulations, and thus the purity of the native hue of the glass is preserved.

I give a reproduction of a window in the transept of the cathedral at Florence (Fig. 7). It is Venetian work, and, like all its companions, is a marvel of colour. It is a much later work than the Chartres glass, and the difference of workmanship is considerable. Both at Chartres and in Florence I had light scaffolding put up to enable me to examine the glass closely, and I found in the later work very few lines except those formed by the leads, which are employed profusely, and the shadows are throughout very transparent. There is a singular absence of white glass in the window, which might be considered a defect, but that the splendour of colour is so astonishing as to silence all adverse criticism.

The scale of the figures is much larger than in the Chartres window, and the masses of colour are greater in proportion, but each colour is wonderfully varied in hue, and the transparent shadows are used so as to enhance these varieties, and impart an extraordinary glow to the whole.

In both the earlier and later examples referred to, the brilliancy and transparency of the glass are exhibited in their highest beauty, and no attempt is made to imitate any natural effect. Such shading as there is in these windows serves to suggest natural forms, but is treated solely as a means of heightening the beauty of the glass. In addition to light and shade the glass-painter has other means of adding interest to his work and imparting texture to it by the treatment of the surface.

There are many ways of doing this, the most...
Use of diapers for giving texture and glitter to glass.

familiar one being by the use of diapers. In some cases these are bold enough in scale to be appreciable as designs, as for instance in the background of a figure, but commonly they do little more than give texture and play of tone to the glass.

The patterns are often picked out of a black ground, or may be taken out of a toned ground of any degree of depth or transparency (Fig. 8), either giving a crisp and sparkling quality, or a gentle modulation to the glass.

On white the diapers composed of white, black, pale tone, and yellow stain, may be very varied and sumptuous, conveying the impression of a rich brocade, or they may consist of pale flowered yellow patterns, which only serve to impart a delicate warmth to the white glass.
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Sometimes simpler methods are employed: dots, clear on a dark ground or dark on a clear ground, lines, simple or crossed, as if suggesting the threads of the material; or, again, the glass may be simply toned with the shading colour, which on white or a light colour will give a cool or a warm brown, according to the tint of the glass. This brown will be much less transparent than a natural brown glass, and its sombre quasi-opaque quality will by contrast increase the brilliancy of adjacent colours.

Yellow is a dangerous colour to use in any quantity in stained glass. It is apt to be aggressive, and, in combination with other hues, to look gaudy, but, when deeply toned with the shading colour, it gives a fine solemn golden brown.

Yellow is safe enough with greenish whites in grisaille, and may be used with charming results among blues, but mixed with purples, greens, and rubies, it makes the glass look sultry and over-coloured.

It has been mentioned that flashed glass can be bitten partly or through to the white. If the glass so bitten is judiciously stained at the back, some brilliant effects of colour may be obtained, whether with ruby, gold pink, or blue.

For the purpose of obtaining a tint necessary for a particular harmony, but not forthcoming in the stock at his disposal, the glass-painter sometimes backs one piece of glass with another of a different colour, trying different combinations till he has got the desired tint. The first piece is said to be plated with the other. This requires extra leading, and gives the window double thickness in the plated part; moreover, the colour is not quite so transparent as when a single glass is used, for which reasons

Use of flashed glass bitten and stained.

'Plating' to obtain different colours.
Stained Glass as an Art

it is undesirable to make a general practice of plating, but it is a valuable resource for occasional purposes.

Other technical matters will have to be dealt with, but will be more conveniently considered in connexion with the third and most interesting division of our subject, which we are now in a position to take up.
III

THE ARTISTIC POSSIBILITIES OF STAINED GLASS, CONSIDERED IN RELATION TO THE SITUATION AND PURPOSE OF THE WORK

All that has been said about the nature of the material, its special properties and beauties, and the technical methods by which these can be developed, was necessary as a preliminary, but the matter we are now entering upon is the true subject of this essay.

It is impossible to discover how a material can be adapted to a particular purpose till we understand its peculiarities and the nature of the processes which the artist has at his disposal when dealing with it. I trust this has been made sufficiently clear, and that we have a solid foundation upon which to proceed with our superstructure.

In my unqualified condemnation of any attempt to imitate natural effects of colour in stained glass, it may seem that I to some extent anticipated this branch of our subject; but this is hardly the case, for what I showed was the impossibility, on technical grounds, of imitating the effects of nature in stained glass, and this had necessarily to be considered under
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technique. It is true I contended that, even if possible, these effects would be wholly unsuitable in a window, but this was merely to dispose of a matter which would not come up again.

As I shall have to illustrate this part of my subject by many reproductions of modern glass or designs for glass, I must call my readers’ attention to my explanation in the Preface of the fact that these are taken from my own work. It is there shown that for purposes of analysis and direct illustration of my arguments I had no other course; but, as examples of beautiful work of our own day, I consider myself very fortunate in being able to offer my readers reproductions from the designs of Sir Edward Burne-Jones and Mr. Richmond.

Apart from these, it would have been difficult to illustrate the principles I inculcate from the current work of the day. I am far from wishing to pass any sweeping and indiscriminate condemnation upon all the glass that comes from the commercial houses. With some of these, artists co-operate in different degrees, and, where this is the case, the artistic element naturally appears; but, as I have already pointed out, the bulk of the work from these quarters is designed by unknown employés, trained to a mechanical style, and such work would certainly not serve as illustrations of my principles.
I. DESIGN

DESIGN (including form and colour), Light and Shade, and Style, will form the three main divisions of the subject now before us.

Beginning with design, the first all-important consideration for the glass-painter to keep in mind is that he has to decorate a window, and that, whatever beauty the details of his work may possess, it will fail in its first duty if it fights with the architectural forms which it should adorn.

These forms should not merely constitute a mechanical limitation to his design, they should be a determining factor in it; and, therefore, any composition which cuts across mullions and tracery of a window, ignoring them instead of harmonizing with them, is bad decoration, though it may be good form and colour. It will make the stonework appear to be an interruption to the design, instead of being one of its governing conditions.

The neglect of this fundamental principle was one of the first marks of decadence in the cinquecento work, at a time when it displayed gorgeous qualities of colour and effect. It was the 'Mene,
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Mene', which foretold the speedy collapse that followed. It showed that the vital spirit of the art was in a diseased state. Soon other and worse symptoms followed, and in a few years the art of stained glass, which had enjoyed a glorious reign of three or four centuries, was a lifeless corpse.

Some of the finest specimens of cinque-cento work in England are to be found in King's College Chapel at Cambridge, the windows of which are splendid in colour and vigorous in drawing, but exhibit this loss of the decorative sense, which marks the incipient disease.

As the aberrations of a genius, whose mind is just beginning to lose its true balance, excel in interest the correct proprieties of the most accurately balanced mediocrity, so does work like this surpass the correct but vapid imitations of early work produced under commercial auspices; but the aberration is there, and with so unmistakable a symptom the diagnosis is but too easy, the end is near.

Let us examine this matter a little in detail. The simplest case is that of a broad oblong, or arched, window, without divisions, such as are found in churches, &c., built on the classic or Italian models. Here the limitations are slight, and if the artist maintains a judicious proportion between the scale of his figures and that of the building, he may allow himself considerable freedom in his design; but if the window be very large he will want stout iron stanchions and saddlebars, and it would be desirable, if possible, to make these a basis for some leading lines in the design, so as to assist the impression of strength and stability in the glazing, and to be to the eye a substitute for the mullions of the divided window.

Cinque-cento glass at King's College, Cambridge, splendid work, but showing early stage of the disease.

Treatment of wide-open space without mullions.

Strong iron-work necessary. Desirability of emphasising this by leading lines in design.
Design

This principle naturally applies to any very broad window, whether square or pointed, and it may be useful to give examples of how it can be carried out.

Fig. 9 is from a window, nine feet broad, which required two strong stanchions and twelve saddlebars. These have been taken as a basis for the main divisions of the architectural features in the design, with which they thus become incorporated. Fig. 33 is a larger reproduction of the same design from the chalk cartoon, which will be referred to in connexion with the subject of light and shade, but this small illustration taken from the coloured sketch gives a much truer impression of the effect in glass, because it shows the bars, the leads, and the relative tones of the different colours, though not the colours themselves.

Fig. 10 is from a window in Salisbury Cathedral, in which each light is twenty-one feet high and five feet broad. This print is taken direct from the glass itself. Again here, the architectural features, the groupings of the figures, and the grisaille ornament, are all composed with direct reference to the iron-work, so as to include this in the design.
Fig. 10.

In S. side of nave of Salisbury Cathedral. From the glass. (Height 21 ft.)
In Fig. 11 the same principle is applied, but in a totally different manner, the treatment having more resemblance to that which prevailed in the thirteenth century, as exemplified in the Chartres window. That is to say, the iron-work is designed to suit the divisions of the subject.

The theme given for this window, which is in a church in New York, was simply 'Love.' In the lower panel are presented 'Faith, Hope, and Love,' with the familiar attributes, 'Love' being enthroned in the centre as 'the greatest of these,' but I desired in the upper part to convey two leading ideas: first, that 'God is Love;' second, that Love is the root of both Faith and Hope. With this view, Christ, as Love incarnate, is made the dominant

In the Brick Church, New York. From small coloured sketch. (Height about 22 ft.)
subject of the design, and is surrounded by adoring angels, cherubs, and seraphs, while on either side of His throne are inscribed the words, 'God is Love, and he that dwelleth in Love dwelleth in God and God in him.' To enforce the second point two subjects are given illustrating the words, 'Love believeth all things,' and 'Love hopeth all things.'

Abraham, inspired to make the supreme sacrifice by the Faith which is begotten of his love to God; and the three young victims of the Babylonian despot's tyranny, filled with Hope in the hour of peril by the Love that 'casteth out fear.'

A third subject exhibits Love absolute, Stephen pleading for his murderers, the highest expression of the most exalted human love, illustrating the words, 'Love beareth all things.'

I wished also to put children in closest proximity to the throne of Christ, and to show the Dove, symbol of the Divine Spirit of Love and Peace, surmounting the whole.

To convey all this in an oblong window involved a somewhat complex composition, and it appeared that the problem presented by my self-imposed conditions would be best solved by designing the iron-work with a special view to the most expressive grouping of the parts of my theme. The illustration will show how this was done, and it will be noticed that St. John and St. Paul, whose words form the leading motive of the whole design, are included in it at the base.

Another and simpler instance of iron-work specially constructed to a design is given in Fig. 12, an outline from a window in a children's hospital, in which the principal subjects (Christ healing a sick child, and angels carrying children) are framed by the iron-work
in a broad border, wherein children appear among the twinings of a flowing poppy pattern, the poppy being a familiar healing plant.

I shall have presently to call attention to some groups of angels which appear with some modifications in three of these windows, as they will illustrate another point in connexion with the question of design.

The circular window (Fig. 13) is ten feet in diameter, and is in the chapel of a Theological College in New Jersey. The subject given was simply 'Theology,' and, as in the case of 'Love,' the comprehensiveness of the theme demanded some complexity of treatment. The largeness of the opening also necessitated the use of much stout iron-work, and this supplied the means of dividing the subject into its parts.

Taking theology to mean the study of God's ways, so far as these are accessible to the finite spiritual and intellectual faculties of man, my first desire was to express the universality of the thing symbolized, and its domination over all other knowledge. Theology is therefore represented as enthroned on a sphere representing the universe;
Seraphs bow before the mysteries she teaches, and across this central division are inscribed the words, 'As the heavens are higher than the earth, so are My ways higher than your ways.'

**Fig. 13.**

*In Theological College, New Jersey. From full-sized coloured cartoon.*

(Diameter 10 ft.)

In the lower panel Humility leads a child, with the words, 'He shall teach the humble His ways.' On either side are History and Philosophy, Science and Art.

History has a prominent place, because through it we learn God's dealings with man, and all the best
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that the seers have been able to divine and tell us. Whether we go to Moses or Isaiah, to Paul or John, to Plato, Marcus Aurelius, or Epictetus, or to the Teacher who is greater than any of these, History has handed down their words to us.

Possibly some may consider Science out of place here, as it is not uncommon to hear Theology and Science treated as if they were antagonistic to each other. But only a narrow view of either can account for this way of regarding them. Science may limit itself to the study of the material universe; it may deal with phenomena only, and by increasing the extent and accuracy of our knowledge with respect to these, may enable us to relate them to each other and elevate our conception of them as parts of a marvellous whole, but it can account for none of them. Since Newton established the law of gravitation as spanning the vast interstellar spaces, and binding under its potent sway the mightiest suns and the minutest grains of meteoric dust, since he showed how this mysterious force determines alike the rhythmic revolutions of the heavenly bodies and the fall of the ripe apple, we have been able to realize the unbroken unity of the universe in its infinite extension through all space. Since Darwin and Spencer established the law of evolution as determining with ceaseless certainty of operation the growth alike of solar systems and crystals, of nations and animalcule, we have been able to realize the unbroken continuity of the history of the universe in its duration through all time; but they have not shown whence originated Gravitation or Evolution.

The Spirit alone can discern the Spirit.

‘Through Faith we understand that the worlds were framed by the Word of God.'
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'We Hope for that we see not.'

'Love is of God, and every one that loveth is born of God and knoweth God.'

By these then, Faith, Hope, and Love, we understand, we see, we know, and these are exalted above History, Philosophy, Science, and Art, in a scheme which deals with the Knowledge of God, but all contribute to that knowledge.

I shall have later on to deal with the advantage which decorative art possesses over pictorial and imitative art, in the presentation of ideas, as distinguished from the representation of objects, but it may be well here to call the reader's attention to the fact that this treatment of 'Theology' and that of 'Love' would be impossible in a realistic picture.

Where the element of realism is once introduced, the eye demands the conditions of a natural scene, the figures must stand in some intelligible perspective relation to each other, with some coherent disposition of light and shade. But so long as we put all realistic effect aside, we are free to express ideas without these hampering restrictions, we can place our figures wherever the nature of our theme or beauty of design may suggest, and I think it will be seen how profoundly interesting to the artist that kind of work must be which gives him such unlimited scope, not only in form, colour, and design, but also in the expression of ideas, and what abundant compensation it offers for the exclusion of that one quality, realistic colour, which is unsuited to his material and to the situation of his work.

Perspective is not necessarily excluded, and in some subjects can hardly be dispensed with (such as the 'Charity,' Fig. 33), but it should always be of a very simple kind, keeping the figures as far as
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possible on one plane, and in my opinion those subjects can be treated with the happiest results in glass, where perspective has no place whatever.

The reader will be able to follow up this subject of the treatment of wide spaces for himself, by noting the varieties offered in the various examples illustrating this essay. I have thought it best to let the designs of my brother artists speak for themselves, and only to offer reasons for details of treatment where I could do so with certainty and without presumption, but I may point out that the examples given of works by Sir E. Burne-Jones and Mr. W. B. Richmond illustrate admirably this part of our subject.

We must now consider the question of design in relation to windows divided by stonework. It is hard to say whether such architectural divisions increase or diminish the difficulties of the artist. To an imaginative artist neither the clear space nor the divided lights ought to be difficulties. They should present only a variety of opportunities. We have seen what occasions wide spaces offer for varied design, and it might appear that narrower openings, fixed in number and proportion, would constitute a hindrance and a limitation. A limitation it is, no doubt, but to a decorative artist limitations are full of suggestion, as they are to a poet. The poet, it is true, may choose his own metre and disposition of rhymes, but, having chosen them, he is limited by them, and what openings do they not afford for beauty of diction and for giving point to the thoughts he utters.

Welcoming then the architectural forms of the window as supplying a motive rather than a hindrance to the designer of the glass, let us see in what spirit he should consider them.
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In the first place, he must absolutely regard them as essential features, or determining factors in his composition. If the window is divided, so must his composition be divided, and if the parts of the window be related to each other, so must the parts of his composition be related.

In some cases this relation will be of an extremely simple kind, as where a window, divided into two or more upright lights, is occupied by a corresponding number of single figures or independent subjects; in which case a general agreement in the scale of the figures and of their position in the lights, as also in the ornamental work of the intervening spaces, if any, will be enough to unite the whole.

Fig. 14, representing Faith overcoming Evil, and Hope parting a dark cloud and letting the light through, is an example of the simplest possible form of divided window. Fig. 15, which gives five other Virtues, is so far further developed that it includes panels of ornament.
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But though the accord in form here is of a simple and mechanical character, this is not the case with the colour which, in a divided window, must strictly harmonize throughout. The best old glass shows that it was not merely designed by men who had a strong instinctive feeling for fine composition of colour, but exhibits remarkable ingenuity in carrying out their schemes. The large West window in York Minster, the lower lights of which (i.e. all except the tracery) are filled with tiers of single figures, is treated with absolute symmetry as regards its distribution of colour, but with such variety in detail in such cases harmony of colour more exacting than that of form. Colour in complicated windows of early periods very symmetrical.

In such cases harmony of colour more exacting than that of form. Colour in complicated windows of early periods very symmetrical.

Fig. 15.
Port of E. window of Bingley Church, Yorkshire. From small coloured sketch.
(Height 8 ft. 6 in.)
that all sense of mechanical recurrence is avoided. The clerestory of St. Ouen at Rouen is a very striking example of the same well-directed ingenuity.

This case is particularly interesting because it concerns not one divided window only, but a long series, each containing five lights; and the whole
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forms one complete homogeneous scheme. A singular feature in this composition is that in the second and fourth figures of each window the prevailing colour is blue. This gives wonderful unity to the whole design.

Where the lights of a window are not all of the same height the composition is naturally more elastic, though the materials may still be single figures or detached subjects. Fig. 16 is an example of this, where the principal figures are similar in height and position, but the accompanying angels are developed in the middle light so as to occupy the larger space.

But the most important problems presented to the glass painter are those where one subject occupies two or more lights. Keeping in mind the principle already enunciated, that if the window be divided but related, so must the composition be divided but related, it follows that a subject extended over two or more lights must consist of figures or groups of figures related to each other more intimately than by mere accordance in height and place.

Treatment of lights of different heights.

One subject extending over two or more lights.

**Fig. 17.**

*In Church of the Incarnation, New York.*

*From small coloured sketch.*

*(Height of panel 6 ft. 6 in.)*
Example of subject in two lights. The mullion must not be felt to be an interruption.

Fig. 17 will illustrate this. The subject is 'Jacob blessing his children,' and it will probably be felt that the groups are necessary to each other, though they can be considered separately. Treated in this way the mullion is no disturbance, it is fully recognized as controlling the design. The continuity of the background has no more tendency to make the mullion appear to be an interruption than does the continuity of the panels of ornament and architectural features in Fig. 15. The fact that the couch runs across the two lights might be considered as a breach of our principle, but it would be some-
thing like pedantry to push it so far. Each portion of the couch may be considered independently, and the fact that they are really parts of the same only serves to connect them. It is in no way disfigured, nor the eye offended by the interruption, as is the case when a mullion divides a figure; a not infrequent occurrence in cinque-cento and modern work.

Fig. 19.

E. window in chapel of a school, near Philadelphia. From small coloured sketch. (Height of centre 6 ft. 6 in.)

I confess that the boat in 'Christ stilling the tempest' is more of a difficulty (Fig. 18). The same explanation may be given as of the couch, but the greater prominence of the boat, and the fact that it does not traverse the lights horizontally, tend to make it assert itself more emphatically, and though I did not feel that it actually struggled for pre-eminence with the architecture, I could not deny that it went near to do so.

1 Ormskirk, Lancashire.
Fig. 19, illustrating the story of Joseph, contains two subjects, each occupying two lights, with a single figure on a larger scale in the middle.

In each pair the groups are complete as groups, but not as subjects. If one of a pair is covered, the other is felt to lack something to make it intelligible, while the centre figure gives the keynote of the whole. The text which it illustrates is 'Ye thought evil against me, but God meant it for good.' On the left, two of the vindictive brothers are dragging forward the protesting Joseph, while a third takes the money from the Ishmaelite merchant. On the right, the brethren stand as suppliants before Joseph, Benjamin being charged with stealing the cup which an officer takes out of his sack, while a scribe makes notes of the evidence.

In the centre Joseph, as Governor of Egypt, stands ready to see the corn dispensed, which lies in sacks behind him, showing how the evil which the brothers contemplated was diverted to beneficial results.

We must now examine some examples in which the conditions are more complex and give more scope for interesting treatment.

Here is a window (Fig. 20) in which one subject, 'The Ascension,' extends over ten lights. It was necessary here to make every part of the work lead the eye to the principal figure. The only representation of this difficult subject by an early artist that ever impressed me greatly was that by Giotto in the Arena Chapel at Padua, of which I give a small reproduction (Fig. 21). The upward movement of the figure of Christ is marvellous. He seems to

1 See inf., Fig. 42.
2 East window of fine old church at Upholland, near Wigan.
PART OF EAST WINDOW IN UPHOLLAND CHURCH NEAR WIGAN.

(HEIGHT OF CENTRE 13 FT.)

From black and white cartoons.
carry with Him the crowd of angels, as if they are impelled by an irresistible force.

The conditions offered by the architecture rendered all question of plagiarism impossible, but I felt this was the true conception of the subject.

The groups of the eleven Apostles and the Virgin presented no special difficulty, though much that was interesting to treat, but the ascending angels offered a by no means simple problem. Each of the lights must be well filled, and yet the upward movement must be conveyed. If the design fulfils these requirements, the reader will be able to see
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how it does so, by a little examination of the drawing, but it is an extreme case of uniting many lights in the expression of one leading idea.

Tracery.

The tracery of this window, which was nearly as extensive as the lower lights, contained as its central feature a large flamboyant wheel or rose shape. In order to embody Christ's words, 'When I go I will

![Fig. 22.](image)

*Fig. 22.*

*Port of tracery in E. window of Upholland Church.*

*From black and white cartoon.*

send the Comforter unto you,' the Dove was represented in the centre, and the 'Fruits of the Spirit' in the divisions of the wheel (Fig. 22).

Having spent much time and thought on the ascending angels of this work, I hoped for an opportunity of making use of them again, and found more than one occasion, as will have been seen in examples already referred to. In the subject,
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'Christ blessing children,' in Salisbury Cathedral, the two groups on either side are united into one (but with some material alterations), and the angels all carry children; in the Toronto window, also about children, the two inner groups are united into one.

The principal panels of the Salisbury window (Fig. 10) illustrate the point we are now considering. It will be seen that the architectural part of it is only symmetrical when the two lights are taken as a whole, and the same may be said of the grouping of the figures. The space being very large (twelve feet across in all) it was necessary to avoid anything like a scattered treatment of the figures. Thus the chief group of Christ and the Apostles form a square mass in the centre on a small raised standing-ground, while women, who have brought their children, stand, sit, or kneel on the lower level. On the left, through an arch, is seen a mother who has gone home to fetch her child and is leading him down the steps; behind the corresponding arch on the right a workman, who knows that his wife is busy at home, has gone to fetch their infant, and is getting the mother to hand it out to him through the window.

The next example differs from any of the preceding in this respect, that though the whole of the seven lights, which go round the apse of a chancel, are devoted to the exposition of one theme, this theme is conveyed by a series of figures and subjects, no one of the latter occupying two lights. (See Frontispiece.) The central idea was to be 'Praise';

1 Grace Church, Utica, America.
2 There is in fact a considerable wall-space between the lights.
the lower parts of the lights being occupied with terrestrial beings, noted for their hymns of praise, the upper with celestial; Cherubim and Seraphim, Angels and Archangels, and the Hosts of the Redeemed; Christ enthroned in the head of the middle light being the subject of their united 'Te Deum.'

As there were seven lights it appeared to me desirable to include in the scope of the theme the days of Creation, and so to embody the beautiful hymn of the Three Children, 'O all ye Works of the Lord, bless ye the Lord; Praise Him and magnify Him for ever.'

The design, here reproduced on a very minute scale, is an attempt to carry out this attractive scheme. Accompanying the figure of Christ, who holds the orb of the universe in His hand, are the words, 'Let the heavens rejoice and the earth be glad,' to give the clue to the whole series. Below are the spiritual singers on earth, David and Hannah, Miriam and Moses, and others, down to later Christian periods, to Gregory and Catherine, Ambrose and Cecilia; and above are the Celestial Hierarchy.

The six Days of Creation are given in the cinqfoils above the lights, the seventh, the day of rest, being conveyed in the centre one, by an angel, with the words, 'And God ended the work which He had made.'

Between the upper and lower tiers of worshippers are panels illustrating those verses of the hymn, 'O all ye Works of the Lord,' which relate to the several days of creation. 'Ye Nights and Days,' where Night shrouded in a dark mantle cherishes a sleeping child, and Day casts off a rosy garment like the tender clouds of dawn; 'Ye Winds of God,' which are spreading towards the four corners
of heaven; 'Ye Green Things of the Earth,' entwined in foliage, with fruit over her head and corn at her feet, while the personification of 'Showers and Dew,' clad only in clouds, pours water on the green earth; 'Ye Sun and Moon,' presented by a strong youth in golden raiment and a maiden in moonlight-coloured garments; 'Seas and Floods,' where the tossing waves appear as living creatures, stretching their arms up towards heaven (Did not Life first come out of the waters?); and finally, 'Children of Men,' represented by a father and mother surrounded by their children. In the centre of the whole are Ananias, Azarias, and Misael, kneeling in the furnace, singing their hymn.

It might have been convenient for some reasons to defer consideration of the motives and significance of subjects in stained glass till a later part of this essay, but I find it impossible to treat the question of composition adequately apart from motive, and neither composition nor motive can be discussed without illustrations. Principles might be enunciated, but without examples they would provide hopelessly dry reading, and could hardly leave any clear impression on the mind of the reader. For this reason I have, in the preceding cases, described the ideas out of which the designs were evolved, and will now call attention to a few special varieties of composition which appear in this somewhat comprehensive series.

In the first place it contains a great many figures, and where this is the case it is desirable that they should not all be of one scale, and equally desirable that they should not be of many scales. In the one case the eye would be fatigued by the monotony of the design, it would be like a house in which all
the windows were the same height from ground floor to attic; in the other case the eye would be disturbed by the instability and want of coherence in the design, it would be as if nearly all the windows of a house were of different heights.

As a general rule two scales of figures are quite enough, exclusive of tracery, the small openings in which require quite special treatment. In these seven windows two scales have been adhered to, except in the figure of Christ, which is intended to dominate over the others. The rule is not followed mechanically, allowance having to be made for special conditions. For instance, the upper panels contain many more figures than the lower ones, and if these had been made exactly the same size the groups would have looked top heavy; but the difference is too slight to obtrude itself.

In the second place, in so long a series it is of importance to bind the whole well together by the horizontal elements in the design. This is chiefly attained by the three tiers of subjects, but these divisions are further enforced by the rather severe treatment of the upper and lower series of figures, all of these being upright and at almost exactly the same level, and by the continuity throughout of such features as the horizontal scrolls above the lower figures, with portions of their hymns, the screens or backgrounds behind them, and the band of foliage above these.

In the third place, it was necessary to make a distinction between the centre light and the others, in order to avoid a tiresome identity extending through so many lights. This is done in the lower series by putting three figures into the panel instead of two, in the middle by making the mouth of the
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furnace circular to distinguish it from the square forms enclosing the other groups in this set, and, finally, by the increased scale and isolation of the figure of Christ. The small cherubs serve not only to fill the space, but to add to the importance of the chief figure.

Finally, the whole had to be knit together by coherence in the scheme of colour.

In the middle band the colour separates itself from those above and below by the prevalent light blues and greens, which were appropriate to the subjects. The middle panel, however, distinguishes itself, as in form so in colour, by the light flesh colour and the ruby flames, the only blue being the film of 'moist whistling wind,' described in the Apocrypha as enveloping the bodies of the youths and preserving them from contact with the flames.

This quality of colour, the light blues and greens, is repeated in the days of creation in the cinquefoils, though in somewhat deeper tones.

In the celestial groups the more brilliant primary colours prevail, the backgrounds being alternately blue and ruby. In the centre, where the ground is blue, the robe of Christ and the wings of the cherubs are ruby. In the adjoining lights, where the ground is ruby, the wings of the seraphs are varied blues.

In the lower series, quieter colours predominate: browns and brownish purples, deep olive and light greyish greens, low-toned brown golds, &c. The screens behind the figures are alternately brown and ruby, but very little of these is seen; the foliage is in sober greens, and the borders in very quiet tints. These colours are distributed with scrupulous care, some recurring only twice, some three times, and
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one, the deep blue, four times, and are disposed with a general but not absolute symmetry.

Blue is perhaps the most valuable colour in glass, and the one which may most safely be allowed to prevail as a general rule, though no absolute laws can be laid down on such a subject. It certainly takes the lead in much early glass, being commonly alternated with ruby in backgrounds, as in the Chartres window, but in this the spaces filled with blue are much the larger. Where warm colours prevail they tend to make the light in a building hot and close in colour. Blue, qualified by other colours, tones the light, but keeps it cool.

It is, however, a difficult colour to treat. If the work on it is not made exceptionally crisp and vigorous, blue is apt to look too smooth and round. It has, when used in any considerable masses, to be much broken up and varied in tint, but, when judiciously treated, effects of great beauty can be obtained with it.

I must cite one more example of a divided window by way of saying a few words about tracery.

In this design (Fig. 23) for the east window of the Church of the Epiphany in Washington, the subject is suggested by the dedication of the church. The division of the subject into three parts in the lower lights is rendered natural and perfectly simple by the compound nature of the theme, but it may be noticed how the three distinct groups evidently belong to each other, and how certain lines run through the whole, uniting the lower lights with the tracery. Here is a précis of the design (Fig. 24) reduced to its simplest elements and divested of all detail, so as to bring into prominence the motive of the composition only. In this reduction it is made
Fig. 23.

(Height 18 ft.)

From small coloured sketch.
clear that the figures in the lower lights all circle round the central group, but the lines of the figures point towards and through the ring of angels above, whose lines unite with these and lead the eye of the mind higher still. Thus, while the encircling groups below concentrate the attention on the Infant Christ, the lines point upward to the Divine Spirit of Peace and Goodwill hymned by the heavenly host above, which the birth of the Infant was to inaugurate.

It has taken long for the world to learn the lesson which He taught, and for which He died, and for which His immediate followers lived and died.

While I write the Christian nations of Europe are all armed to the teeth, and looking on at the most ghastly barbarities which have disgraced the history of mankind, and not one will stir a finger to save their fellow-creatures from these cruel tortures, or to rescue women and girls from the foulest outrages, because each fears lest one of his neighbours might gain some territorial advantage by its interference.
The magnificent armies of splendidly drilled and equipped millions, which impoverish the nations that have to pay for them, are impotent to rescue one victim of a savage and triumphant despot, impotent for anything humane; powerful only to slaughter each other over questions incapable of solution except by an international tribunal. There is another thing that the civilized Christian world is agreed about, and that is that the work of the world, by which we extract from the fertile earth and shape to our use all that we need for our sustenance and our comfort, shall be conducted on the principle of ‘Every man for himself, and the Devil take the hindmost.’ The battle is to the strong, to the strong in purse and in sharpness of wits; these become the rich and highly favoured, while the weak are trampled down by our Christian system into that terrible poisonous swamp of destitution, squalor, and ignorance, which keeps every civilized community constantly supplied with criminals to hang and imprison. The great rule, ‘Love thy neighbour as thyself,’ does very well for Sunday, when there is no money to be made, but on Monday the Gospel of Christ must be shut up and the gospel of competition for profit brought in by practical men for six days, in which the golden rule with regard to our neighbour is to get out of him all we can, and if our neighbour be a workman, and competition wages do not leave him anything for his old age, he can go to the workhouse.

So far ‘Peace on earth and goodwill towards men’ appear to have made but little progress in eighteen centuries, but happily governments and systems are more responsible than individuals. While governments allow savagery to wreak its fury
for months on defenceless victims, on the ground that if one made a humane effort others would fly at her throat, peoples are sickening with horror and shame; while an industrial system compels every man to look out for himself if he would not be crushed in the struggle for profit, individuals are supporting charitable institutions by the thousand, and however perverse may be the method which robs men of their honourably earned fair share of the product of their toil, in order to dole it out to them afterwards in demoralizing and humiliating alms, yet the scale on which charities are conducted shows that altruism is not dead, nay, is more alive perhaps than at any former period.

Not only do many individuals deplore the wickedness of international war, of settling differences of opinion between nations by brutal and senseless slaughter, which settles nothing, and only leaves hatred and thirst for revenge behind, but serious efforts are made in all directions to establish methods consonant with peace and goodwill, in place of those which foster war and hatred.

Not only do many mourn over the sin of social war—of fighting one’s neighbours for one’s personal profit, instead of working with them as brothers for the good and happiness of all, but on all sides men are deeply studying the great human problem how to base the work of the world upon methods born of that Spirit whose fruits are love, joy, and peace, and to rid ourselves of a system whose fruits are shoddy, adulteration and jerry-building, selfishness, greed and snobbery, idle wealth and sordid penury, luxurious debauchery and squalid crime. On the one hand, bodies and souls, stunted and withered by the cankerworm of grinding care; on the other,
impudent swindlers, flaunting the wealth which they have amassed by the wholesale ruin of honest toilers.

To look on the outside of society it would seem that spoken words or pictured images, which tell of peace where there is no peace, and of goodwill where selfishness reigns supreme, can be but mockery. But selfishness, though it reigns unchecked in the market, has not yet destroyed the heart of man, and this will sooner or later (God grant that it may be soon) overthrow the tyrannical profit-system which controls and thwarts its better desires and makes our daily work an engine of the Devil, Mammon.

Is this a digression? To those who look upon art as an empty show, and composition as a lifeless system of academic rules, it may be. To those who regard art as the expression of the best that is in us, and composition but as a means towards the fuller expression of that best, these reflections go straight to the heart of our subject.

I have said that composition cannot be separated from motive, neither can motive be separated from the great purpose of life which must underlie all work that is worth doing.
Light and Shade

2. LIGHT AND SHADE

The point which we have now reached is of great practical importance, and it may be well to recall the conclusions at which we have already arrived and which lead us to it. We have seen that, as transparency is the characteristic and distinctive quality of our material, it is this which we must preserve and develop. We have noted the difference between light and deep colours, and how lines and tones may be employed to enhance their brilliancy and to harmonize them with each other; but so far the question has been only considered in its technical aspect. We have now to take it up in relation to the situation and purpose of the work. This matter may be regarded from two points of view: first, the lines and tones should add interest to the design as a representation of figures, draperies, foliage, &c., and as conveying a subject; second, they should enhance the beauty of the material, and of the work as a piece of decoration.

But although we may consider these two aspects separately for analytical purposes, they should never be dissociated in the mind of the artist. The material and the situation of the work as a transparent light and shade may enhance the interest of details, or the decorative beauty of the whole. These two considerations must always go together.
window should never be absent from his mind, and the necessity for giving interest to the details of his subject should be to him but so many opportunities for developing the charm of the glass and increasing the decorative beauty of his work.

The immense value in stained glass of form in its contours has been insisted on, but here we have to deal with the inner forms within the contours, such as can only be expressed by light and shade.

There are many forms within the extreme outlines of figures and other objects which can be conveyed by lines, such as features, folds of drapery, &c., but these lines are still outlines—the outlines of eye or mouth, of fold and crease, which have to be given with or without shadows, but the majority of the inner forms can only be expressed by 'modelling,' i.e. by light and shade.

The question now before us is how far should these forms be realized in glass painting, keeping always in view the decorative purpose of the work?

It will be remembered that there is no limit to our possibilities in this direction in glass. The contrasts of light and shade attainable in a picture can be greatly excelled in glass, and the delicacy of gradation can be equalled. Shall we then make full use of these powers, or should we by doing so mar the technical and decorative beauty of our work?

In my opinion we should, by adopting this course, wholly mar the beauties peculiar to stained glass, and I may say we should lose the most precious beauties, even of pictorial art, by a similar attempt. The greatest painters have never sought to emulate the contrasts of nature in mere light and dark, because to have done so would have been to sacrifice
Light and Shade

colour. In a picture by Paul Veronese, both lights and shadows glow with colour. Inferior men, who have struggled after an extreme range of dark and light, have only succeeded in getting black shadows and chalky lights, neither of which have any resemblance to nature.

It might indeed be plausibly urged that since powerful contrasts can be obtained in glass without sacrificing colour (which is perfectly true), here is the proper place for seeking such effects, and in a measure the contention is just, so long as the contrasts are sought only for their decorative value.

The subject has been partly discussed in dealing with technique, where realistic colour was shown to be impossible in stained glass, and this consideration gives the true ground for avoiding realistic light and shade. If the mind of the spectator is once entrapped into a false position by attempts at pictorial realism in the glass, he will misread the whole work.

If he gets realism in one form he will expect it in another. If the light and shade are wrought to the fulness of natural light and shade, then the eye will demand that the colour shall be wrought to the fulness of natural colour. Misled by the raising of false expectations, instead of enjoying the beauties peculiar to the work and unattainable in other arts, it will be dissatisfied with the manifest failure to make good its false pretensions, the leads and bars will be felt to be disfigurements and eyesores, and the whole will be regarded as a poor attempt to imitate something else, when it ought to awaken admiration for its attainment of beauties beyond the reach of other forms of art.

What limits then are to be observed? Light and
Where then is the line to be drawn?

A principle wanted, not an arbitrary line.

Suggestion of natural forms by light and shade inevitable.

Absolute importance of treating these to enhance decorative beauty of the glass.

Unimportance of the amount of light and shade if this principle be observed.

shade must have some resemblance to nature if it is to add interest to representations of figures, draperies, &c., and who is to determine just how far this resemblance is to be carried; wherever the line is drawn, must it not be somewhat arbitrary?

Happily no line need be drawn, arbitrary or otherwise, but a principle may be established, which every designer may apply, while giving full play to his own predilections.

It has been shown that tones and lines do enhance the brilliancy of glass, which looks bald without them, and it can hardly be contested that these lines and tones will be more interesting, and will have more point and meaning, if they resemble something than if they resemble nothing; not only so, but they will have more beauty to the eye. In fact, if our design includes a subject with figures, we have no choice. If our glass be cut and the outlines drawn so as to represent figures, clearly any light and shade on these must bear relation to the natural forms.

Accepting this as our starting-point, the principle which will guide us is simple, and consists merely in the application of our fundamental rule. The artist must keep the material and its situation in mind, and must treat his light and shade with the express object of enhancing the beauty of the glass.

If he keeps this aim steadily in view, he need not be afraid of realism in the details of his light and shade. He may put little or much, as his imagination may incline him; it will not matter, so long as the decorative beauty of his work is his inspiring motive. He will find in each part of his subject some fresh opportunity of promoting that upon
which he has set his heart, and he will see that it is not the amount of realism that is important, but the spirit in which it is introduced.

This will be evident if we examine old glass. In very early work the question would not offer itself. Nothing that could be called realism of natural effect had been attained then in any kind of painting, and the modelling of limbs and draperies in glass differed little from that in the frescoes or other paintings of the time. But this will not affect our appreciation of their glass painting as bearing on what has become a problem to us. In the Chartres window (Figs. 2 to 5) it is clear that the shading is all realistic so far as it goes, and is very expressive of natural forms, while it all adds to the interest and to the decorative beauty of the work. With the advance of technical power the realism was further developed, but always strictly as a means to an end.

In the fourteenth and fifteenth centuries, after the discovery of the yellow stain, when white glass was much more freely used, the interest and charm of surface of the glass was greatly promoted by realism of detail. The jewels and embroidery on a mitre, or on the orfrays of a cope or chasuble, were represented with minute accuracy, contributing immensely to the glitter and sparkle of the work. White canopies were treated in perspective, with delicate shading of their carved shafts, mouldings, crockets, and finials, giving a beautiful silvery quality to the glass.

In the Chapel of New College, Oxford, there are some noble specimens of fifteenth-century glass, with large scale figures under canopies, in which a considerable amount of realism is employed with
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splendid decorative results. This glass is in the ante-chapel.

I believe it was turned out of the chapel to make room for some degraded late work, in which a lot of blousy, gaudy figures, with pink cheeks, stand under heavily and clumsily painted canopies. In looking at these profanations of William of Wykeham's beautiful chapel, we see at once that the painter never troubled his head about the beauty of the glass. He loaded the shadows on one side of his canopies to make them 'stand out'; that was all he cared about. The realism was sought for its own sake, and it is all vulgar. In the ante-chapel the realism is employed as a means of enhancing the beauty of the work, and it is all exquisite.

In this same ante-chapel is a large west window, designed by a great and refined painter, Sir Joshua Reynolds. It forms a singular contrast both to the early glass on either side of it and to the atrocities in the chapel. This window contains tender and beautiful figures, charming in feeling and design, but as glass it is a hopeless failure, and no less so as decoration. The figures are painted on square panes in enamel colours, and in the subject of the Nativity, which forms the centre of the design, the principal group is relieved upon a dark ground with a great deal of cloud. There is neither glow nor glitter in the whole, and the large mass of smoky background is sadly depressing.

In the windows of the chapel the traditions of the old art of stained glass are seen to be still lingering on, but are vulgarized in the hands of a tasteless painter; the spirit of the old work having quite died out.

In the west window we see that the tradition and
spirit had wholly vanished—that the decorative sense was gone; so that when a painter like Sir Joshua undertook to design a window, he had no other idea of what to do than to paint a picture and send it to a glass-painter to copy on to glass. It is satisfactory to know that Sir Joshua was wholly disappointed with the result. The cartoons for this work are charming; the window is a colossal mistake.

To an artist the principle given above ought to be abundantly sufficient to guide him to a true use of his technical opportunities. If, having made a design which decorates his window and gives an impressive rendering of his subject, he seeks by his workmanship to increase the decorative beauty of the glass and of the design, he will not go wrong. If he aims at making his glass look like a picture, he cannot go right. He will destroy all chance of making a good window, and can only achieve a very bad picture.

But though this principle may be sufficient for the artist, the outsider may want something rather more definite, something that will show to what general results the application of this principle would lead. I will endeavour to work the subject out a little and illustrate it by examples.

The first broad distinction that may be noted between the light and shade in good stained glass and that in good pictorial work, is that in the former only so much is employed as is necessary to convey a sense of form in the individual objects, and very little suffices for this; in the latter much more is demanded, atmosphere and chiaroscuro (that is to say, large divisions of light and shadow). These qualities are wholly unnecessary for conveying the
forms of separate objects, but cannot be dispensed with where it is intended to realize natural effects as a whole. The absolute impracticability of realizing such effects in glass was shown in dealing with the technical possibilities of the material, and any attempt to represent them approximately can only satisfy those who are wholly ignorant of their real beauty, while it will involve the sacrifice of all those jewelled and glittering qualities, so precious in glass, which have no resemblance to the light and shade of a natural scene.

An analogy has already been mentioned as existing between stained glass and bas-relief in relation to colour, and it is observable also in relation to light and shade.

The extreme dissimilarity of the materials renders this analogy the more striking and the less likely to mislead. The point in common as regards colour is that it cannot be realistic in either art, and is only employed for decorative purposes.

The point in common as regards light and shade is that in both materials the design lies on a single plane. In the relief any large masses of tone are impossible, in the glass they are possible, but in a window any appearance of retiring planes is eminently unsuitable, and the tones, inseparable from such groupings in nature, are incompatible with the characteristic beauties of the material. The single plane, which should not be lost sight of, demands therefore that simplicity of light and shade in a glass window which is inevitable in the bas-relief.

Another point of resemblance is that in the low relief the intellectual interest of the work is immeasurably increased by beauty of modelling in the
Light and Shade

details, and yet the slightness of the projections gives very little light and shade. The same is true in glass painting. Slight depths of tone are sufficient to give that intellectual interest to the details which is wanting in the flat treatment of the windows at Pisa, and this slight depth of shading is equally valuable in adding to the charm of texture and glitter in the glass.

Here is a portion of the frieze which runs all round the upper part of the cella of the Parthenon (Fig. 25). This frieze is universally admitted to be one of the most perfect pieces of decorative work in the world. There is no attempt in it to realize any natural effect, but it is full of life, of character, and of exquisite truth to nature in detail.

Processions of old men and young virgins, priests bringing oxen and sheep to sacrifice, young men in chariots and others on horseback; all and each are as beautiful in detail and consummate in execution as they are admirable in design and perfect for their decorative purpose, when considered as groups or as a whole.

Different planes are implied, but they are not very simple light and shade.

Fig. 25.

Panathenaic frieze from the Parthenon.

Perfection of execution in detail, and of decorative beauty.
represented. In the group of horsemen here given it will be seen that the horses are one behind another, and an examination of a sufficient length of the frieze will show that they are in ranks of seven. The horseman on the left in the illustration is at the near end of such a rank, while behind him to the right are seen five of the next rank and the forelegs of a sixth horse, each partly concealed by his next neighbour. The seventh or nearest one of this rank is in the next slab, and is wholly displayed. A distance of about twenty-five feet may be inferred between the youth and horse on the left and the pair that they partly conceal, but both are the same size, and the entire depth is conveyed in a relief nowhere exceeding an inch and a half.

It will be readily understood from this example how distinct are truth of detail and beauty of detail from realism of natural effects; and how slight a relief, and therefore what simple light and shade, are sufficient to express this beauty of detail.

Here, then, we have in a nutshell what will serve as a safe guide in a decorative art which affords unlimited scope in form and none whatever in natural effects. But when we have once thoroughly assimilated this principle, we may allow ourselves great freedom in its application.

I will give first a few illustrations in which not only the spirit but the letter of the above precept is observed, and I shall neglect all pedantic adherence to those broad divisions of my subject which I found convenient for general purposes, by noting points concerning design and colour which can be more effectively considered here than at an earlier stage of our inquiry.
WEST WINDOW IN ST. SAVIOUR'S, SOUTHWARK.

(HEIGHT OF CENTRE ABOUT 21 FT.)

From small coloured sketch.
**Fig. 27.**

Panels from W. window, St. Saviour's, Southwark.
From black and white cartoon.
Fig. 26 is from the coloured sketch for the west window of St. Saviour's, Southwark, where the committee, having asked for a design of the 'Creation,' settled on an adaptation of the scheme for Utica already described. Fig. 27 gives larger scale reproductions of some of the uncoloured cartoons for the same work.

The sketch gives the better impression of the appearance of the glass, so far as this can be conveyed in monochrome, but the cartoons, owing to the absence of the tones which represent colour, are better adapted for showing the amount of light and shade in the work.

It will be seen how little there is of this, and that there is no attempt whatever to realize natural effects, whether of perspective or masses of shadow. All is on one plane, and the shading is only what is necessary to give interest to the forms in detail and charm to the quality of the glass. Take, for instance, the figure of 'Day' throwing off the rosy clouds of dawn. As far as the subject goes, she might as well have had no drapery, but I wished Day to be glowing and golden in colour, so I gave her an ideal garment, which afforded an opportunity for the desired colour and did not disturb the sentiment of the subject. If this figure had been treated in outlines only, it would have looked bald and flat. The very slight and transparent shadows serve to make the lights gleam, to give variety of surface to the glass, and to express the form. The window is at a great height, and is mostly seen at a great distance. Under these circumstances even thick lines on a bright colour would disappear while these transparent tones tell from the end of the church. The words interspersed among the figures
From small coloured sketch for the Cavendish memorial window in St. Margaret's, Westminster. (Height 16 ft.)
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appear dark in the cartoons, but light among their adjoining colours.

Letters are often valuable in decoration, and were freely used in early work. Whether they are black on white scrolls, or picked out of a dark ground (as in this case), they give opportunities for glitter in the colour and for lines in the design, beside their obvious use in giving a clue to the motive of a subject.

Fig. 28 is from the chalk cartoons for part of the memorial to Lord Frederick Cavendish, in St. Margaret's, Westminster. The coloured sketch is also given to show the relative tones (Fig. 29).

This design forms a complete contrast to the last in many respects. In the first place, the window is near the eye and the figures are large, so that a far greater degree of finish is necessary in each figure. In the second place, the scheme consists of a series of subjects, not of allegorical figures or groups like the last, and these involve a somewhat more naturalistic treatment than such themes as the Winds, Nights and Days, &c. But the same principle underlies the four compositions. All are on one plane, there is neither perspective nor chiaroscuro, and the light and shade are only what is necessary to make the form interesting, although the largeness of scale and depth of most of the colours required a somewhat bolder treatment of shadows than was called for in the small figures.

Fig. 30 is taken from the cartoon for the central part of the Washington window described above. Being divested of the contrasts arising from colour, it will serve to show what simple light and shade suffice to express form and to develop the characteristic qualities of the material.

1 See Fig. 23.
Fig. 30.
Panel from E. window of Church of Epiphany, Washington. From black and white cartoon. (Height 5 ft. 9 in.)
One more instance of a severe adherence to the fundamental principle will suffice. Fig. 31 differs from the preceding illustrations in consisting neither of subjects like the last two, nor of small panels containing allegorical groups, like the St. Saviour's window, but of a design of figures running continuously through the two lights. The absence of draperies involves also considerable simplicity of colour, and this is emphasised, not qualified, by the treatment of the details. The background and wings are blue, and the foliage green. With the exception of the nimbiuses, there is no other colour in the window but the flesh colour of the children and the varied browns of their hair.

In these four examples there is no departure from the strictest interpretation of the principle which prescribes the avoidance of realistic natural effects, other than such simple light and shade as will add interest to details and charm to the material.

I will cite two or three now in which there is a slight departure from the letter of the decorative law I am advocating, but not, I venture to think, from its spirit. When the spirit of a principle is so completely imbibed that its operation is automatic, rules may be dispensed with, and the greatest freedom may be allowed. It is like the difference between a man whose words and actions are dictated by a natural courtesy and delicacy, and one whose conduct is formed by strict adherence to the rules in a manual of etiquette. Let us hope that in social life there is no such monstrosity, but unfortunately its equivalent in art is common—at least in commercial art.

It has been mentioned (for the point is too obvious to need argument) that although imitative realistic
Fig. 31.
Memorial by Wordsworth and Arnold families to Jemima Quillinan.
From coloured cartoon. (Height about 7 ft.)
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colour is impossible in glass, approximate colour, suggestive of the natural appearance of the objects, is always employed.

It is this kind of suggestion of facts, without any attempt at realizing them illusively, which is always admissible where it promotes the interest and decorative beauty of the work.

For instance, a distant figure looks smaller than a nearer one. If the suggestion of distance is in some degree essential in a subject, by all means make the remote figures small. There is no fear of their looking on a different plane, the quality of the colour and the lead lines round each will preclude this. The spectator will infer distance from the difference of scale: there will be no illusion to the eye.

So in colour, a distant mountain often looks blue. Why should I not represent it by a piece of blue glass? The reader may confront me with my own principle, and urge that the blue in the mountain is an effect of atmosphere, and that to introduce it in the glass would be to realize a natural effect. I do not accept this statement. As to the blue being an effect of atmosphere, so is the blue of the sky, but neither the pieces of blue glass leaded together for the sky nor those for the mountain bear any resemblance to sky or mountain. These, and the diminished scale of the distant figure, do but symbolize the things for which they stand; they no more represent them than the approximate flesh colour shaded with a monochrome brown represents the infinitely subtle half-tints of real flesh colour.

No doubt this freedom would quickly degenerate into licence in the case of a man who hankered after
the unfit, but this can only happen if he has never felt the beauty of his material.

To the artist who pictures the window he is designing in his mind, everything will suggest occasions for giving some quality to the glass, which will increase its beauty by variety of texture and surface, by glitter and sparkle, or by depth and glow. He will put as many leads as he pleases for the sake of breaking up the colours and avoiding flat monotony of tint, and for giving tone to the glass, perfectly indifferent to the fact that his doing so excludes all imitation of nature; and he will avoid anything which would put the spectator on the wrong tack by suggesting such an imitation.

With this clear purpose in his mind, no symbolic accordance with nature will mar the decorative beauty of his work or mislead the spectator. Such perspective or such approximation to natural colour as may promote the interest of his composition he will unhesitatingly adopt. They will be lines and local colour in his design, they will be explanatory in the presentation of his subject, but they will not be illusive.

This cordial and complete assimilation by the artist of the spirit of his material is an emancipation, where rules would be a bondage. 'The letter killeth, but the Spirit giveth life,' is true in art as elsewhere.

A glance at the photograph from the Salisbury window (Fig. 10) will afford the reader a practical illustration of what is meant by symbolic as contrasted with imitative accordance with nature. There is some simple perspective in the steps and buildings seen through the arches on either side, and in the smaller figures occupying these spaces;
there is also some general accordance between the colours of the sky, the foliage, and the grey stonework of the arches and of the steps below the principal figures, and the natural colours of such objects, but I think no one can detect any pictorial realism in the panels. As the photograph was done from the window it will show this better than those which are taken from cartoons. Only the glass itself would make it possible to judge how far the views here advocated have been carried out, but even in the photograph it will probably be seen that the glitter of the glass has been aimed at, and that nothing in the treatment of the composition has been allowed to interfere with this.

The other illustrations of this point will suffer from being taken from cartoons only, but the reader will naturally infer that the glass executed from these will have the same qualities as that in the Salisbury window, and will consider this examination of them on that understanding.

Fig. 32, which represents the angel descending to stir the water in the pool at Bethesda, is a fair instance of the kind of freedom which can be safely permitted where the aim is quite clear. The subject required a good many figures, and, in order to include those naturally in an upright composition, I assumed the pool to be at some depth below the level of the road, and to be approached by steps. This gave an opportunity for showing the figures at different levels rather than on different planes. Such difference of scale as appears in the figures is useful in the composition. It gives greater importance to the angel, and facilitates the introduction of a number of persons going about their occupations

Pool of Bethesda, Romsey Abbey.
IN ROMSEY ABBEY.

(HEIGHT ABOUT 17 FT.)

From black and white cartoon.
IN CHURCH IN PHILADELPHIA.

(HEIGHT 13 FT. 8 IN.)

From black and white cartoon.
in the road above, without making the upper part of the window appear top-heavy.

The grey stone of the steps and arches serves as a quiet background, which brings into bold relief the glowing colours of the draperies, and the arches in their turn are relieved upon the blues of the sky and distance. The texture of the rough-hewn stone of the steps is as serviceable as their colour in contrasting with the flesh and draperies of the figures, while the horizontal lines of the masonry give the stability necessary in a design where the action of the figures is much varied. These matters are all simple enough, and needed no calculation. If the subject, the space to be filled, and the material are all fully present in the mind of the artist, an image will form itself in his mind, in which the subject will appear as stained glass, mosaic, tapestry, or bas-relief, according to his material; and in this case he will not have to refer to any arbitrary rules in order to bring his design into harmony with his material.

Fig. 33 is from the cartoon for a window in Philadelphia, the sketch for which has already been reproduced on a small scale to illustrate another point (Fig. 9). The window was erected in memory of a benevolent lady, and her kindness to the poor was the subject to be treated. By making her stand in a portico with her maidens, distributing alms among the poor folk grouped upon the steps, an opportunity was afforded of showing a number of persons with very slight variation of plane.

The portico is surmounted by a group of statuary representing Faith, Hope, and Love. These, and the architecture and steps, are all in white marble, while the curtains under the porch are deep blue,
with the result that the principal figure, whose dress is in rubies of different qualities, is entirely relieved upon the deep blue; the maidens are half on the blue and half on white, and the other figures all on white; the white, however, as will be seen in the photograph, is not a bald white, but is varied with the tones of the marble, with carved work, and with slight and transparent shadows.
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Fig. 34 introduces a new element, that of archæology. This will be best dealt with when considering questions of style, the example being referred to here only in connexion with the perspective involved in it.

The scene represented is that which is actually seen from Areopagus, where St. Paul preached, the Propylæa and Pinakotheke in the left light and the small temple of Nike Apteros on the right being of course restored. The top of Mount Hymettus shows behind the head and shoulders of St. Paul. I had treated the subject more than once before with the Acropolis in the background, to show that the scene was Athens, but without any attempt at accuracy of relative position. But when doing this cartoon I had by me a large model of the Acropolis, and on placing myself at the point where the top of Areopagus would be, I found that the view of the Propylæa which presented itself would work well into my composition, and I did not hesitate to adopt it. The larger mass of white marble in the left light is counterbalanced by the white label on the right, with the words, 'Whom therefore ye ignorantly worship, Him declare I unto you.'

In the absence of the colour, it will be seen that there is no massing of shadows in the groups of figures; each is only shaded to express its own form, so that the contrasts of light and dark were those of the colours only.

The same general remark about light and shade holds good of the design of the Marriage at Cana, in St. Mark’s, South Audley Street, where also a very modest display of perspective is admitted.

I find, with some surprise, on looking through between two and three hundred designs for examples...
of an approach to naturalism in the treatment of subjects, only these five in which it can be fairly said that there is any perspective or suggestion of receding planes.

As I hold no view excluding such treatment, when it is compatible with decorative beauty and with the true character of the material, I must conclude that my intuitive preference for a treatment which deals only with one plane, must be stronger than I was aware of, since even these slight departures from it number only about two per cent. of the whole.

I do not think there is among the designs one departure from the main principle I have commended concerning light and shade, that this should express the form of individual objects, not the broad masses of light, half tone, and shadow found in nature, but I should like to say on this point that the principle should be held subject to the same qualification that I have urged respecting perspective and colour. The end must not be confounded with the means. The end to be kept constantly in view is the technical beauty and fitness of the work for its decorative purpose, and different men will feel differently about the means best adapted to this end. All very early glass conforms strictly to the principle enunciated above, but then all painting did so at that time. The broad distinctions of light and tone had not been then realized, so that the question whether or not they should be represented in stained glass did not arise.

Later, however, when the Italian painters were developing their fullest powers of representing light and shade, when the chiaroscuro of nature was realized and often exaggerated in pictures, the
decorative simplicity of effect was fully maintained in glass, unimpaired by the fact that glass-painters had acquired great technical skill. In the remarkably interesting series of windows in Fairford Church, the light and shade, though exquisitely finished, is quite simple and free from imitation of what we may call pictorial qualities. And yet this was produced early in the sixteenth century, when Raphael and Correggio had already passed away, and Titian and Tintoret were in their prime.

It was not till the decorative sense was decaying in the other arts that pictorial or naturalistic light and shade became common in glass, though symptoms of it appear at the beginning of the sixteenth century. Some very fine glass exists, showing evidence of this tendency before it was developed to such a degree as to destroy the decorative charm of the glass.

The windows of the choir in Lichfield Cathedral, which are dated from 1534 to 1539, are very impressive and dignified pieces of work. It is over twenty years since I have seen them, but the impression left by them on my mind is that, though they cannot compare with thirteenth-century glass for jewelled glitter, yet the true purpose of the work has not been lost sight of in seeking for a broad system of light and shade. The artist was aiming at genuine decorative beauty, and if the means he adopted were not the best, he nevertheless made them serve his end.

The work possesses a distinct beauty of its own, a beauty which the artist felt the material was capable of exhibiting, and which he succeeded in obtaining from it. The difficulty seems to be to stop at this point; at any rate the transition was developed in pictorial art.

Fairford glass.

Lichfield. Considerable degree of naturalism with true decorative feeling.
rapid in that century, from the introduction of a certain pictorial quality into the glass, by which it acquired a beauty of a new kind, to the imitation of pictures pure and simple. A few years sufficed for this, and by that time the artists seem to have dropped the whole thing and to have come to the conclusion that it was foolish to be struggling to do on glass what they could do so much better on canvas.

This is the nemesis which follows all attempts to divert a technical art from its true purposes. It no longer interests artists, and is left to tasteless imitators of something for which the art is wholly unfitted.

The conclusion to which these considerations seem to lead is that a very simple realism in light and shade suffices to give the greatest charm to the details in stained glass, and the greatest decorative beauty to a window as a whole; that no man can determine for another just
what kind or degree of realism he should allow himself, but that if any man makes the realism his aim, instead of a means of enhancing the beauty of his glass, he is lost.

When stained glass once breathed this impure spirit, it flickered for a short time and then went out with a whiff, like a candle let down into foul air.

Note.—Using deeper coloured glass to express the broader qualities of tone is of great value as giving variety to the quality of the local colour, and is too simple a matter to be susceptible of the degradation which so quickly besets excessive shading. In Fig. 35, which is taken from a coloured cartoon, the left leg is in tone, owing to its receding action. This is given by using darker glass, and, in a group of figures, this method may be extended with much gain in decorative charm and no risk of illusive imitation. See Appendix, American Glass.
HIS is a pregnant theme, and I must endeavour to condense under this head several matters which have not naturally come under notice in the earlier divisions of our subject.

The first point to be dealt with is the 'Medievalism' touched upon in the introductory chapter (p. 2). In the last section I have endeavoured to supply a guiding principle which might enable the cultivated amateur to realize what sort of naturalism is congenial to the conditions of stained glass, and the dangers that beset any attempt to make naturalism an aim. My experience of the way educated people very often regard stained glass led me to discuss this matter at some length and to make the principle as clear as it was in my power to do; but it is right to say that this error is not one to which the commercial glass firms of the day seem at all prone.

The prevailing heresy in the trade is of a totally different, one might almost say, of an opposite kind, and is due, doubtless, to the circumstances attending the revival of stained glass as a craft.

The gradual decay of all interest in the artistic side of our daily lives which set in with the great commercial activity of the last hundred years, or
thereabout, led to a reaction in which a special feature was a revived admiration of Gothic architecture. The intention of those gentlemen who contrasted the noble design and exquisite details of our old cathedrals, churches, &c., with the bald, depressing buildings which were being raised in their time, was excellent; the misdirection of energy which followed is one of the greatest evidences we possess that the love of beauty was dead, or at least in a state of syncope, showing no signs of life. One of the first results was the defilement of our most glorious buildings by vulgar 'restorations,' and a part of the restoration consisted of filling the windows with excruciating monstrosities, supposed to be like mediæval stained glass. Imbecile drawing and crude and gaudy colour seemed to that generation to be the distinguishing characteristic of early glass, and these were qualities which could be readily supplied at so much an acre by the trade.

If we may endeavour to guess the motives which actuated the well-intentioned but erring gentlemen who were responsible for the enormities which (to our shame) still desecrate our cathedrals, we may imagine some such thought as this to have been in their minds. 'We find in the glass of the thirteenth century a quaint and primitive style of archaic drawing, and a childlike naïveté of conception in the presentation of subjects which charm us; let us go and do likewise.' And, judging from the results, it appears that their idea of 'doing likewise' was to make ridiculous caricatures of the originals.

If a man were to fulfil the command to 'become as little children,' by wearing a child's frock, short socks and shoes, and by imitating a child's toddling walk, lisp and language, he would be the intellectual
counterpart of the glass-painting tradesmen who thought they were following the principles of mediaeval artists by making childish caricatures of their mannerisms. The mimicry of children by grown men is only practised in real life-at the pantomime. The cathedral is considered the proper place for the corresponding antics where tradesmen's art is concerned.

The misconception upon which this practice is based is so irrational that the mere mention of it ought to be enough to dispose of it, but unfortunately the practice itself has lasted so long and established itself so firmly that it will take strenuous efforts to root it out.

The thirteenth-century artist drew quaintly, often grotesquely, but it was his own natural drawing, and was full of life and vigour. The conceptions portrayed in his glass were often naïve and childlike, but they were his own genuine conceptions; and as for the design and technique, they are splendid. The work he produced was a full and noble expression of the best that was in him. Witness the Chartres window and countless others of the period.

The fourteenth-century artist worked in the same spirit. He did not imitate the art of the thirteenth century. He gave his own best.

The fifteenth-century artist maintained the same principle; he differed in technique and in spirit from his predecessors, and this difference found full expression in his work. He did not imitate the art of the thirteenth or fourteenth centuries. He gave his own best. He could do nothing else because he was an artist.

If stained glass were now in the hands of artists, there would be no occasion to urge anything so
obvious as this. No artist ever has done, or could do, anything but give his own best. Any man who does otherwise, whatever abilities he may possess, is not an artist.

But with trade the only consideration is to do what pays. A member of one of the commercial firms said to a friend of mine some time ago, 'There's no market for thirteenth century now; fifteenth century is all the rage.'

This is the tradesman's position in a nutshell. In the early revival of Gothic, thirteenth century was 'all the rage,' but as the theory which then obtained was that the style of drawing in a window had nothing to do with the style of the artist who designed it, but must be an exact imitation of the style of the artists who lived in the architectural period to which the stonework belonged, it was found necessary for commercial firms to advertise that they supplied stained glass in the styles of the thirteenth, fourteenth, and fifteenth centuries.

This was a common form of advertisement not very long ago; I do not know if it has yet died out, but the practice remains. It is amazing that any considerable number of men could have agreed in professing to supply the equivalents of the great art of the past, which people travel far to see, by the process of training apprentices to draw goggle eyes, senselessly distorted figures, and wearisome crinkled draperies, and more amazing that a public could be found to believe in such pretensions.

Those who did so believe could never have perceived any beauty in the old glass, or they could not have tolerated such vile stuff as the earlier modern windows in Westminster Abbey, the east window in Christ Church Cathedral, Oxford, the
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Windows in the nave of Canterbury Cathedral, and similar ones in nearly every cathedral in England. It is true that since then public taste has improved, and commercial firms have had to improve their workmanship. They have not improved their principles, but they imitate old work more cleverly. People of taste began to complain of the garish colours, and they had to go into this question, and arrived at some good imitations of old glass, and have ever since produced excellent material; an unqualified advantage which should be fully recognized.

But we are considering here not material, but design, and in this respect there was no improvement in aim. There was no art, not a spark of original conception, no expression of any thought or feeling, nothing but a trick of imitation. If there was any improvement, it consisted merely in this, that the trick was better done. The earlier attempts could only deceive the rawest novices; the later ones take in a much wider public.

Various concessions were made to meet the demand of the average philistine: the grotesque elements were watered down and a slightly more modern style of drawing introduced when it was found that this sort of thing pleased the public. But apparently the public were 'pleased' to accept a good deal still that to an artist seems unspeakably ridiculous.

There are some windows in a well-known London church, made by a well-known London firm at the time when early fifteenth-century glass was the favourite in the market. So the fifteenth-century tap was turned on, and the regulation crinkles, &c., were poured out in liberal profusion. Now in the early fifteenth century, when the yellow stain had
become familiar, it was commonly used as the conventional tint for hair. The windows in question represent a row of patriarchs, or apostles, on a large scale, all old or elderly men, and their hair is all about the colour of primroses. (If I am right in believing that these windows were put up before 1880, it will be evident that the colour has no political significance.)

Although it is impossible to exclude the ludicrous element from the consideration of such absurdities, yet to any one who has any reverence for art this subject must be felt to be a very serious one, for the mischief that is being wrought is untold. It is a lamentable factor in the situation that it is just in those technical arts which concern work which is durable, that this vice is rampant. If a spurious form of pictorial art acquires an unworthy popularity, time will expose its hollowness, and the only sufferers are the deluded purchasers who have to pay for their experience by finding that the market value of their pictures has gone down, but this is not the case with the technical arts as a rule, and in particular it is not the case with the art we are here considering.

Stained glass is a very durable form of art: it is commonly a fixture in a church or other public building, and in a large majority of cases is employed as a form of memorial, so that both on practical grounds and on grounds of respect for the feelings of individuals, it is extremely difficult to interfere with a stained glass window when it is once fixed, and it is just here where the evil is most enduring that it is most rife.

The case is bad enough in our churches, but it is a scandal that in an educated country our noblest
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national buildings should be systematically disfigured with inane productions, which after-ages must pronounce to be rubbish, because the average public is still too ignorant to understand that works of art must be the works of artists.

When will fairly educated members of society learn that we cannot gather grapes from thorns, figs from thistles, nor art from tradesmen?

When will they learn that the art of every age must express the mind of that age and of the individual artists living in that age; that attempts to mimic the mannerisms of other ages produce no art at all, good or bad, and can be nothing but childish and contemptible shams?

We all feel this about the shams of fifty years ago, but we have not the wit to see that fifty years hence all will feel it about the shams of to-day.

It is merely a question of education whether the tricks take us in or not. But what a muddled state of mind that must be which will pay a large sum of money to be cleverly tricked. The purchaser of a commercial window knows it is not fifteenth-century work, he knows that it is not nineteenth-century art; it is sham fifteenth century made in the nineteenth, and yet he thinks he has got a work of art.

A few years ago an advertisement appeared for a time regularly in the daily papers, offering for sale Violins at thirty shillings each, look as good as old, each having label “Antonius Stradivarius me fecit 1695” inside. Who bought these sham Strads? Obviously the people who regarded music as the purchasers of sham mediæval glass regard the sister art. The imitation fiddle would be worth-
less to the musical ear, and the imitation old glass is worthless to the artistic mind. But both fiddle and window are got up to 'look as good as old' to the inexperienced eye, and apparently there are people who are satisfied with this. The window looks well, and what more do you want? seems to be their view.

The late Mr. John Bright said of a contemporary member of the House of Commons that his speeches sounded very well if you did not listen to what he said. There are a few of the more successful sham mediæval windows on which the same praise might be conferred, that they look well if you pay no attention to what is in them, but it is rare for them to attain to this standard. For the most part the first glance is enough to reveal them as either depressingly dull or ridiculous.

I have already mentioned that there are exceptions where commercial houses have co-operated with artists, and there are mixed cases, where members of firms are themselves men of artistic ability, but, as a rule, the conditions of trade soon stunt and mislead their powers, and though their presence may ensure a certain better standard of taste in the selection of colours and in the plan of a window, it rarely suffices to protect their work from degenerating into a cut and dried imitation of earlier styles.

Not only do I desire to guard against exaggerating the extent of the evil here discussed (which it would indeed be very difficult to do), but I carefully refrain from any personal references. It is principles (or the want of them) which have to be attacked, not persons. As houses of business the commercial firms may be admirably conducted, and
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it is not discreditable to men of business that they should manage their affairs so as to ensure the largest profits. Neither is it surprising that so long as there are people who attach no value to art or imagination, and only care that a work should 'look as good as old,' business men should undertake to supply them.

If a demand were to arise for imitation 'old masters,' any of our 'universal providers,' who have any enterprise in them, would set up a department which would supply pictures in the styles of the Florentine, Roman, Venetian, and Bolognese schools. A staff of young employees with a turn for drawing, but incapable of doing any original work, would soon learn a few tricks of the trade, by which they could turn out Botticellis and Titians at so much the square yard. Had picture painting died out for three centuries, and been revived by business men as a speculation, this would have happened, but happily it did not die out, and probably in any case fewer persons would have regarded pictures as so much furniture, to be ordered, like stained glass, at the manufacturers. (Stained glass windows can now be had at the stores.)

Meanwhile it makes lovers of art despair to see the country swamped with shop-art—shop-carving, shop-metalwork, shop-mosaic, shop-glass—and to see that the average educated Briton accepts this as quite natural, and regards these deplorable inanities as 'Decoration.'

Before leaving this painful theme, I must call attention to one point closely connected with it, that is to say, the effect of the system on workmanship. Division of labour is an important element in the great profit-system. It is an absolutely
destructive force where art is concerned, but is brought into full play in the production of commercial glass.

As I have shown in the chapter on Technique, the glass-painter should be an accomplished draughtsman, and it goes without saying that he should be able to take the artist’s design as a whole, so as to treat it intelligently, above all, he should draw his own outlines, which in glass are of the highest importance.

Now the actual system employed at the commercial firms is this. The outlines are given to any raw lad who is only beginning, because they are traced, so that the painter, when shading, is hampered by unintelligent and clumsily drawn contours. Then the young men, who have acquired the knack of doing the draperies, have detached pieces of these put on to their plate to shade, while the best painter has all the flesh given to him, so that his plate-glass is covered with heads, and arms, and legs in confusion, which he has to paint without any reference to the figures to which they belong; the odd pieces of background, foliage, buildings, &c., being given to inferior hands. The result is necessarily that none of the men can take any interest in their work or know what it looks like when put together. It is a perpetual drudgery, a monotonous repetition of the same sort of thing to each, without the opportunity of regarding it intelligently. The execution under such conditions becomes mechanical, but it goes faster, the work suffers, but the profits are increased.

For many years I had to depend on the firms for the execution of my designs for glass, and cordially recognize, in the case of the two or three with

A panel of stained glass in a commercial house done in fragments by different employés.

Consequent lack of interest to all.
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whom I co-operated, that every facility was given to me to correct work and to train the painters to do what I wanted, some of them coming from time to time to my studio to work under me. There was no lack of courteous endeavour to meet my wishes, but the conditions offered some insuperable difficulties. In this matter of division of labour, for instance, I could get very little concession either as regards outlining or getting a design painted as a whole. The men had only learnt to do one thing, and the one who painted draperies could not paint a head.

By careful training, and often painting on the glass myself, I was able to obtain much excellent workmanship, but it seemed impossible to get beyond a certain point until I established my own works, where I abolished division of labour and the breaking up of subjects into fragments, and had the whole work under my sole control from first to last.

STYLE, ARCHITECTURAL

It is pleasant to turn from the deplorable state of things which has arisen out of the invasion and annexation of artistic territory by trade, to the contemplation of subjects which concern art only, and the first which naturally arises is the true solution of the problem over which the Gothic
revivalists blundered so lamentably when they called in trade as their ally.

The problem in question is this, In what manner should the style of a building influence the style of the artist who decorates it?

The false and impracticable answer was that the artist should have no style of his own, but should adopt for the moment that of the period when the building was erected, or, in the case of a modern structure, that of the period of whose architectural style it is an imitation. The artist must drop one style and take up another, according to the architecture of his building, as he would take off one coat to put on another; he must masquerade in the costume of various countries and ages, and pretend to have been born in these various places and times, and to draw and think as men drew and thought there and then.

This solution must be negatived flatly and uncompromisingly. First, if it were possible, it would, artistically considered, be profoundly immoral; it would make all decorative art a hollow pretence; it could never then be the genuine expression of anything the artist really felt.

But this point need not be discussed, for, second, it is absolutely impossible, as shown in the last chapter. The man who has no feelings of his own, no perception of beauty of his own, no conceptions of his own to express, is not an artist, and his work is not art. The man who has feelings, perceptions of beauty, and conceptions of his own to express, must and will express them, whatever building he is working in. He would not if he could, and could not if he would, be a 'Jack of all ages and master of none.'
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What then is he to do if he has to decorate buildings of different ages, or at least in different styles? The answer is simple. We have only to appeal to the universal practice of all artists, past and present. No artist ever entertained the idea of drawing the human figure, or draperies, or trees, or anything else, in half a dozen different styles, in order to ape the manner of ages to which he did not belong, but all artists have adapted their designs to the forms they have had to fill and to the scale and proportions of the buildings of which those forms were a part. This is a totally different thing from changing their style of drawing and painting, their way of thinking, their conceptions of the themes they have to deal with; a thing which happily no human being can do. The business firm’s employe, not being troubled with conceptions, is ready to copy the mannerisms of any age, and to produce the absurd results with which we are too familiar. The artist will make every design suit its situation; the manner will be his own.

It cannot be too emphatically stated that this alone is possible to decorative art. Trade, and trade only, has ever attempted to destroy art and character by aping tricks of manner, which were of course no tricks in the original work, but always become so in the hand of the servile copyist.

Can we imagine any artist in the past, whether of the earlier or later periods, altering his style according to his buildings. In the church of Santa Maria Novella in Florence, an early Italian Gothic building, there are wall paintings in adjoining parts by Giotto and Ghirlandajo, and many others. Each painter is himself absolutely. Ghirlandajo

1 Ghirlandajo was born about 150 years after Giotto.
was a renaissance artist, and his frescoes are renaissance; every painter's individuality and the character of his age are fully expressed on the walls of this wonderful church, which is consequently a rich treasure-house of noble work. If Italy had been cursed in the fifteenth century with commercial decorating firms, Santa Maria Novella would have been filled with cut and dried imitations of Giotto, and would have become a charnel-house of corruption, such as most of our churches now are. It is worth noting that in the choir of Santa Maria Novella, between the walls decorated by Ghirlandajo, is a large stained glass window. It is in the later Italian manner of its own time. Italy is filled with examples of the kind. In no case has an artist stultified himself by pretending to belong to a different age to his own.

But take the present day. Is there any exception to this same rule? Does any artist draw or paint in any style but his own? Outside trade decoration is there any case of sham mediaevalism or sham anything else? Personal proclivities there are and always have been. As Botticelli and Mantegna showed strong classical predilections while many contemporaries were still under the influence of their Gothic predecessors, so we find some of our painters of to-day manifest in their work a strong dominant love of classic work, the late Lord Leighton and Mr. Poynter for instance, while others, like Sir Edward Burne-Jones, have evidently been more influenced by mediaeval, and, in particular, by Florentine art. But in all such cases it is a genuine personal feeling, it is the true expression of the best that is in them, it has nothing in common with the imitation of tricks of manner, and it does not change
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with different buildings (nor with the state of the market).

It would be difficult to offer anything like rules for the adapting of designs to spaces or to special styles of building. Some of the examples already given will show at least how such varying conditions affect my own designs.

Fig. 36.

Study for angel for tracery of window in church at Brooklyn.

A comparison between the broad window (Fig. 33) and the narrow lancets in the St. Saviour's windows (Fig. 26) will show what totally different character can be imparted to a design by the influence of the shape and surroundings. It is not merely that the one light is broad and the others narrow, but the style of the thirteenth-century architecture suggested a different sort of effect and treatment.

It is hardly necessary to say that there is no thirteenth-century drawing in the window. The
figures in the two windows will be found to be alike in this respect, the difference being in the design only.

The adaptation of composition to spaces has already been touched upon in the consideration of design generally. The Epiphany window (Fig. 30) gives several instances, in the heads of the lights, in the tracery, and particularly in the rose, where it is plain that the form of the group of angels is suggested entirely by the shape of the space. Here is a flying angel, designed for a rather unusually shaped piece of tracery over two round-headed lights (Fig. 36).

STYLE IN RELATION TO ORNAMENT

There is one important division of this branch of our subject which must occupy our attention for a little while now, and that is, Style in connexion with Ornament. It is by no means an easy subject to treat or to come to decided conclusions about. I have spoken strongly and in the most unqualified way about the puerility of mimicking the manner of other ages in the figure-work of to-day, because that is a question which admits of no difference of opinion, and about which there has been no difference of opinion among artists; but ornament stands on a different footing, for reasons which are clear enough.

As I have just endeavoured to show, the true
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Complexity of problem.

influence which architectural conditions should exercise over the decorative artist, is not in the drawing and painting of his figures, draperies, &c., but in his general design and mode of filling his spaces. Ornament, however, consists so largely of design and so little of direct representation, that the way out of this problem is not nearly so simple as out of the one already considered.

At one time many architects held the view which I hope I have refuted, that the stained glass of to-day should be exactly like that of the various early periods, the style being dependent on that of the architecture it decorates. This mistake arose from their point of view. They did not realize the difference between architectural forms and the forms of natural objects—human figures, draperies, &c.

It may be open to question whether the true end even of architecture in any age can be to reproduce exactly the structural forms, the shafts, arches, mouldings, and other details of past ages, and I fancy the present school of architects have asked themselves that question, and that they have not all answered it in the affirmative; but whatever grounds there may be for believing that architecture should grow and develop like all other things, and that it should do so now as it did in all former ages, it can never be said that a particular form of arch or clustered shaft which was beautiful in the thirteenth century is an obvious absurdity now. But it can and must be said that the human figure as drawn in the thirteenth century, in good faith, would be an obvious absurdity from the hand of a nineteenth-century artist.

The figure of the early artist was in full accord-
Style in Relation to Ornament

ance with his perceptions and convictions, and we feel its genuineness and its vitality through its grotesqueness. From an artist of to-day it would be in defiance of his perceptions and convictions, and would be a gross affectation; consequently no artists draw such figures.

But this is not the case with the shafts and arches. They are not representations of natural objects, and therefore can be convicted of no wilful departure from natural forms. The architect who adheres to them may be right or wrong, but, even if wrong, he may be quite honest and acting on a genuine conviction.

I fancy few will deny that much architectural work, which is not only beautiful but original, has been produced in recent times by new dispositions and combinations of the old forms. Proportion in architecture is of such overwhelming importance, that if a man possesses an imaginative sense of it, his work will be imposing quite apart from its details.

It is plain then that we cannot argue from architecture to figures; what may be permissible in the one must be intolerable in the other. But may we not argue from architecture to ornament? May it not be reasonably urged that the ornamental part of a window should correspond in style with the architecture of the church to which it belongs? This certainly may be plausibly urged, and, in advocating a different view, I wish to do so with diffidence, not because of any doubt in my own mind, but because I recognize that a case may be made out for the other side.

The first point to be considered is whether the ornament in the stained glass of a window connects Impossi-

bility of arguing from architecture to figures.

Question as to whether ornament should ally itself with the architecture or the figures in a win-

dow.
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Natural tendency to associate parts of window with each other rather than with stonework. Incongruity of mixed styles in one window. Example of this.

Ancient practice.

Genuineness of each man's own style, irrespective of style of building.

Maintenance of rule even in architectural additions.

Itself more closely with the figures in that glass or with the surrounding architecture. I think it will be admitted that to the eye the various parts of the stained glass are much more closely associated with each other than with anything in the stonework, and that an incongruity between the style of figures and ornament in the same design would offend the eye more than any that might exist between these and the neighbouring architecture.

I know this to my cost, for some sixteen years ago I was asked by the late Mr. Street to design the figures for a window in Salisbury Cathedral, for which he was planning the ornament, he being the architect to the cathedral. I found that his ornament was simply a copy of some of the thirteenth century grisaille from old windows in the cathedral, and the discordance between the figures and this antiquated ornament is a perpetual eyesore.

The next point to consider is, What has been the practice in the best periods, and how do the results of that practice now strike us? I think it will be generally agreed that throughout the middle ages architects were remarkably indifferent about the mixture of styles in their buildings. The only fixed principle being that every man worked in the style of his own time, whether in architecture, or in stained glass, or other decorative work. A stained glass window was homogeneous in its figure and ornament, and its style was that of the time when it was painted, whatever the architecture of the church might be. The same is true of carved stalls, screens, or other decoration. Not only so, but if an addition was made to the structural form of a church, the addition was in the style of its own time, without regard to that of the original building.
Style in Relation to Ornament

If a window were opened out in the wall of a Norman church, for instance, the mullions and tracery of the window would be Early English, Decorated, or Perpendicular, according to the time in which it was done. Even in the more severe symmetry of classic work such mixtures are found. In the Propylaea of the Acropolis at Athens, the inner columns are Ionic, between two Doric façades. This last instance does not concern the question of period, as the styles existed contemporaneously, though the Doric was earlier in its origin, but it shows that the association of different styles in a building was not distasteful to the greatest architects. The one thing that was distasteful was the affectation of a style that was not the artist’s own. I think all are agreed that these combinations of styles are picturesque, are full of historic interest, and are indispensable to the genuineness of each work.

What then is the practical bearing of these considerations upon the treatment of ornament in stained glass?

If the facts adduced are accurate and the reasoning sound, we have arrived at three conclusions:

1. That want of accordance between the figures and ornament in a window is disturbing; or, to put the matter in more general terms, the parts of any one design should be homogeneous in style.

2. That the presence in a building of separate features in different styles from the original architecture has been allowed in all the best periods, and that the results are full of interest and charm.

3. That the one all-important condition is that all work must be the genuine expression of the artist’s own feeling, and not a sham.

But we started by accepting the condition that
the style of a building should influence the design of its decoration, and that ornament consists chiefly of design; so that in our practical conclusions we must not forget this.

In my opinion the law arrived at about figures may be safely applied to ornament. The form and situation of the space to be decorated should influence not the manner but the design.

Ornament consists in only a slight degree of representation, but it commonly conveys impressions received from natural forms. Foliage, for instance, is the staple of ornament; it is true we translate its free and irregular growth into a language of rhythmic order with recurrent forms like a versification in visible images, but the mode of this translation is not arbitrary. Each country and age has had its own manner, Egypt, Assyria, Greece, mediaeval Northern Europe, Italy in the renaissance, all have seen the thing in their own way, and those ways are as full of character as their treatment of figures.

Here are illustrations of the way in which foliage has been translated into decoration at different times (Fig. 37).

How much we should have lost if the people of any one of these ages, instead of giving play to their imagination, had thought it their duty to copy the decoration of earlier times.

The only solution of this problem that appears to me to be worthy of artists, is to let the manner of their ornament be their own, but to determine the scope and movement of the leading lines, the scale of the details, the amount of colour, &c., according to the form and situation of the space to be filled.
Style in Relation to Ornament

But though the principle is simple, it is not an easy one to carry out in the present day.

![Images of ornamental designs]

**Fig. 37.**

| a, b | Closed and open lotus from Egyptian painting of colonnettes. |
| c   | Assyrian bas-relief, sacred tree, NW. palace, Nimrod,       |
| d   | From Greek patera.                                         |

The decorative sense seems to flourish most
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Decline of decorative sense in late civilizations.

happily among primitive peoples. These decorate everything they come across; the artistic instinct is natural to unsophisticated human beings, and in an early stage of development, decoration is its only outlet. Even when they begin to represent objects they treat them as line and colour, not in the spirit of imitation. Decoration precedes representation as verse precedes prose.

In the Bayeux tapestry, when Duke William's men cut down trees with which to build his ships, the trees are foliated ornament, with elegantly curled stems, although the men, by some unexplained process, manage to saw them into straight planks. To those who see everything in this light, ornamental decoration comes spontaneously; and it gains delicacy and beauty with the development of draughtsmanship, but when the realistic faculty reaches a certain point the decorative sense seems to wane; arabesques appear where charmingly painted nymphs stand in impossible positions on the tips of gracefully curled leaves, intermixed with birds, vases, fountains, griffins, fishes, or anything else that comes into the painter's head; the symmetry, the absence of perspective relations, and the impossibility of the whole scene being the only means of distinguishing it from painting pure and simple.

Tendency of late ornament to become realistic.

Raphael's arabesques.

Here are specimens of Raphael's charming arabesques in the Vatican (Fig. 38). They are full of grace and playful fancy, but one feels that they are ornamental painting rather than ornament. They are genuine, but mark the point at which decadence is inevitable; no further development in that direction is possible.

Nineteenth century

We know what it became under nineteenth century civilization in this country, what our wall
papers and carpets were until a modern Hercules undertook the far more than Herculean task of cleansing our dwellings from the vile and putrid stuff which defiled them. The decorative sense appeared to have become extinct with us, and was diseased almost past hope; still there was some life in it, and that light has in late years been greatly quickened. But under such revivals there
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Tendency to resuscitate old forms at times of revival is always much harking back to old forms, owing to the interrupted growth, and a well defined style, characteristic of the period, is hardly to be expected. The difficulty is enormously increased where trade intervenes, and confines itself simply to the
mechanical copying of old patterns, and some years ago it would have been difficult to find a prevailing character in English ornament, so that an artist could only give expression to his own personal predilections.

Happily, outside the work of the business houses, and even including this where they co-operate with artists, something like a common spirit in the design of ornament is becoming manifest, founded on the past, as all good work is, but exhibiting a character of its own.

The style which, in my opinion, is most congenial to modern art, and most susceptible of natural development, is that which long prevailed, though with important modifications, in early Italian work. The foliage in the best Italian ornament almost persuades one that it is that of some ideal flora, which is actually rhythmic and symmetrical in its growth. It harmonizes perfectly with naturally drawn figures, but is decorative in the highest degree.
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Some very perfect instances of the style occur in the capitals of the columns at the Ducal Palace in Venice. Here is a specimen (Fig. 39), in which the foliage is associated with figures. There are simpler examples of decorative foliage treated in the same spirit in the Duomo at Florence.

Fig. 40 b.
Grisaille from window in Forfar Church. From black and white cartoon.

If it be asked how ornament of this character can be applied to glass, I can only give a few examples showing how I personally feel about it. Figs. 40 a, b are from the cartoons of the panels above and below the Paul at Athens (Fig. 34), in which the foliage is in light and varied bluish-grey greens, upon a white ground. Fig. 41 is the grisaille from the Salisbury window (Fig. 10). An example of foliage and
Style in Relation to Ornament

Figures combined was given in the small outline, Fig. 12, and some foliage with smaller scale detail in Fig. 15.

I hope enough has been said to show that even in that division of the art we are discussing, in which this age is weakest, we are not left to the wretched resource of copying mechanically other men's work, and that precedent as well as reason demand that what we do should be our own, even though the style of our work differ from that of the building we are decorating.
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STYLE IN RELATION TO ARCHAEOLOGY

This subject is so far related to the last, that the error of copying the work of past periods carried with it the practice of treating costumes, buildings, &c., as if they belonged to those periods. If the principles here advocated are accepted, it will follow that we shall not dress the people in our scriptural or other subjects in the costumes of the thirteenth or fourteenth centuries, merely because the churches we are decorating were built in those periods, or are modern imitations of the architecture of those periods; but the question then arises, what costumes shall we give them.

The old practice was a very simple one, and gives great value to the old work. The early artists represented people as they saw them, without any regard to the country or period of the subject represented. They knew little or nothing about those places and times, and they loved to show things as they knew them; consequently their works are a storehouse of information about their own times.

There is an obvious objection to our keeping up this practice in the present day. The competition for profit has thrust beauty out of our streets and houses, and especially out of our dress. At any other time the existing dress could be used for artistic purposes, only in this century has it been so degraded and vulgarized that it must be rigorously excluded where beauty is desired. But even if our dress consisted (as regards men) of something better than a jumble of battered black tubes, we could not
employ it in our treatment of ancient history. Every educated person now knows something about the costume of Egypt and Assyria, Greece and Rome; many know a good deal about them, and most of us take a keen interest in realizing past times. Our pictures and our books show this, and though archaeology is wholly unnecessary to decorative art as such, yet if it is to reflect our natural feelings we cannot entirely exclude this way of regarding our subjects, even if we would; but I do not admit that there is any reason why we should.

From the moment that we exclude the primitive and wholesome custom of giving everything as we see it in our daily lives, we must either adopt some vague and colourless costume, that shall mark no particular place or period, or we must arbitrarily select some costume that we know to be false, or we must seek to give local colour and character to our work by giving the impressions we naturally form of the people we represent from such knowledge of them as we may possess.

There are some traditions that it would be difficult to break, and which have constituted exceptions to the general rule in the past.

Christ and His apostles have at all times been represented in simple tunics and mantles, such as may have been worn at almost any period, and it would be undesirable to depart from this long established custom; but it would render our decorative art very monotonous were we to clothe all personages in the same way, and it would be scarcely rational to impose upon ourselves this self-denying ordinance, when we have at hand many costumes full of interest and character waiting for us to make use of them. To injure the spirit of decorative work for the sake

Affectation of such practice in a society familiar with the costumes of the past.

Desirable-ness of presenting our subjects as we naturally conceive them.

Traditional treatment of Christ and apostles at nearly all periods.
Fig. 42.

Panels from chapel of school near Philadelphia. From black and white cartoons. (Height 3 ft.)
of archaeological accuracy would be very foolish, but not quite so foolish as to forgo anything which would add to its interest for fear of such accuracy.

The story of Joseph (Fig. 19) will illustrate this point. Here are the two subjects on a larger scale (Fig. 42). We have unlimited evidence as to every variety of Egyptian costume, and marvellously full of character and interest it is. But we also have abundant evidence from the same sources of the costume of their neighbours, whether allies or enemies, and these also are full of variety and distinctive features. The impressions formed in my mind of these people is determined by my familiarity with these images, and I should be consciously violating my sense of fitness if I went out of my way to clothe the persons represented in these panels in some conventional and pointless garments, which I knew bore no resemblance to the clothing of their time and country.

A more important case is that of a memorial to General Lee in Richmond, Virginia, for which I had to treat the subject of Moses leaving the court of Pharaoh, 'choosing rather to suffer affliction with his people' (Fig. 43).

Moses, as the adopted son of Pharaoh's daughter, was virtually an Egyptian prince, and would hold a state office. He is descending from an upper room in a royal pavilion, where Pharaoh is seated in council with his priests and officers, and is supposed to have his attention arrested by the ill-usage of his fellow-countrymen, who are working as slaves under the lash of merciless taskmasters. He has been brooding over the sufferings of the Israelites, and the scene he is now watching nerves him to a final resolve, and he casts away his staff of office as a sign
Stained Glass as an Art

of his determination to renounce all connexion with the persecutors of his people. Pharaoh's daughter, who is entering the pavilion with two of her maidens, perceives with apprehension the indignant attitude of her adopted son.

I found the Egyptian architecture, costume, ornament, &c., all lent themselves admirably to the development of interest in the material, and of the decorative quality of the work. Moreover, the scene presented itself to me naturally in that form, a form which must unquestionably be more interesting to the large number of persons who are familiar with Egyptian statues and paintings than any artificial and arbitrary costume which I might have invented in defiance of my knowledge and inclination.

To some painters anything which savours of archaeology is repugnant, possibly because some other painters make archaeology take precedence of art in their work, and if the anti-archæologists naturally think of the scenes they treat in costumes and surroundings derived from their own fancy, and not from what they know of the ways of the people they are representing, they are quite right to make their work accord with their conceptions. If they did otherwise, they would at any rate depart from what I have ventured to regard as a fundamental principle, namely, that every man's work should be the expression of his own feeling. If the work so conceived be a work of imagination and decorative beauty, I for one should infinitely prefer it to anything which lacked these first essentials, however correct in costume and details. But I could not admit that its merit consisted in or was promoted by its inaccuracy.
MEMORIAL WINDOW TO GENERAL LEE, ST. PAUL'S, RICHMOND, VIRGINIA.

HEIGHT 10 FT. 6 IN.

From the glass.
The principle that every painter should paint all subjects in the costume of his own time is intelligible, but when this has become impossible I wholly fail to understand the principle which would allow or demand some sort of ancient costume, but with the proviso that it must be incorrect, and must not correspond with our natural conception of the scene represented.

I have already referred to the design (Fig. 34) in which the actual scene visible from Areopagus is given as background to the subject of Paul at Athens. I had designed the same theme more than once before, where the conditions of space were adverse to such a treatment (Fig. 44 is an example), but here the space was very broad, the means of realizing the scene were at hand, and I found that such realization accorded perfectly with my composition. Under these circumstances I could not feel that the

**Fig. 44.**
In church of Holy Trinity, Philadelphia.
From small coloured sketch.
(Height 15 ft. 3 in.)
correctness of this background must be regarded as a fatal bar to its adoption.

On this as on all other aspects of our theme, I adhere to the principle that the decorative and technical beauty of the work must be our first aim, and that, with this object steadily kept in view, every man’s art must be the unaffected expression of his own feeling.

**STYLE IN RELATION TO A FEW SPECIAL POINTS**

There are one or two matters which can be most conveniently considered in this connexion, whether they may be regarded strictly as questions of style or not.

In most forms of art the human figure is the subject of the highest aspirations of painter or sculptor. God’s most perfect work, made in His own image, as the temple of the human spirit, has been the noblest object of reverent study to the great men of the past, to Phidias, Praxiteles, Signorelli, Raphael, Michael Angelo, Titian, and all who rank as the first creators in art.

How should the human figure be regarded in relation to stained glass? It is hardly necessary to say that the question is chiefly a technical one; the nobility of the figure is the same in whatever relation it is considered, but it may be less susceptible of artistic treatment in one material than another.
If we refer to the best periods of stained glass, we do not get much information, because at this time, when draughtsmanship was in its infancy, the figure was to a great extent avoided. Giotto, for instance, never represented it, so far as I can recollect. He lived in the late thirteenth and early fourteenth centuries; and it was not till late in the fifteenth century, when the power of drawing had greatly developed, that Botticelli and Signorelli made the figure an important element in their work. By this time stained glass was approaching its last stages. It consisted, moreover, chiefly of single figures of saints, who at this period were commonly represented as rather overloaded with drapery, so that little opportunity offered for treatment of the figure.

But both in early and late glass, when such an opportunity did occur, it was utilized. There is a window in Chartres Cathedral, close to the one reproduced above, which illustrates the Creation, and is full of medallions about Adam and Eve. The figures are in a rather warm flesh colour, upon ruby ground; the effect being admirable. The drawing is archaic, but full of spirit.

In the Fairford glass, nearly 300 years later, there is a temptation in which the Eve is very gracefully drawn. At this period, when white glass was much in favour, even the flesh was painted on white, but in neither case does the artist appear to have felt any technical difficulty in the matter. Nor is there any reason why, in an isolated case, on a rather small scale, such difficulty should be felt.

The reason why the question has to be considered and experiments tried, is because one of the great beauties of glass consists in its glitter, which is rather
promoted by crisp workmanship and small detail, such as folds in drapery, than by the representation of comparatively smooth surfaces. The colour also of flesh can only be rendered by a simple tint, though the modelling can be given to perfection. It follows that the treatment of the 'Resurrection' and of the

'Reception of the Blest' in Luca Signorelli's magnificent frescoes at Orvieto, would in glass present a problem (I do not say an insoluble problem), on account of the large number of naked figures they include.

The necessity of much colour in any window on account of its situation, or of the character of the
Style in Relation to a few Special Points

neighbouring windows, would of course preclude such a treatment, but on technical grounds I see no reason for excluding one of the noblest subjects an artist can treat where other considerations would favour or require it. Even glitter in glass, beautiful as it is, would become monotonous if it prevailed equally everywhere, and the particular kind of texture and surface offered by the representation of the human figure has a value of its own, technically, among objects with stronger colours and more sharply defined light and shade.

Here is a group in which an attendant is liberating Lazarus from his graveclothes, in response to the command, 'Loose him and let him go' (Fig. 47). The attendant is represented with little clothing, that his swarthy skin may contrast with the paleness of the man who is newly risen from the grave.
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Here are three figures (Fig. 46) taken from black and white cartoons, which do not therefore show the tone of the draperies, which are in powerful colours, and the shadows in the flesh appear somewhat darker in the photograph than in the glass, but these examples and the Samson (Fig. 47) will suffice perhaps to show that the representation of the human figure in glass does not involve baldness of technique.

On page 31, in a footnote, I mentioned that it would be necessary to qualify the statement that glass, like sculpture, cannot imitate those qualities of colour and workmanship which give such interest to the works of the great painters. This is true, but the qualification is this, that glass can give great variety of texture, and that these textures, when they do not pretend to be realistic imitations, give great technical charm to the material. Different degrees of gentle gradation or sharp transition of light and shade, of delicate or rugged execution, will suggest (though they do not realize) natural surfaces of materials like marble, rough-hewn stone, metal (such as plate armour or chain mail), fur, and other stuffs of strongly marked textures, foliage, large or small, &c., and any or all of these may be employed by the artist to promote the technical interest of his material, or may be degraded by the philistine in the hopeless attempt to make pictures.
PART OF EAST WINDOW, EVESHAM.
(Figures 4 ft.)

From black and white cartoons
The representation of angels demands some notice here.

This is not strictly a matter of style, but it would not have been easy to include the point under any other head.

All representations of angels are necessarily symbolic (wings, for instance, are impossible anatomically, but are expressive symbols of free movement); and it would therefore be in a high degree irrational for any man to pronounce as to their treatment whether it should be in this or that style. I only offer what I have to say on the subject for the reader's consideration, and for what it is worth.

Angels are described in the Bible as God's messengers and agents, and, since they are referred to as existing before man, must not be confounded with risen human beings; at the same time the words 'Ye shall be as the angels' may fairly justify a generally similar treatment in our symbolic representations of them.

Now a custom arose in the middle ages of clothing angels in ecclesiastical vestments. The intention is obvious. The angels were a hierarchy of God's ministers in heaven; the priesthood was a hierarchy of God's ministers on earth, and the insignia of the earthly ministry were employed as symbols of the heavenly.

This was quite natural at the time, but as a permanent practice it appears to me to be open to very grave objections. It is a part of the system which regarded everything in the garb of its own time. It does not appear in the early glass so far as I can remember; there is nothing of it in the Chartres window, but it is prominent in fourteenth and fifteenth-century work. Giotto's angels wear albs, but
Absurdity of drawing angels who existed before the Creation in costume only invented 5,000 years after it. Anthropomorphism exceeded.

Necessity of representing celestial beings in exalted human form.

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later on copes were added, and the same garments are common in the glass of the same periods. Does it not seem reasonable that when the custom of dressing the people of all ages and countries in the costume of our own time has been entirely dropped, this habit of clothing angels in fourteenth-century ecclesiastical vestments should go with it? To represent Pharaoh's soldiers crossing the Red Sea as crusaders sitting sideways in little square carts, or to dress Abraham meeting Melchizedec after the battle in an elegant suit of Italian armour, is quaint though quite characteristic of the time, but to clothe archangels, who are supposed to have existed long before the Creation, in an elaborate costume, which never came into use till many centuries after Christ, appears to be such an extreme strain of the mediaeval way of looking at things, that when it had once disappeared it was a pity to revive it.

Moreover, it is a material way of treating celestial things, which goes far beyond anthropomorphism. Much of the attack upon anthropomorphism that one meets with in metaphysical writers appears to me to be exaggerated and mistaken; man's spirit must be derived from God's spirit, and is our only means of forming a conception of Him. It is limited, but a limited view is not false unless we mistake it for the whole. Man's body is not merely the clothing or envelope of his spirit, it is the outward expression of it which has grown and developed with it, and in the portrayal of celestial beings we can but give exalted human beings as symbols of those that are beyond our ken. But to extend this to our clothes, and to give these spiritual beings not merely

1 In the carving over the stalls in the Chapter House, Salisbury.
2 Benozzo Gozzoli, in the Campo Santo Pisa.
garments, but a highly elaborate and special form of costume, may be symbolism, but seems to be

![Fig. 48.]

a narrow form of symbolism, which serves to lower rather than elevate our conceptions.

Symbols also ought not to clash with each other, and when we have given angels wings to convey to the eye the impression of free and rapid movement, it is surely an artistic blunder (not to put it more strongly) to clothe them in such weighty garments that the wings become futile, and merely ornamental appendages.

Compare these angels from Orgagna (Fig. 48), and Van Eyck (Fig. 49).

The great painters soon dropped this aggressively material symbolism,

![Fig. 49.]

Extension of this to highly specialized costumes, a narrow and un-elevating symbolism.

Incongruity of wings and heavy garments.

Orgagna and Van Eyck. Ecclesiastically clothed.
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which appears to me to be quite out of harmony with the best modern thought.

There is an aspect of this subject about which it may be worth while to say a few words.

Is the human body exclusively animal in its nature? I cannot feel that the best spiritual or scientific teaching exhibits it in this light.

The history of the human being, studied in the light of evolution, shows a gradual diversion of the organs of the body from animal to spiritual functions; the eyes, ears, and mouth, aided by the limbs, which in the early organic forms existed only to search for food and devour it, or to shun danger, have gradually learned higher offices. In the lower races these have only a rudimentary development, but in the purest examples of the higher human races the animal functions are wholly subordinate; they cannot be dispensed with, but are only a means to an end. The eyes and ears are occupied in the reception of impressions of any degree of elevation, whether intellectual, emotional, or (to use a more comprehensive term) spiritual; and the mouth is employed in giving expression to the thoughts and emotions thus received; and we have only to suppose this gradual change of function to reach its consummation in order to conceive a wholly spiritual being in the very likeness of man.

So long as there remains the grosser matter, which needs material food and protection from material evils, there will remain the struggle for material well-being, which hinders the full development and expression of our spiritual nature, but with the decay of what St. Paul calls the 'corruptible body,' may we not conceive that the spiritual body, which has been germinating within this coarser shell or
husk, may be a true and nobler antitype, purged of all that tended to lower it, and free to exercise unhampered those spiritual functions which constitute already nearly all the lives of the best.

It may be objected that the analogy is false, because the gradual diversion of our organs from animal to spiritual functions has taken place in the race, not in the individual, whereas the consummation is here supposed to take place in the individual; but I deny the grounds of the objection. It is well known that each individual traces in the embryo the history of the race in its development from the lower organisms, and it is a sound analogy which supposes that each individual may in like manner attain to the consummation.

It can hardly be necessary to say that this speculation is not offered as anything that is or can be demonstrable, but that it does not appear to be at variance with spiritual or scientific teaching, and, while recognizing that man at his highest is but 'a little lower than the angels,' it gives something like a rational basis for the necessarily anthropomorphic representations of angels in works of art.

William Blake's angels in his 'Job,' where he illustrates the words, 'The sons of God shouted for joy,' are to me a truly noble conception (Fig. 50).

The drapery in these is scarcely perceptible, and seems as if a part of themselves. If we must yield to the long-established tradition which represents angels as wearing garments, these should at least suggest as little as possible materials bought at a shop and made up. It may not be possible in a material like glass to convey anything so impalpable as the drapery of Blake's angels, but at least we can avoid overweighting them with masses of heavy
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clothing. Even symbols should help, not hinder, the imagination.

Examples. The two or three examples here given are not

put forward as models, but simply as showing how I endeavour to carry out the conception I have described (Figs. 51 and 52).
From a 'Jacob's Ladder' in East Window of Christ Church, Brooklyn.

Figures about 5 ft.
Fig. 52.

ANGEL OF JUDGMENT.

(FIGURES 3 FT.)

ANGEL OF MERCY.

From black and white cartoons.
4. THE INFLUENCE OF LIMITATIONS OF FORM AND SPACE ON DECORATIVE ART

WHY do these limitations elevate rather than depress the imagination?

The subject is subtle and by no means easy to treat briefly, but I will do my best to convey what I feel about it.

In the first place, one tolerably obvious effect of these limitations will strike us. When we paint a picture in a frame, we regard the frame as an opening through which we are contemplating an actual scene, and as the power of imitating natural objects realistically increased, this way of regarding a picture became more and more fixed.

Now spandrils of arches or windows can hardly be looked upon in this way. The idea that the incident is going on outside the church, perhaps thirty or forty feet above the ground, and that we are looking at it through the window, does not occur to us; we regard the window or spandril as an essential part of the architecture.

The result is that we instinctively think of anything represented in such a space as symbolic rather than realistic. We may realize as much as we please for beauty, but not for realism, not for illusion, not
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to persuade the spectator that he is contemplating an actual scene. Now so soon as we find ourselves freed from this last impression, we are at once able to give expression to an unlimited range of ideas, almost impossible of representation in a realistic picture. Combinations which would be hopelessly incongruous in a realistic picture are perfectly reasonable in a symbolic painting, and the expression of lofty spiritual conceptions by means of beautiful forms affords a scope to the imagination almost closed by ordinary pictorial art.

But there is, in my opinion, a yet higher reason for this elevating influence in the limitations we are considering, a reason closely allied to that which makes rhythm and metre more congenial to the expression of the loftiest thoughts than prose.

\[\text{Fig. 53.}\]

Plan of a tree by the clerk of the works. From Prof. Ruskin’s ‘Modern Painters,’ Vol. V.  

1 Inserted by permission of the author, Prof. Ruskin, and the publisher, Mr. Geo. Allen.

Analogy between limitations of decorative art and those of rhythm and metre.
Influence of Form and Space

This question of rhythm in poetry is a profoundly interesting one. Why should the loftiest thoughts seek rhythm, a limitation, as a desirable condition of their expression?

There is a diagram in Professor Ruskin's Modern Painters, described as a plan of a tree by the clerk of the works. It serves there to illustrate admirably a botanical point. I venture to use it here for another purpose (Fig. 53). The reader will notice that the stem and branches divide and redivide on one constant and harmonious principle, resulting, nevertheless, at the extremities of the branches in apparent confusion and dissonance. In the centre are harmony and order—on the surface conflict, entanglement, and obscurity. A person placed above such a tree, and seeing only the extremities of the twigs, would be able to perceive no order or principle in their disposition, but if he could follow each twig downward, he would find they all led to the same original stem.

Does not this world present a like contrast? Do we not find underlying principles based upon constant and harmonious laws? And do we not find that the deeper we penetrate into the heart of things the profounder is the harmony, the more clear and simple the law, and yet in our daily lives and on the surface we experience conflict, entanglement, and obscurity?

Before applying this contrast between fundamental harmony and resultant complexity to the solution of the question before us concerning rhythm in

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1 In the drawing some branches appear to clash which need not do so necessarily, because they are presented on a plane. In three dimensions they would not clash. May it be that a fourth dimension would relieve nature of her conflicts, and that this is one of the conditions of a higher stage of existence,
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poetry and the rhythmic conditions of architectonic art, let me ask the reader for a few moments to consider rhythm itself in its widest significance. Any who have read Herbert Spencer's *First Principles* will remember his truly noble chapter on 'The Rhythm of Motion' as a universal law of matter when acted on by different forces. He shows how these forces alternately get the upper hand; a minute stream of water issuing from an aperture does not fall through the air in a fine thread, but in detached drops, cohesion and gravitation asserting their power alternately. In a slightly larger stream the water will form little wreaths of spray; with a greater volume it comes in waves; in Niagara in mighty masses pressing upon each other with terrific weight and velocity, but with a clearly marked rhythm both in the plunging torrent and in the clouds of spray shot upwards from the rocks below. The same law is conspicuous in waves. From the Atlantic rollers to the minutest ripple the alternate supremacy of the wind pressure and of gravitation is apparent in the rise and fall of the water.

And that which is true of the smaller phenomena on the surface of our globe is equally so of the great cosmic movements, whether of the members of our solar system or of remote binary stars.

A planet or a comet alternately asserts its tendency to fly off into space, and, having exhausted itself by the time it reaches its aphelion, yields to the potent gravitating force of the sun, and rushes into its perihelion, once more with renewed energy to start on its outward journey. Finally, the greatest rhythmic alternation of which we have cognizance is the birth and decay of a planetary system: its growth from the nebula, its decay by loss of heat,
Influence of Form and Space

and the ultimate precipitation of the dead planets into their cold and darkened sun, with a shock which, by the heat it evolves, evaporates the whole and produces a fresh nebula.

From the inconceivably rapid vibrations of a ray of light to this mighty pulsation, whose beats are counted in millions of years, rhythmic alternation is the universal condition, the law to which all movements of matter must conform. But we must remember that rhythm may be regular or irregular, that the deeper fundamental rhythms are regular, the superficial complications irregular, and that regular vibrations make musical tones, irregular ones make noise. Is it not clear, then, if we would penetrate beneath the surface—if we would probe the depths of human life, of human passion, of human joy and sorrow—if we would touch the mysteries of our being, we must place ourselves in accord with the deeper laws which rule the universe?

On the surface we see apparent confusion, a conflict of rhythms so complex that no rhythm is discernible. The poet penetrates below the surface, he ceases to hear the babel of the every-day world, his ears are opened to the marvellous harmonies that underlie it, and, if he would tell what he hears, he must do so musically: he has no choice.

And as it is with the singer, so with the listener. Let him hear the rhythmic fall of melodious verse, and the jarring discords of the workaday world will begin to vanish from his mind, his spirit will be attuned to lofty thoughts, and he will respond eagerly to what in prose would be unintelligible.

Is it not for this reason that music speaks to the soul more directly than other arts? Is it not because it gives us pure harmonies and pure rhythm, undis-
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turbed even by the necessity of drawing its images from the outer world?

From music and poetry to other arts is an easy transition. The same laws hold good for all. Can we doubt, when in a noble cathedral we feel something like awe in contemplating its mighty proportions, that the solemn impression is largely due to the rhythmic order in the succession of its divisions and subdivisions; and is it not the same with all architectonic art?

Harmony of proportion first, and with it, and essential to it, rhythmic succession of harmonies.

What a cathedral is to a street, what a Gregorian chant is to the babble of general conversation, what a pediment of the Parthenon is to an irregular assemblage of statues on pedestals, that is a great piece of architectonic painting, such as the ceiling of the Sistine Chapel or that over the high altar of the lower church at Assisi, to a picture gallery.

No lower than this should be the aim of the designer of stained glass. Its association with architecture ought to give it great opportunities, and occasionally it does so, but too often the individual designer has to deal with a single window in a series treated by different hands, so that he is only able to consider his work as an isolated design and not as a part of a connected composition.

Where the single window is itself comprehensive in design (as in Figs. 26 and 30), this is of less importance, as it contains within itself the opportunities for rhythmic treatment. Such as these, or a series of similar spaces like those in Fig. 29, are dear to the heart of the true decorative artist.
CONCLUSION

We have considered 'Stained Glass as an Art,' from various points of view, and in various relations, but it has always been 'as an art.' Material and technique have only been dwelt on so far as their consideration was essential to a right understanding of the artistic side of the subject, and archaeology has been touched upon in the same spirit; that is to say, the state of the art at early periods has been referred to purely to illustrate its artistic beauties and to show what qualities led to its growth and development, and what qualities caused its decay.

My chief aim has been to show what are the true lessons we may learn from the noble art of the past, and how we may apply those lessons to the present. I hope it has been made clear that the worst misuse we can make of the beautiful works which remain to us from mediæval times is to defy their principles and to make servile imitations of their manner. In those ages all men expressed their own thoughts in their own manner, they never entertained the idea of aping the appearance of earlier work, consequently all their work was genuine, and is a lasting delight to lovers of art in our day.

It is our part now to follow this example of...
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sincerity, and to express our own thoughts in our own manner, if we would be true to ourselves and to our art, and if our work is to earn that respect from after-ages which we pay to the work of the past.

There is one matter not yet dealt with in this essay to which I must make brief reference in these concluding remarks, and that is symbolism.

There was a pregnant sentence in a letter I received the other day from Dr. Kitchin, the Dean of Durham. It was this, 'Of all dead things the deadest and most offensive is a dead symbolism.'

A traditional symbol of long standing may be used as a hieroglyph, as a label, but it must not be used as a substitute for imagination. All the old symbolism can be learnt by heart and applied mechanically with wearisome iteration, and is so applied in commercial glass, but if a man has something to say which is worth saying he will not have recourse to worn-out and hackneyed platitudes, which in art as in speech are only employed by those who are 'gravelled for lack of matter,' and have to draw or talk to order.

Here is an example (Fig. 54) in which having to design three chancel windows with the subjects Life, Death, and Resurrection, I associated with these the figures of Faith, Hope, and Love, the connection being illustrative of the words 'Live by Faith,' 'The righteous has Hope in his Death,' and 'Made perfect in Love.'

Fig. 55 is the east window of the church attached to St. Luke's Hospital, New York, the theme being 'Christ the Consoler,' with the Seven Acts of Mercy in the circles above. The groups of sufferers are rather types than symbols, but attention may be called to the archangels Gabriel and Michael who
stand as supporters on either side of the throne; the former, who announced the birth of the Saviour,

![Fig. 54. From windows in the apse of the Mall Church, Notting Hill. (Height 8 ft. From the glass.)](image)
appears as the *bringer of good*, with the accompanying words 'Immanuel, God with us'; the latter, who overcame the Devil, as the *banisher of evil*, with the
words 'Deliver us from evil.' The next illustration is from the naked studies for this design (Fig. 56), and the draped study for one of the figures is added (Fig. 57).

![Image](image_url)

Fig. 56.

Here, as in every other aspect of this and of all forms of art, the one golden rule is to let our work be the fullest expression of our own genuine thought and feeling, in the best language at our command.

All good work is *modern* work when it is produced.
CHRIST THE CONSOER, AND THE SEVEN ACTS OF MERCY. THE EAST WINDOW IN THE CHURCH OF ST. LUKE'S HOSPITAL, NEW YORK.

The difference between the window and the original design (Fig. 551) is owing to the enlargement of the window space after the design was finished.

From the glass.
CHRIST THE CONSOLED, AND THE SEVEN ACTS OF MERCY.
THE EAST WINDOW IN THE CHURCH OF ST. LUKE'S HOSPITAL, NEW YORK.

From the small coloured sketch.
Conclusion

Giotto was intensely modern, so was Botticelli, so was Signorelli, so was Michael Angelo. When art was robust and in vigorous health, no one thought even of keeping up the style of the preceding century, much less of harking back to an obsolete style of several centuries before.

In stained glass we have a noble and an enduring material; a material with a strong individuality of its own and possessing beauties all its own; a material fit for elevated art and for high purpose, unsuitable indeed for light and ephemeral work. The strange infatuation so generally prevalent that it should be mediæval has kept too many of the best artists from having anything to do with it (happily not all, as the beautiful designs at the end of this essay will show); and some who were not misled by this error have fallen into the equally fatal blunder of imitating oil-paintings. Between these two pernicious
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Perils which have beset stained glass.

Only means of saving it, the education of the public.

errors, one striking at the root of all art, the other at the root of all technical art, stained glass has been passing through a perilous experience. The few artists who have designed for it have succeeded in keeping the art alive, and the specimens of their work which two of them have kindly allowed me to reproduce are such as the nineteenth century may be proud of. But there is only one thing that can save our cathedrals and churches from further desecration, and that is the education of the general public.

One individual cannot expect to do very much towards this end, but it is in the hope of helping, in however small a degree, to promote such education, that these pages have been written.

By the time people of general cultivation in other directions have learnt, when dealing with this particular subject, to distinguish art from manufacture, and genuine work from shams, we may hope to see the windows of our public buildings exhibit qualities worthy of their situation and of a material whose beauty is excelled by none known to the technical arts.
A new departure in stained glass was made in America some years ago, of which my readers may like to hear some account.

Mr. John Lafarge, an artist of great ability, devoted to decorative work, turned his attention to stained glass, and, finding it almost impossible to obtain the quality of execution he wanted on the glass, made experiments with the material itself, which produced some very beautiful results.

By the introduction of opalescent qualities, by letting the colours run into one another, and by twisting and flattening the glass while still soft, he obtained a great many varied and graduated colours. The twisting of the glass gave also creases and ridges somewhat resembling drapery.

With these qualities of material at his disposal, Mr. Lafarge conceived the idea of eliminating altogether painting on the glass (I am giving the account as Mr. Lafarge gave it to me), with the view of preserving in its greatest purity the transparency and brilliancy of the colours, and at the same time not sacrificing the light and shade which is wanting in the glass at Pisa.

The idea was conceived and carried out in a purely artistic spirit, and I examined with much interest a large number of windows executed on this principle
in America, many of which possess great beauty and are genuine works of art when taken on their own understanding.

I examined this work with an open mind, quite prepared to adopt anything which promised to add beauty to an art in which I was so greatly interested; but after giving the subject the fullest consideration, I found myself quite unattracted by the method.

To put the matter as concisely as possible, it substitutes accident for design. The only part of the design which it leaves completely under the control of the artist is the shape of the separate pieces of glass, and therefore the leads which unite these and form the chief outlines in stained glass. Any lines of draperies, &c., within these, and all shadows, depend absolutely on what the artist can find in the accidents of his materials that will approximately suit his purpose.

But approximation of this kind, though it may suffice for small ornamental work, such as inlaid furniture, or a table top in Florentine mosaic, is, in my opinion, wholly inadequate for monumental decorative art.

Accident, where art is concerned, is a useful servant, but is the worst possible master.

After what has been said about the supreme importance of form in stained glass, it will be well understood that a system which deprives the artist of all control over form, except in the leads, must be unacceptable to me.

A glance at any of the designs in this book will show at once how impossible it would be to execute any of them by a method which excludes workmanship on the glass, and what havoc it would make of the design and form in them if these could only
American Glass

be conveyed by such accidental streaks and creases as chance might supply in the material at hand. Moreover, the artist would soon find that his servitude to accident would not stop here; it would extend to the outer contours and leads. For the impossibility of making his forms intelligible within the leads will compel him to treat these outer lines, not simply from the point of view of design, but so as to make their meaning clear.

It became evident, after looking at a number of these windows, that design had become a secondary matter in them as regards form, and that effects of colour alone were aimed at. But even as colour I could not feel that the work was successful.

1. In the first place, the faces, hands, and feet could not be managed by the accidents in the glass, and had to be painted; and as the tone of the whole was usually very deep, the flesh had to be powerfully shaded. The result was a striking incongruity between the flesh and all the rest, this being the only painted part in the window.

2. In spite of the transparency of the glass it failed to glitter. Only designed light and shade and the deliberate touch of the artist's work can do this; only the crisp edge and gentle gradation which are given with intention, and come from the mind of the artist, can interest the spectator.

The varieties in the material itself are too vague and pointless to have any charm, and the lack of crispness and definition deprives the glass of glitter and sparkle, but if the accidents were more sharply defined it would be impossible to use them. It is only by the absence of all defined form, that is, of all interest of detail, that accidental tones are rendered available. The sense of this defect has
occasioned the use of a great many very thin leads to serve as intermediate outlines, but this is only an imperfect cure.

3. The same difficulty affects the tone of the windows as a whole. The impossibility of getting any sufficient variety of depth and texture into light colours makes them look thin and weak; consequently, in order to make the window rich enough, deep colours have to be so largely used that in many cases light is quite excluded.

I have described the beauty of the material produced under Mr. Lafarge’s directions, as a result of his experiments. It is really full of charm in itself, and, wishing to see whether it was susceptible of such treatment as might not interfere with the prime necessity of decorative art, Design, I wrote to Mr. Lafarge to ask if I could obtain some of it. He replied very kindly that he was glad to hear I thought of trying it, and that he had given instructions to the makers of the glass to supply me with what I wanted. Accordingly I ordered a sufficient quantity of different colours to enable me to make efficient experiments. To my great disappointment I received a case of glass, most of which was like imitation marble, some so dark that the light hardly penetrated through it, and a very few pieces that were beautiful in colour. I wrote for an explanation, and received for answer that ‘The glass has deteriorated as the market for it increased. . . . The corrugations you speak of are very undesirable, but the manufacturers say the market demands it.’ It appears then that ‘trade art’ is at the bottom of the mischief there as here.

As Mr. Lafarge is an artist in the truest sense, I conclude he insists on the qualities he requires, and
which I saw in his windows, but that the firm who makes it will only supply inferior glass to others, because there is no demand sufficient to induce them to keep it in stock.

I much regret this, as I see no objection to the use of many of the colours in backgrounds, or in any way which leaves the artist absolutely unfettered in his design from beginning to end.

I have so high a respect for Mr. Lafarge's artistic abilities and purity of aim, that I regret to have to differ from him in judgment. I felt that a treatise on stained glass would be incomplete which did not deal with this important new departure, and the principles to which I strongly adhere rendered it impossible for me to assent to it as a method; I had therefore no choice but to show the genuine respect I feel for Mr. Lafarge and his work by a perfectly frank recognition of the beauties of the material he has invented, and of the difficulties which appear to me to lie in the way of its general use in decorative art.

The very defects of the system constitute, in fact, a testimony to the powers of the artist who, in spite of them, has succeeded in producing results under it possessing so much beauty and interest.
NOTE II

Opus Sectile (Opaque Stained Glass)

This form of decorative art should, from the point of view of its purpose and destination, be included rather in a work on mosaic; but as its methods bear no resemblance to mosaic proper, and are almost identical with those of stained glass, I thought it desirable to describe it briefly here.

I understand that it was suggested by a form of inlaid marble work practised by Roman artists, but in its present form it consists of pieces of opaque coloured glass, cut into the required shapes, with lines and tones painted on them and fired, exactly corresponding to those in stained glass. But these are laid in a bed of cement upon a wall, instead of being united by leads to form a window.

The difference between this work and mosaic proper will be at once evident. In ordinary mosaic the forms and colours are entirely obtained by the insertion in the cement of small tesserae of coloured pottery of a vitreous character. There is no work on these enamels, and it is only by the varieties in them that forms, tints, and shadows are expressed. In the opus sectile, the broad distinctions of colour are obtained by the varieties in the material, but the forms and shadows are painted on the surface, so that ‘opaque stained glass’ is a more accurately
Opus Sectile (Opaque Stained Glass)

descriptive name for this branch of decorative art than 'mosaic.'

Messrs. Powell & Sons have produced some admirable glass for this purpose, possessing great charm of colour and surface, and I hope when its proper use is understood it may be much used as a very durable form of wall decoration.

Opus sectile has been a good deal misused at present, owing to the facility it offers for painting the surface with enamel colours, which strike at the root of its native beauty as much as in transparent stained glass, and produce an effect somewhat like poor china painting.

When treated broadly and simply in its natural colours, with very little work on the surface, the material has a dignity and a certain severity which render it peculiarly suitable for mural decoration. This dignity is entirely destroyed by enamel painting, which gives it a prettified appearance, and wholly unfits it for any serious purpose.

Opus sectile cannot compare with mosaic proper for richness and splendour of colour, but it is available where mosaic would be out of place. Mosaic can only be used, or ought only to be used on a large scale, and at a considerable distance from the eye. Opus sectile can be successfully treated on as small a scale as stained glass, and looks well at any distance.

Moreover, mosaic is, from the elaborate nature of the process, the most costly kind of decoration, while opus sectile, from the simplicity of the method of working it, costs less than stained glass.

The illustration (Fig. 58) is from a piece of this work, in which the figure is life size, treated in accordance with the above views.
Fig. 58.

Angel of Judgment. Figure life size. From the opus sectile.
DESIGNS

BY

SIR EDWARD BURNE-JONES

AND

MR. W. B. RICHMOND

There is a story told of a bishop at a Royal Academy dinner who, after expatiating upon the beauties of the works which surrounded him, consoled those artists whose inferiority excluded them from so honoured a position by reminding them that there still remained for them the wide field of decorative art. It was the common view of the time that the branch of art to which Raphael and Michael Angelo devoted their highest powers was now the proper field for the outcasts from the R. A. and the hirelings of the shops.

It is one of the most encouraging signs of the times that in the present day such men as Sir Edward Burne-Jones and Mr. Richmond give their time not merely to decorative painting, but to designing for such technical arts as stained glass, mosaic, gesso, &c. Many others might of course be named, such as the late Ford Madox Brown, Dante Gabriel Rossetti, the present President of the Royal Academy, Mr. Walter Crane, &c., &c.

The following designs, beside their intrinsic merits, are interesting from the contrast of style and treat-
Stained Glass as an Art

ment they exhibit; those by Sir E. Burne-Jones consisting exclusively of figure-subjects, while Mr. Richmond’s are purely decorative, the figures themselves forming part of a symmetrical composition in which a rich foliated pattern is the leading feature.

Figs. 59, 60, and 61 are from the cartoons for the large windows in the apse of St. Philip’s Church, Birmingham. Fig. 62 was taken direct from the windows themselves, expressly for this work. The subjects are, as will be seen, the Nativity, Crucifixion, and Ascension, the latter being the central and largest window. The position of the first window of the series renders it impossible to get a good photograph of it, owing to some buildings behind, but the details of the obscure parts can be supplied from the cartoon. Any lover of decorative art who wishes to know what can be done in the matter of stained glass in the present day, should make an effort to see these noble windows. They were executed at the works of the late William Morris, that marvellous master of the technical arts who did so much to beautify our homes and our daily life, and whose irreparable loss we all mourn.

The beauty of these designs speaks for itself, and needs no words of mine to commend it to the reader’s notice, but unfortunately the glowing splendour of the colour is not here presentable.

I should like to call attention to the keen decorative sense which has enabled the artist to convey his subjects in so full and picturesque a manner without ever verging on that pictorial realism so strongly deprecated in this essay. In the Nativity, the arched rock-work, the gravelly ground, the sheep, the bare trees, are all rendered with truth and charm, and with just so much light and shade as makes them
THE NATIVITY.

From the cartoon by Sir Edward Burne-Jones for a chancel window at St. Philip's, Birmingham.
THE ASCENSION.

From the cartoon by Sir Edward Burne-Jones for a chancel window at St. Philip's, Birmingham.
THE CRUCIFIXION.

From the cartoon by Sir Edward Burne-Jones for a chancel window at St. Philip's, Birmingham.
EAST WINDOWS OF ST. PHILIP'S, BIRMINGHAM. EXECUTED BY WILLIAM MORRIS & CO. FROM THE DESIGNS OF SIR EDWARD BURNE-JONES.

From photographs taken from the glass expressly for this work.
interesting in themselves and develops the beauty of the material. In the Crucifixion, the dramatic treatment of the sea of heads behind the chief group of figures, the action and expression of these, and the vigorous modelling of the principal figure all illustrate the same point. The artist has not thought it necessary to avoid perspective in the heads of the crowd, where the gradual diminution of scale conveys the sense of distance to the mind without any illusive realism; and even the severe symmetry of the angels’ draperies, in the Nativity and Ascension, is not more striking than in the same painter’s well-known picture of the Annunciation, or his beautiful design of the Adoration of the Kings for the tapestry now at Exeter College, Oxford. The cartoons, being without leads and bars, might possibly convey a misleading impression that the designs lean towards pictorial realism. A glance at the photograph from the glass will correct any such mistake, and I must ask such of my readers as have not seen the windows to accept my assurances that no such idea could enter the mind of any one who contemplates the glass. The work exhibits a perfect combination of two qualities sometimes supposed to be antagonistic. It addresses both the mind and the eye; the interest which the windows possess as presentations of subjects does not in the slightest degree detract from their splendour as stained glass, which, when designed for the eye only, is apt to degenerate into the pointless combinations of the kaleidoscope, or at best to the patterns of the Turkey carpet, charming for carpets, but wholly unworthy of monumental art.

The situation and subjects of Mr. Richmond’s windows in the clerestory at St. Paul’s demanded a different treatment. They represent Orders of
Angels¹, and standing as they do at a great height from the ground, a broad and simple composition was necessary. This has been given in a bold and dignified foliated design, in the convolutions of which the angels appear in symmetrical order. As it was important not to darken these windows, the glass is for the most part light, and Mr. Richmond has succeeded in imparting to it a glittering brilliancy worthy of the best traditions of the old stained glass schools.

I must again express my grateful thanks to the two artists for the use of illustrations, which so materially assist my efforts to promote a better understanding of 'Stained Glass as an Art.'

¹ The following extract from a note from Mr. Richmond will add to the interest of these reproductions:—'The clere-story windows in St. Paul's represent Angels who watch over labour. There is the Angel ploughman, sower, reaper, &c. Then the ornament represents the Oak, the Rose, the Vine, the Hop, the Ash, and the Olive. They are done with as little paint as possible, very much lead, and very thick glass. There are also Angels who carry the shields of the Virtues.'
ANGELS.

From a window in St. Paul's Cathedral, designed by W. B. Richmond, R.A.
Fig. 64.

From a window in St. Paul's Cathedral, designed by W. B. Richmond, R.A.
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THE END
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