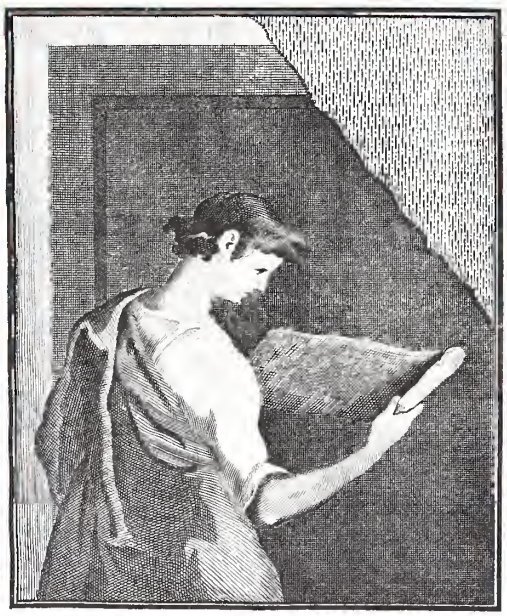

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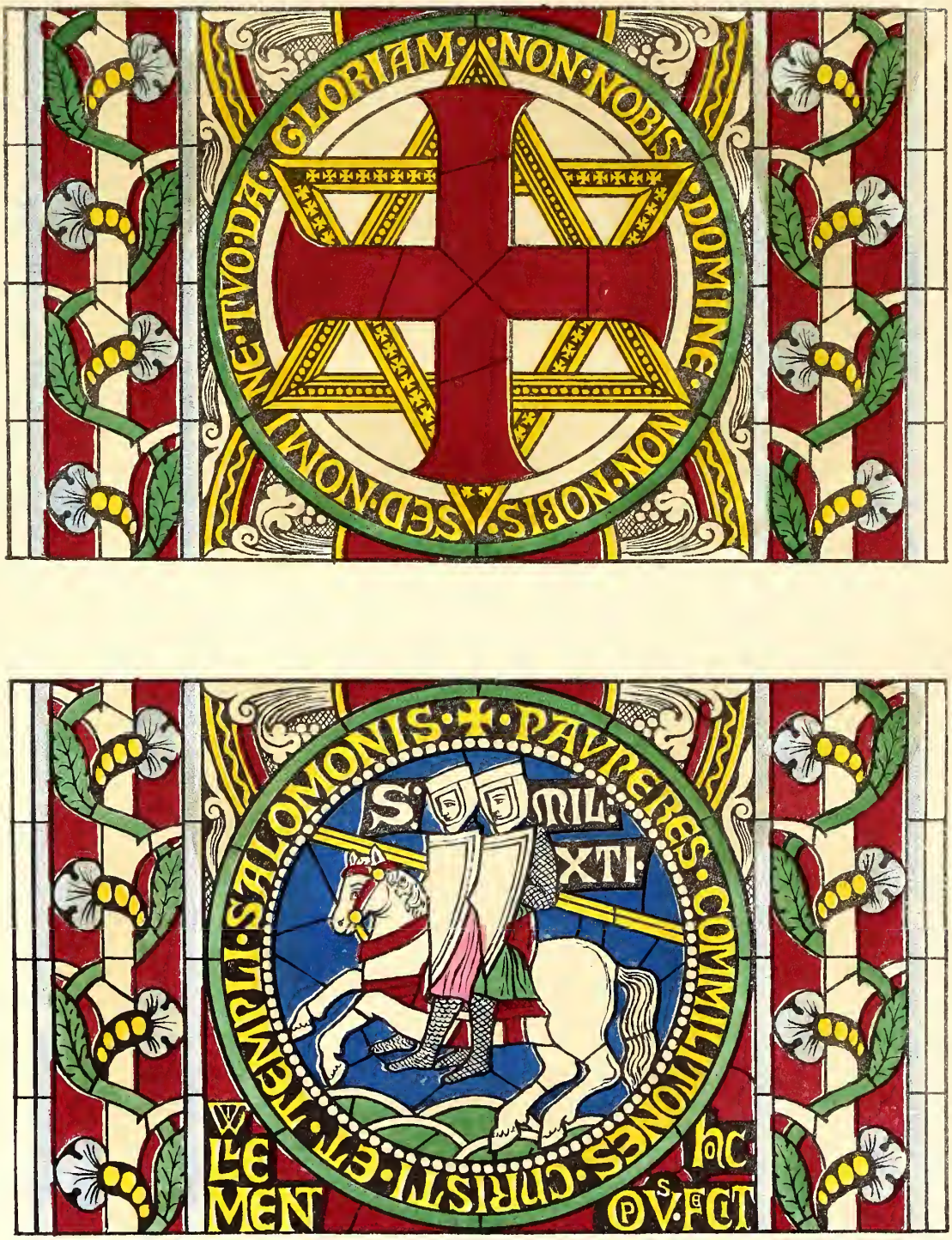

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N° VIII

STAINED GLASS, FROM THE WINDOWS AT THE EAST END OF THE NORTH AND SOUTH AISLES,

TEMPLE CHURCH, LONDON.

London, John Weale, 59, High Holborn, January 1st 1844

Day & Haghe, lith^rs to the Queen

QUARTERLY PAPERS

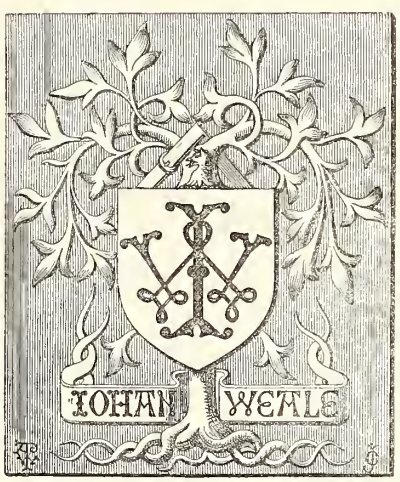
ON

ARCHITECTURE.

VOLUME I.

FORTY-ONE ENGRAVINGS, MANY OF WHICH ARE COLOURED.

EDITED AND PUBLISHED BY



LONDON:
59, HIGH HOLBORN.

MDCCCXLIV.

LONDON:
GEORGE WOODFALL AND SON,
ANGEL COURT, SKINNER STREET.

TO

THE EARL OF LINCOLN,

MEMBER OF PARLIAMENT FOR THE COUNTY OF NOTTINGHAM, AND PRINCIPAL COMMISSIONER OF HER MAJESTY'S WOODS AND FORESTS,

THIS WORK,

SPECIALLY DEVOTED TO

ARCHITECTURE AND THE ARTS IN CONNEXION,

IS INSCRIBED,

AS A TESTIMONY OF RESPECT FOR HIS PROMOTION OF PUBLIC IMPROVEMENT,

BY HIS LORDSHIP'S VERY HUMBLE SERVANT,

JOHN WEALE.

JAN. 1ST, 1844.

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ESSAY

ON THOSE

POWERS OF THE MIND

WHICH HAVE REFERENCE TO

ARCHITECTURAL STUDY AND DESIGN.

The operations of the human mind are at all times, and under all circumstances, a source of interesting inquiry; but there are difficulties attending the investigation, so subtile in their nature, and so potent in their general bearings upon the question, that every opinion should be formed upon mature consideration, and suggested rather as a *probable theory*, than an *infallible truth*.

That certain effects are produced by certain causes, is a clear and simple proposition; but when we attempt to analyze these causes, for the purpose of ascertaining *why* they have produced such effects, we find ourselves involved in a course of abstract reasoning, which usually accompanies metaphysical researches.

The subject is one of great interest and importance to all who are engaged in intellectual pursuits; and perhaps that of Architecture may be considered as eminently connected with it.

If then by careful examination and well directed study, we could trace (although but *dimly*) the apparent origin of some of those feelings of pleasure and satisfaction, which are generally excited by works of *fine art*, the result would be a valuable acquisition to the student, whose labours and whose hopes are directed to the same end.

It is under these views that the author ventures to submit the following observations.—He offers them with great diffidence; *not* as the fruits of learned or laborious reading, nor as an attempt to elucidate any of the intricacies of mental phi-

losophy; but merely as a few thoughts which have occasionally occurred to him during his reflections upon this curious yet somewhat obscure inquiry. They are *not* given *ex cathedra*, as instruction based upon logical conclusions; but as the notions of one, who communicates them under a hope, that they may become a nucleus for more erudite and valuable matter.

As perspicuity in an essay of this kind is one of the most essential qualities for its usefulness, it may perhaps be desirable in the first place to give a *brief sketch* of those peculiar impressions made upon the mind by certain external objects, which writers upon taste have described as *sublime* and *beautiful*. It is then purposed to select two or three well known architectural works erected at different periods, and in dissimilar styles, that have during many years obtained the general admiration of mankind, and endeavour to trace in *them* a few of the properties and associations, which invariably call forth the like sensations and emotions.

Dr. Blair, in his Lectures on Rhetoric and Belles Lettres, defines taste to be, "*the power of receiving pleasure from the beauties of nature and of art.*" Such a definition of the abstract term seems to be sufficiently clear and evident; yet the ideas connected with this faculty, are so complicated and diversified, that their arrangement and classification are at all times a difficult, and often a hopless, task.

In the first place, we observe, that they are *not* entirely dependent on deduction of argument or process of the understanding, but are often produced *instantaneously*, and are felt by all classes at all ages. It must, however, at the same time be acknowledged, that if founded on an *internal sense* in our nature, they are yet susceptible of augmentation; and that the pleasure we derive from objects of taste, is increased by the powers we may possess of discerning and appreciating their beauties. A fine picture or a magnificent building will call forth pleasing emotions in the most uncultivated minds, but such feelings are far more potent in those who can reason upon the causes which have excited them. The progress of this power may be observed by the varied effects produced on different persons by a work of art. Take, for instance, an historical picture representing an event of great interest; there is scarcely a human being, however ignorant or untutored he may be, but will feel gratified by the sight of it. The action which it exhibits calls forth his surprise and curiosity, although he has never read or heard of the circumstances; and his anxiety and efforts to make out the story it tells, animate and enliven him. Another person, somewhat more advanced in knowledge, will look upon the same picture under very different feelings; he will probably be aware of the event which it records, and therefore a judge, to a certain extent, of the accuracy with which it is delineated. He will compare the situations and attitudes of the several figures with his own con-

ceptions of the way in which the incident occurred; and will consider how far they excel in some parts and fail in others, in conformity with the views which he may have adopted upon the subject. His pleasure is increased by the information he has *previously* obtained; and he can, to a certain extent, refer to the causes which have produced it. Let us now suppose that this picture becomes an object of contemplation to one whose taste has been matured, and whose attention has often been called to works of a similar kind. His observations will be far more extended, and his capability of appreciating its merits greatly increased. *He* will not only be able to form a judgment upon the way in which the subject is *generally* treated, but he will take into his consideration the various feelings and passions expressed in the countenances of the several figures, as referable to the parts they act in the scene represented, and the peculiar impulses by which their actions are influenced. He will also have an opinion upon the grouping and drawing of the figures; and the correctness and propriety of their drapery or costume, in reference to the period at which the event happened. He will take into his view the assimilation of the background, whether of landscape or architecture, with the effects of the other parts. He will likewise dwell upon the magical illusion produced by light and shade, the beauty of the colouring, and of the chiaroscuro. He will even trace with a critical eye the mechanical execution of the painting, in its elaborate and delicate touches of careful finishing; in short, he will enjoy the exquisite delight and gratification which are always experienced by a refined and cultivated mind, when beholding a magnificent specimen of fine art.

Now the sensations experienced by each of these persons are to be referred to that *faculty* of the mind which we call *taste;* and the amount of the enjoyment derived from it, may be considered as proportionate to its cultivation. It will, however, be proper to state here, that assertions have sometimes been made upon this point, which, fallacious and erroneous as they are, have yet occasionally been founded upon an argument rather startling and insidious, when addressed to those who have reflected but little upon the subject. It has been said, that there is no *standard* for taste; and that whatever pleases, is in good taste to him who admires it. That men of equal capacity as to intellectual and elegant acquirements, often differ most essentially in their opinions upon productions of art. How then, it has been asked, can a preference be given to the taste of one, in contradiction to that of the other? How is judgment to be awarded, when the judges themselves differ in their decision? The absurdity of these premises is immediately perceptible upon selecting extreme cases for illustration; for however men may differ in their estimate of works possessing certain degrees of excellence, there can be no doubt as to those which are at the *highest* and

lowest parts of the scale. In viewing objects exhibiting beauties of several kinds, conflicting opinions may arise as to their *relative* merits; but we well know there are many which call forth neither pleasure nor interest in any class of spectators, however dissimilar in their habits and feelings. In architecture, the chaste simplicity and fine proportions of the Greek examples; the richness and splendour of the Roman ones; and the picturesque and sublime effects produced by the buildings of the middle ages, have each their advocates and admirers. It is true they excite different sensations in different persons, and a preference may be given to *one* or the *other;* but it is quite evident that *all* must possess certain qualities or properties, which distinguish them from commonplace and inferior erections; and that the various opinions formed upon them, are, as to the *amount* of excellence in *each*, not as to the *want* of it in either.

The style, the proportions, and the arrangements of a decorated edifice, may be criticised, and the several parts lauded and censured, under the peculiar views of separate persons, whose tastes have been cultivated, and their judgments looked up to as an authority; but if they were required to determine between such a structure, and the plain unadorned elevation of a private house, the mere question would of course be considered an absurdity.

We must therefore arrive at the conclusion, that there are various pleasing impressions produced in the mind by certain objects both in nature and in art, differing in kind and degree, and referable to causes not generally known or appreciated. If this be the case, the inquiry as to such causes becomes a matter of great interest and importance to all those whose professional studies are connected with their effects.

In the first place, then, we may observe, that although a large portion of external objects occasion little or no alteration in the usual habitude of our thoughts, yet there are *some* which call forth feelings of a novel and powerful description. Upon a farther and more close investigation of these operations of the mind, we discover, that although producing one general effect as to pleasurable emotions, they are yet capable of separation into two very distinct classes. We are pleased and gratified by the view of a mountain torrent, or a meadow rivulet, but the sensations which call forth our pleasure are widely different. In the former we feel an expansion as it were of our mental energies; a sensitive consciousness of some unusual agency; in the latter we remain placid and unruffled, and our enjoyment is tranquil and serene. Both classes of sensations may be augmented, the former to a degree which sometimes produces a sense of ardent and almost painful interest. As an illustration of these various effects, we can describe scenes and objects that invariably excite them. As an example of the *first*, let us take the nave of a Gothic

eathedral, its vista of lofty columns, interseeting arches, and vaulted roofs. The imposing grandeur of its transepts, and the height of the central tower; the magnificenee and length of the choir, carrying the eye to a distance that almost eonceals its termination in fading obseurity; the various tombs raised over the mighty dead, and bearing on their massive slabs the recumbent effigies of those who rest beneath; the dim light partially admitted from the upper parts of the edifiee; the broad shadows thrown from the several projections, and the awful gloom of the deep reecsses:—*all* serve to eall forth the peeuliar feelings we have described. They may even be *increased* by other causes not absolutely conneeted with the original impressions. Approaching darkness, illumination by artificial light, a peal from the organ, or a ehant by the ehoristers, will each tend to elevate and expand them. It is to the sensations which are produced by this class of objects, that writers upon taste have given the appellation of *sublime.*

As a specimen of the seeond, we may take a rural landseape. The fertile valley clothed in soft verdure, and traversed by a clear stream flowing with gentle murmurs "*o'er its pebbled bed;*" the farm-house and neat cottages of the village, standing out in the bright sunshine, with their white gables and modest easements, and surrounded with the flowers and fragrance of their little gardens. Then the ehurch, with its slender and pointed spire, rising as it were from the dark foliage of the yew trees that shade its antique poreh. At a little distance, fields of ripening corn waving in the summer breeze; and rich pastures covered with luxuriant herbage. In the horizon, a line of brilliant light reflected from the distant ocean, on which is sometimes seen the sail of a majestic ship, reduced almost to a speck of sparkling whiteness, floating upon its bosom. These effects may also be *increased* by other eauses, sueh as the ehimes of bells, strains of lively music, groups of daneing peasants, and the singing of birds. Now it is very evident that the sensations called forth by scenes of this description, are very different to the former ones; and therefore they have been designated *beautiful.*

Having thus stated the two *grand* divisions into which the impressions generated by certain objects can be separated, it may, perhaps, be requisite to make a few general observations.

First, in respect to the *sublime.* The effects are not confined to the impressions reeeived from *visible* objects only; they may be exeited through the organs of hearing,—by the sound of thunder, a discharge of artillery, the raging of a tempest, and from various other causes. It is true their extent may vary from a very trivial, to a most powerful excitement; from an impulse scarcely pereeptible, to a sense of awful apprehension; but the feeling is still the *same,* differing only in the degrees

of its intensity. The sight of the ocean, even when calm and undisturbed, is *sublime;* but it becomes supremely so, when its foaming waters are elevated by a storm, and the stately ship of war is seen struggling through its mighty billows. The barren and extensive plain, with not a single form upon its surface to arrest the attention, has the power of exciting similar emotions; but these emotions are increased by the gigantic elevation of rock and mountain scenery. The firmament, without the appearance even of a star, is a source of *sublimity;* yet how greatly is this quality augmented when we behold it shining with heavenly bodies, demonstrating the almighty dominion that sustains and regulates them. Terror and apprehension, irregularity and disorder, obscurity, solitude, and silence, are all compatible with these effects, and often materially aid to increase them.

There is also a degree of moral sublimity produced by causes quite independent of *external* impressions: the *actions* of men, if of an extraordinary kind, exhibiting great courage or fortitude, will often call it forth; and whether the motives or results be good or evil, yet the same interest and excitement is awakened.

Secondly, as to the *beautiful.*—The objects that generate these sensations, are of a very different description to those which occasion the sublime. Although general and numerous, they are yet *not* so easily ascertained and described; they seem intermixed as it were with our ordinary and usual perceptions; and their effects, though often feeble and indistinct, are yet more simple and continuous. Among the many qualities that are considered as connected with beauty, we may class figure, colour, regularity, variety, novelty, and many others which, either alone or in combination, are capable of producing these emotions. Colour, for instance, has of *itself* the power of causing very dissimilar feelings in different persons; and the partiality which is evinced by children for certain tints in preference to others, is a very strong proof of the fact. Figures of various forms may be all pleasing, though differing in their outline; the result seems often to depend upon an association in the mind with the purposes and uses to which they may be applied. Parallel lines, right angles, and regularity of shape, may generally be desirable for our houses; but they do not so well accord with our ideas in laying out the parterres and walks of our pleasure grounds. The waving line described by Hogarth, is unquestionably beautiful in an innumerable number of objects. The meandering stream, the trees of the forest, the flowers of the valley, and the graceful contour of the human form, may be quoted as examples of its influence; but the base of the pyramid, the stylobate of the temple, and the pier of the bridge, are objects in which the formality of straight lines, and right angles, become by their fitness equal in beauty with the flowing elegance of the graceful curve.

A rich natural landscape is a most effective source of pleasing impressions upon *all* classes; the several parts which compose it are capable of calling forth pleasurable sensations; the wood, the valley, the stream, the farm-house, and the village church are each *alone beautiful*, and their union excites feelings of delight. These sensations are again varied by the relative situation of the parts to each other; and the talent of the artist who arranges them in a picture, is strikingly displayed in this portion of his task. Motion often becomes a source of beauty: the waving of foliage in the summer breeze; the flight of birds; the graceful changes of form exhibited by young animals in their sports; the surpassing elegance of the human figure in its various undulations by gymnastic exercise, dramatic action, and national dances; in short, it is almost impossible to conceive any motion unpleasing to the eye, except *that* which we are conscious is generated by pain, or uncouth vulgarity.

Either of these two classes of emotions which we have endeavoured to describe, may be produced by a *single* insulated object, entirely unconnected with accessories, save those properties which are inherent in its nature.

The large spreading ancient oak, and the slender drooping laburnum, are in the same great natural division of organized bodies, and possess but two external properties which can be considered as having any material effect in their immediate operation upon the eye, namely, form and colour; yet they produce certain sensations in the mind different from those experienced in its usual ordinary state; but at the same time distinct and separate from *each other*. Nor are these feelings entirely dependent upon the *direct* influence of external objects upon the organs of sight; for the language of poetry will call them forth in the mind through the powers of its memory; and although they may not be so vivid, yet they are often sufficient to interest and delight us.

It is evident, then, from a careful consideration of this subject, that certain impressions of a peculiar kind are made on our senses from various sources; which are different from the ordinary sensibilities of our nature; that they are not continuous for any lengthened period, but act as occasional impulses upon the regular and habitual feelings of our existence; that they are capable of cultivation, and that their enjoyment may be augmented by an examination and knowledge of their effects.

Having made these few prefatory remarks, we may now proceed to a more important part of the question, namely, their application to the study and practice of architecture.

On entering upon this portion of the subject, the author is anxious that his motives should be clearly understood. He is quite aware that any attempt to institute

precepts upon a THEME so speculative and ideal, would be absurd and futile; but, at the same time, he considers, that a careful study of the *principles* which are involved in the inquiry, is calculated to correct the judgment and improve the taste.

The cultivation of the mind in any department of the *fine arts*, is *not* to be achieved by abstract rules, general in their application and invariable in their effects; but rather depends upon a susceptibility to impressions from external objects, and an aptitude to perceive and appreciate their qualities. The result is not a series of images *separately* registered in the memory; but a *concentration* of their effects, which induces and trains the mind to sound reasoning and just conclusions in matters of taste.

It is under these views that the following observations are submitted.

In architectural criticism certain principles have sometimes been recognised, as the basis of those feelings of pleasure and satisfaction which are considered as the best tests of excellence. Among these perhaps may be named as the most prominent and general, *Utility* or *Fitness*, *Harmony*, *Proportion*, and *Enrichment*.

Utility or *Fitness* are those appearances in every part of a structure, which at once strike the mind with a consciousness of the ingenious plans and contrivances that have been adopted to answer the uses for which it has been intended. It is not merely confined to the *practical* conveniences and accommodation of the interior, but is also felt in a certain degree by perceiving, that the general form and character of the elevation assimilate with the view we take of the purposes to which it is appropriated. This principle, although in itself extremely simple and obvious, and the developement of which would seem to follow, as a matter of course, in the arrangements which every architect would be anxious to carry out, is yet sometimes neglected; not always from want of ability, but from an inclination to indulge in pictorial effect, even at a sacrifice of more important results.

Harmony may be described as the forming of the general portions of a design, so as to preserve an unity or relation between the several parts of it. For instance, in a front of great length, projections or recesses are frequently introduced with the intention of giving relief to the sameness which a plain unbroken surface of considerable extent sometimes produces. Now if these breaks are of such dimensions as to separate, as it were, the line into distinct portions, we lose the imposing effect which an extended elevation is always sure to assume; but, on the contrary, if they are so regulated as to give the relief desired, and yet preserve a connexion with each other, it is considered that the whole is in harmony or repose.

Proportion is the regulation of the magnitude of the several distinctive features of a building, so that they shall assimilate with each other, and yet have a pleasing

relation to the general design. This principle is, perhaps, to a certain extent, united with the former one; but it has more powerful effects on the untutored eye, and often seems connected with important results. It *mainly* consists in the proper adjustment of the solid parts to those of the voids; the capability of support to the amount of the weights and loadings; and the impressions left upon the mind, as to the stability of the whole. The apertures should appear in conformity with the adjoining piers and superincumbent masses, so as to induce a perfect confidence in the mind that an equilibrium is preserved; and these feelings should be elicited, although no support may be required; the same end having been attained by means equally effective, but concealed from the observer.

Enrichment is a division of architectural study more easily appreciated both by the student and the general spectator, than either of the others to which we have alluded. It is, however, often introduced with a confidence as to its effect, that causes negligence in the mode of its application. It sometimes serves as an excuse, and not unfrequently as a screen, for defects, which, however they may escape the notice of the multitude, are palpable and evident to the judicious. In the selection and introduction of enrichment, much good sense and consideration are required; its excess is often the cause of its failure; and the want of relief from *plain* surfaces occasioned by its unbounded use, is fatal to that beauty and elegance, which might have been produced by a more cautious and tasteful employment of its means.

With this brief mention of a few points in architectural composition, let us endeavour to trace in certain buildings erected under the influence of different styles, at remote periods, the *peculiar* arrangements and forms which have called forth in the minds of their beholders, during *several ages*, the *like* sensations of pleasure and satisfaction.

The question requires no introductory or historical details of architectural progression; no particular description of remaining antiquities; nor any theories as to the origin of different styles. Let us then commence our investigation by a reference to one of the most extraordinary structures that was ever raised by human means—the great Pyramid of Gizeh, in Egypt.

Although we are not perhaps to look to Egypt for the *very earliest* specimens of ancient art, yet the grandeur and extent of its buildings, sanction its claim to be considered as the oldest school in which a distinct arrangement can be marked, or a system deduced from existing examples. The remoteness and obscurity of its fabled annals, the mystery and gloom of its heathen superstitions, and the powerful oppression of a despotic government, have transformed its whole history into a tale of wonder, which would have but little claim on our belief or our sympathies, but for its

connexion with divine literature, and the mighty and enduring monuments that seem to have taken an everlasting root in its soil. Among these, and in some respects the most remarkable, are its *Pyramids*.

These immense masses of stone, with square bases and inclined sides, have been objects of interest and inquiry from the earliest ages. The time of their erection seems to be unknown; for although surmises and opinions are not wanting upon the subject, yet nothing has been collected to which we can refer as authentic data. Their existence, however, may be traced to a very remote period; for they were objects of interest and research to Herodotus, the father of profane history.

The dimensions of the largest of these extraordinary works—the one to which we have just alluded—have been variously given by the several persons who have measured it. Perhaps the most popular and clear idea of its extent, is acquired by a description which states, that it occupies a space equal to the area of Lincoln's Inn Fields, measured by the wall of Lincoln's Inn Gardens, and by the lines of the houses within the court-yards; its height being one third more than Saint Paul's Cathedral. It has been by some considered as a natural hill of earth or stone; or cut in a rock to a certain height and built above.

It is formed in regular courses or layers of stone, which vary in thickness, from two to three feet; each receding from the one below it; and on the top is a platform about thirty-two feet square.

It appears a solid mass, with the exception of a narrow corridor leading to a small chamber in its centre; and an ascending one, or gallery, about half the length of the first, terminating in another larger chamber at a considerable distance vertically above the former; in which was found a *single* granite sarcophagus of dimensions calculated for one body only.

This description would certainly seem to determine the purposes for which these colossal structures were erected; and the futility of the motive, compared with the immense power called into action for their production, gives a striking example of human weakness and folly.

We have said, that a peculiar class of sensations are produced in the mind from impressions made on the senses by certain external objects.

The base of the great Pyramid of Gizeh is stated to be equal to the area of Lincoln's Inn Fields; and its height one third more than that of Saint Paul's Cathedral. Now let any one picture to himself the image of a bulk of solid stone, of the above dimensions, and he will immediately experience, to a certain extent, those feelings which we have endeavoured to describe as *sublime*. They may not be *powerful*, because they are produced by *secondary* causes; by the *imagination* of the object,

and not by the object *itself.* If, however, the eye is steadfastly fixed upon the extent of area named, and a figure is awakened in the mind of such a portion of space occupied by a body, rising to the height we have stated, a degree of interest and excitement will be immediately called forth, very different to that state of calmness and repose with which we view objects of common occurrence, and of usual magnitude; and we intuitively feel that the *reality* of the image would *increase* these effects in a very considerable degree. Now then, what are the causes of these strange and peculiar feelings? Are they produced by the *shape* or *outline* of the figure? Certainly *not*, because we can conceive a pyramid of similar material, and of like form; but with a base covering only a few feet of ground; and no such results ensue. The object is an isolated one; it has no connecting or adjacent parts, to give a character or qualities to the whole. It is a plain, simple, unbroken mass without adjuncts of any kind; and yet we are affected in a remarkable degree, not only by the *sight* of it, but even by the *image* which a description of it will produce.

It will perhaps be said, that the figure is calculated to impress us with a notion of *stability*, which may have some share in the effect. This, to a certain extent, is perhaps true; the form is evidently one of great firmness, and adapted for preservation and endurance: but if it does interfere with the emotions excited, its powers are but *secondary;* for in the image of the *reduced* pyramid to which we have just alluded, the same quality exists, but its importance is not striking or definite.

It would seem then, after mature consideration, that we must ultimately refer to the *unusual magnitude* of the object, for the *effect;* and this solution will be borne out by analogies which we can trace under different views and circumstances.

Let us, for instance, take a fence wall, two hundred feet in length, and of the usual height, ten or twelve feet; we have been in the habit of looking upon such erections from our childhood, and we neither see nor feel any thing extraordinary in their appearance. But suppose it to be raised to a height of two hundred feet; it is most probable that when we view this vast increase of dimensions, our feelings will be suddenly and sensibly affected. The wall is considered to be without projections or ornaments of any kind; an entire plain surface, producing no interest in the beholder, while remaining at a usual and moderate height; but becoming an object capable of exciting *sublime* emotions, when extended far beyond those limits to which the mind has been long inured and accustomed.

Having arrived at the opinion, that amplitude of form, and increase of dimensions, will generally produce the effects we have described; we have yet made but *one* step in our inquiry: to stop here would not only leave the main point unsettled, but might lead to false reasoning, and erroneous conclusions. The *second* question evidently

arises from the answer given to the *first;* and we are led to ask, in what way these sensations are produced by merely increase of dimensions? It is clear that though invariably called forth by such means, yet they may also be excited by very different causes, without the image, or even an *idea* of extended matter. The shouts of a multitude; the sound of thunder; the raging of a tempest; or the discharge of artillery, are, as we have already observed, equally efficient to awaken in the mind the *same* feelings which we experience from an ideal picture of the great Pyramid of Gizeh. There must therefore be a *primary* cause in conjunction with the first impression. Many very ingenious and curious speculations have been put forward upon this subject, and supported by arguments of much force and learning; but perhaps the most plausible solution is, that which refers to a *conviction* of unusual *power* and *strength* being required for the production of the object which is the source of the impression.

Grandeur of style, in architectural language, is that mode of arrangement and formation in a design, which calls forth *these* feelings; it expands and elevates the mind above its ordinary state, and fills it with a certain degree of admiration and surprise. The effects are pleasing, but of a serious kind; and are quite different from those which are generally caused by beautiful objects.

It would appear, then, that grandeur in architecture is, (in a great degree at least,) to be achieved by a careful adaptation of its parts in conformity with those principles upon which sublimity seems invariably founded.

It may be said, that these principles refer to buildings of magnitude and importance. That although perhaps mainly correct, and of some value under certain circumstances, yet the works upon which the greater part of the profession are engaged give no opportunity for studying their effects, or offer any advantages for carrying them out.

These observations are true in a degree, but not to the extent that some, under a hasty consideration, might be inclined to suppose. There can be no doubt that they are *most* powerfully effective, when exemplified upon a large and extended scale; but upon a *reduced* one, advantages may be derived from them, if they are considered with care, and cautiously acted upon. Perhaps no very *decided* idea of sublimity can be obtained in architecture, except by a capacious and lofty building; but a comparatively *small* one, may, by judicious management, convey to the mind similar sensations, although of a very subdued nature. Greatness of manner often arises from presenting the object in a full point of view; *whole*, *entire*, and *undivided*. This is to be done with a front of *moderate* dimensions, by avoiding projections, and abstaining from dividing into frivolous and mean parts, that which, as a *whole*, is

respectable and in good proportion. There appears to have been a prejudice, of long standing, prevailing in England upon this point, which, within the last few years, has, in some degree, given way to a sounder judgment and more refined taste. It seemed as if an opinion was general, that even a moderate extent of *plain* surface always produced a monotonous and unpleasant effect; and that projections or recesses were absolutely necessary to relieve the eye from this evil. A very little reflection on the subject would most likely have dissipated these notions. Let us for a moment figure to ourselves the front of a building—say sixty feet in length, divided into four compartments, by piers three feet wide, and two feet projection from the face. The deformity of such an elevation is evident at the moment it is imagined; but why is this sensibility to it so immediately produced? It is in consequence of the great *projection* of the piers, which divide the space of sixty feet into four small portions of little more than ten feet each; and by the shadows thrown on the recessed divisions, rendering the separations evident and distinct. Lessen these *projections* to *one* foot, and the several parts become more connected and assimilated, while the former unpleasant effects are materially decreased. Again reduce them to two or three inches, and all our distaste seems annihilated. Now it must be borne in mind, that these observations are entirely *separate* from any considerations as to *beauty;* they are strictly confined to what is termed *sublimity.* An elevation of sixty feet, divided by pilasters, may produce a façade of very *pleasing* interest; but we contend that these pilasters serve to diminish those feelings of the sublime which would have been impressed upon the mind, if the surface had remained plain and unbroken on its face. It would seem, then, whether the space we have to work upon be extensive or contracted, that the most efficient mode to call forth these emotions is, to avoid as much as possible all such adjuncts as tend to separate the *whole* into *parts.*

It is the *extent* of *one* portion, and not the *addition* of *many*, which gives the desired result; and whether we refer to the wall of two hundred feet in length, or to that of sixty feet, the same rule applies, and similar effects are produced.

The object as a *whole*, contains the properties we require; and these properties are augmented or impaired in proportion as the figure is extended or reduced. The example to which we have referred as illustrative of these remarks—an Egyptian pyramid—is certainly one of a very peculiar description; the feelings which it excites belong *entirely* to the *sublime;* there is not a single part or portion of it connected with any other sensation; and it is for this very reason that it has been selected. In the other buildings to which we may have occasion to allude, the second principle of taste, *beauty*, is in some degree combined; and in analyzing the emotions produced, it must of course be taken into account.

The qualities which call forth these different affections of the mind, are so contrary and opposite, that they often interfere most materially with each other; and it is by the just apportionment of each, that the talents and taste of the artist are made evident.

Let us then now advance another step in our inquiry, and give some consideration to that part of it, which we have as yet only described *generally*, the nature of the effects produced by those objects that are usually called *beautiful*.

This division of the subject is surrounded by greater difficulties than the previous one; the sensations are more universal, but not so easily defined; the causes are very widely diffused, but the effects are not so clearly apprehended. The pleasures resulting from them are of a calm and placid description, yet not strongly marked and separated from the daily and habitual emotions of our existence.

Neither magnitude nor extension are required for the production of these feelings; they may be elicited from comparatively small and subordinate bodies; indeed, there are few objects in which some traces of them are not to be found.

As we have chosen our *first* specimen for illustration from Egypt, erected probably at a very early period of the world; let us take the *second* from the *same* country, and also of a remote date—say the remains of an Egyptian temple. Although it is scarcely necessary for our purpose to name a particular one, yet for the convenience of reference (should it be required) we will select that of Apollinopolis Magna, in Upper Egypt, on the banks of the Nile, between Thebes and the first Cataracts.

Its extent of dimensions and various decorations, call forth in a powerful degree the combined feelings of sublimity and beauty. The edifice is of considerable magnitude, consisting of a long parallelogram behind the propylæa which crosses one of its ends; while the external wall or peribolus girding the whole, without breaks or projections, gives an idea of great extent and solidity. The front elevation of the moles or propylæa, and the grand entrance between them, with but little embellishment, is an object of much interest; its simplicity and pyramidal form, added to its bulk, greatly increase the effect of the whole.

And what is this effect when the building is viewed *externally*. It is similar to those produced by the pyramid; but proportionally less forcible, as the dimensions of the former are inferior to those of the latter. To what source then can we refer it? Evidently to the extended and unbroken lines of a vast mass of materials, the figure of which is associated in the mind with an idea of great power for its production. If piers or buttresses, or columns of any description, had been introduced on the plain faces of these walls, or any means taken to interfere with the large, simple, and uniform surfaces which they present, the property of producing a feeling of sublimity in

the mind, would in a degree have been destroyed. We should have seen only comparatively small portions of matter, that would have failed to interest us in any way, as to the strength or force that had been required to erect them. A very different result takes place on viewing the *interior* of this temple; our sensations of the sublime are somewhat reduced in intensity, but other feelings are excited; large masses are here divided into parts, which, though sufficiently great under ordinary circumstances to surprise and interest us, are still infinitely inferior to those we have just described. Yet we feel pleasure and satisfaction in certain changes of form; we are struck with the effects of light and shadow, and delighted with the representations of natural objects impressed as it were upon the solid stone; not only enriching the parts they occupy, but apparently enlivening the plain spaces by which they are surrounded.

The internal arrangements are also of a very imposing description; the vestibule or grand entrance court had on three of its sides a colonnade against the wall of the peribolus, supported by columns and forming a covered way. The gradual ascent by corded steps to the great portico or pronaos, (which was composed of eighteen columns of increased height, placed in three ranks,) must have formed a pleasing and interesting view, not only by the variations of light and shade, but by the elegance of their carved capitals, and the embellishments of the dado, or breastwork, in front. The appearance also of the twelve columns of the inner vestibule, which were seen on entering it from the pronaos, could not fail to have added greatly to the interest of the coup d'œil. Beyond this point the remaining space was occupied by closed rooms and passages that surrounded an insulated chamber, which was probably the adytum or sanctuary.

It will be perceived from this brief description that the *interior* of the edifice contained those *elementary* principles which have been considered as associated with *beautiful* objects—light, shadow, colour, variety, imitation of natural productions, and pleasing forms and contours: while its *sublimity* depends upon its unbroken continuity of outline—the pyramidal tendency of the composition, and the boldness and breadth of its several parts.

Here there is a combination of two great causes of intellectual enjoyment derived from external objects; and which, in popular language, we may describe as pleasures of taste. Nothing can be more clear and distinct than the separation of these principles; and most of the pleasing sensations we experience, may be referred to the influence of either the *one* or the *other*, and generally to the union of both.

It will now perhaps be requisite to consider for a moment, how far the *arrangement* of those objects which we have distinguished as possessing the qualities of sub-

limity and beauty, may influence the power and extent of their effects. This is a question of great importance; for we instantly perceive that it is possible to distribute them so, that they shall in a degree fail either to please or to interest us. These remarks more particularly refer to the *beautiful*, and it is to that division of the subject to which we shall at present confine ourselves.

In the example to which we have alluded, if the columns that support the covering of the colonnade were attached to the walls instead of being insulated, and affording a bearing for a superincumbent weight—or if they were placed at great distances apart—or brought very near together—although *individually* interesting to the eye, the satisfaction we feel from a view of them in the vestibule would be greatly diminished; and therefore our sensations cannot be *altogether* derived from the graceful forms of these portions of the building, but in *part* from the situations in which they are placed. Another question immediately suggests itself, why is it that we are indebted to these peculiar situations for a certain degree of gratification, which seems quite independent of that which is produced by the objects *themselves?*

This at once brings us to an element of architectural composition, which we have already slightly mentioned—*utility* or *fitness*. The columns, as they are placed, produce feelings of perfect consciousness of the service they perform. We know that their strength is proportionate to the weight which they sustain; and a consideration of the consequences of their failure, enhances our estimate of their usefulness. This property is in no way connected with the gracefulness of their forms; it is appreciated by an association of ideas which are the fruits of our experience, and are instantaneous in their results. Their separation beyond a certain distance, would have alarmed us with doubts as to their efficiency to support the parts between them; their closer approach to each other, would have impressed us with a notion of wasted means and useless incumbrance. The mind is unable to detect the lapse of any sensible portion of time for the reasoning which elicits these truths; but they are as self-evident at the *moment*, as if they had been sanctioned by the experience of *years*. The importance then of this principle of *utility* or fitness in design, will be readily perceived; it is obtained without any aid from the qualities of external objects, except those which are connected with the principle itself. However powerful and simple these objects may be in their unadorned state, yet they are capable of embellishment from other sources; the *plain* post, notable only for the application of its strength to a useful purpose, may, without diminishing that usefulness, become the magnificent emblem of refined taste, and stand forth in all the majesty and beauty of a Corinthian column.

If the several columns introduced in the pronaos and inner vestibule of this temple had been merely *plain*, *square*, *upright* supports, they would equally have impressed

upon our minds a conviction of the aid which they give to the stability of the parts that rest upon them; but the various carvings of their capitals add dignity and grace to the more essential quality of their strength; and a combined effect is produced. The enrichments to the cornice of the pronaos, and to the breastwork or dado between its columns in front, are a beautiful and effective relief to the plain faces of the remaining portions; not projecting so as to break or fritter away those parts into small divisions, but preserving a degree of grandeur from the continuity of the general outlines, softened and embellished by the representation of small and delicate forms.

From the observations we have ventured to make upon the Temple of Apollinopolis Magna, (the remains of which form a splendid example of Egyptian architecture,) may we not suggest, that some of the leading points we have endeavoured to explain as principles of taste connected with architectural study have been illustrated? May we not presume that the sublime emotions called forth by a view of the *exterior*, are chiefly due to the very great extent of its dimensions, the massive character of the composition, and the boldness and breadth of all its parts? Is it not also evident, that the several objects we have enumerated and referred to, in the *interior* of this building, are the causes of *other* sensations, which are as clearly defined, although totally distinct from the former ones? That in *addition* to such effects, we discover a principle of *utility* or *fitness*—not depending upon form, outline, colour, or enrichment; but yet combining with these qualities, and increasing the pleasurable feelings they excite?

Does it not follow then, that we are capable of obtaining similar results, (to a certain extent at least,) provided we carefully study the causes and adopt similar means to produce them? And is not the fine taste and correct judgment of the artist to be perceived in his judicious selection and combination of them, so as to harmonize with the views and purposes for which his work is intended? These *principles* are *immutable;* they are entirely separated from those dogmas and opinions, which are often the pride of one age, and the derision of another. He who studies them *well* and *truly*, with a mind sufficiently refined to appreciate their value, and with firmness enough to submit to the trammels they sometimes seem to impose, may rest secure in the hope of acquiring for his productions that popularity which neither fashion nor prejudice can shake, nor time destroy. This permanency and duration is evident by the constancy of their effects deduced from buildings of the earliest times; and it is to illustrate this *truth* that we have attempted to mark them in the Egyptian pyramid and temple, and shall endeavour in a few more brief observations to trace them through subsequent periods.

Let us now refer to a building erected some centuries subsequent to that to which we have just alluded, and one perhaps of the most magnificent specimens of architectural design, that has ever been produced in ancient or modern times, the PARTHENON, at Athens. It is not the province of this essay to enter into any particular description of the edifice, because it is generally known and enthusiastically admired by all persons who have a taste for architectural pursuits, or who take an interest in the remains of Grecian art. We shall therefore merely observe, that it was a Doric, peripteral, octastyle temple, situated on the acropolis of that city, and erected in the time of Pericles, about four hundred and forty-eight years before the Christian era. It had a pediment and eight columns at *each* end, with fifteen on either side; and in addition to these *external* ones, there were likewise ranges of *inner* columns, which formed the pronaos and posticum. The cella itself is supposed to have been *hypæthral*, that is, a central portion of it was open to the sky. The several details are ably described and delineated in Stuart and Revett's Antiquities of Athens.

To the pupil this structure is generally presented as one of the first models for his study and admiration; nor is it possible to conceive an object more calculated to excite a passion for his profession, or to exalt his ideas of its dignity and importance. Perhaps the most remarkable feature in its history is the extraordinary and invariable effects which it has produced upon its beholders, through all ages and under all circumstances. The sight of it immediately calls forth feelings of wonder and delight; it seems to defy criticism, and to impress the mind with the idea of a work, *perfect* in all its parts; an enduring monument of unrivalled genius. These feelings are not confined to the few whose tastes may be considered as cultivated and refined; they are not merely the consequence of learned investigation, or æsthetical knowledge, nor do they depend upon the process of our reasoning powers, or the perception of certain results derived from well known causes. They are enjoyed (although in less degree) by the unlearned and the illiterate, by those who can give no reason for their admiration, nor select a single part in which they can discover its source.

Now it again becomes our task to endeavour in this example, as in the previous ones, to trace out those *elements* in the composition, which have induced the *peculiar* and *general* sensations we have described.

In the first place, it may be stated that in this building there are not those extraordinary dimensions which are so evidently effective in the Egyptian pyramid and temple; yet its grandeur (a term frequently and most properly applied to it) arises from the combined feelings of sublimity and beauty. It would seem, then, that these

emotions are excited by somewhat different causes than merely increase of surface; and this is unquestionably the case.

It will be remembered that we have alrcady suggested, that *extension* of form may be considered as only the *proximate* cause, while the ultimate onc is the impression of *great and unusual power*. Although the former never fails to call forth these scnsations, yet it is probable that similar effects may be produced by other means; or that the *ultimate* cause may be generated by a different *proximate* one. This indeed seems most likely, because those external impressions which excite in us ideas of great force and strength, are infinitely varied and diversified. We have mentioned *sound* under different modifications; in such cases the sense of vision is in no way concerned, the impression is upon the organ of hearing *alone*, but it is still dependent on what we have termed the *ultimate* cause, namely, a consciousness of extraordinary power, a feeling of the same description as that we experience when looking upon a figure of unusual extent and magnitude. It is true, the sublime portion of the sensations which we feel upon viewing the Parthenon, cannot be referred to the secondary sources wc have just named, but there are *others* we may discover equally efficient, which also lead to the primary *one*, that stands isolated and almost alone, as to the constancy and identity of its effects. Let us then try if we can trace these *sources* in the magnificent structure we are examining. We have already stated that the distinguishing feature of this most remarkable building is generally described as *grandeur* of a great and maseuline description. The Doric ordinance of which it is eomposed, and the several parts of that ordinance, although in exquisite proportions, are at the same time ponderous, and indicative of vast firmness and strength. The columns support very heavy superincumbent masses, which, although rendered beautiful by decoration, still preserve the character of immense pressure and density. The material of which the edifice is built being stone, requires short bearings in an horizontal position; and the spaces between the columns are therefore comparatively small, while the columns themselves are numerous and gigantic. The external lines are *continuous;* there are no breaks, no reduction of *large* portions into *small* ones, but the whole appears one mighty fabric, enriched in parts, but yet preserving its majestic character, from the maintenance of its enormous weights by proportionate supports. It must also be kept in mind, that although the dimensions of this building are not to be compared with those of the Egyptian temples, and therefore less likely to produee effects of the same *intensity*, yet they are sufficient to excite them in a certain degree, and to increase those we have just described.

Under these considerations may we not perceive, that thc consciousness of great power and strength called forth on an inspection of the Parthenon, is similar to that

which is felt on viewing the pyramid of Gizeh, or the temple of Apollinopolis Magna; that although the causes are *different*, the results are the same, and that these results are *certain* and *alike* upon all minds, varying in force, but constant in principle? It may be said, perhaps, that although the difference in magnitude between the Egyptian pyramid and the Greek temple may account for a variation in the intensity of their separate effects, yet the *amount* of this variation is not in proportion to the assumed principle. We must, however, remember that sublimity is the *only* sensation we experience from a sight of the former; but in the latter it is combined with a perception of beauty, which necessarily modifies its power.

Let us suppose for a moment, that the *whole* of the Doric ordinance of this temple, so masculine in its proportions, and so characteristic of strength, firmness, and durability, was changed for a *Corinthian* one, the columns reduced in diameter, and the capitals enriched with graceful and delicate carving; in what way should we be affected by such alterations? Our admiration would not perhaps be greatly diminished; the reduction of that portion of it which may be referred to the sublime, might be compensated in a degree by an increase of the more calm emotions that are derived from the impressions of beauty. On the contrary, if the *whole* of the ornamental parts of the *present Doric ordinance* were *entirely omitted*, we should lose a portion of the quiet enjoyment which at present so harmoniously blends with the sterner features of the edifice; but our feelings of the *sublime* would be augmented, and approach nearer to those which were produced by the pyramid.

We must not, however, pass over this example without notice of a property intimately connected with architectural excellence, although not always, perhaps, sufficiently appreciated by the general observer. It is almost impossible to estimate too highly that essential, but somewhat difficult, attribute, which enables the architect to arrange the several parts of a design, in due and just *proportions* to each other. It is a quality required in every work that is intended to interest the spectator or honour its author. It signifies but little whether the building is a *public* or *private* one, or whether it is of *extensive* or *limited* dimensions; it has no reference to the importance of the purposes for which it is intended, nor is it confined to the splendour or magnificence of its adjuncts. Its merits may be exemplified in the elevation of a simple cottage, as well as in the noble and imposing façade of a palace. It needs no ornament to work upon or detail to be made out; its successful application may give effect to decoration, but its failure can never be concealed by the introduction of embellishment. A plain wall with a few undressed openings can be rendered an inoffensive, and probably a pleasing object, by the careful and judicious apportionment of its piers and voids, but neglect on this material point may occasion feelings

of disappointment, even in the midst of palatial grandeur. It is most likely that these sensations are grounded upon the general principle of *utility* or *fitness*. We are gratified because we feel a consciousness that every part has its proper and full support.

Now after the preceding observations upon the great importance of this *property*, it may be asked, whether any rules or precepts can be obtained for the instruction and aid of the student. The reply involves some doubt and perplexity; we might say that the proportions of piers or solids to their openings may sometimes be considered as theorems founded on mathematical science; but such an answer does not meet the difficulty to its full extent, nor afford the assistance demanded when the spirit and general bearings of the inquiry are considered.

Although the gratification of the eye derived from this quality in a design may be based (as we have already suggested) on the principle of utility and fitness; and we may be pleased, because we are convinced that equilibrium is preserved by the proper adjustment of the several parts of the structure, yet the conviction seems to be the consequence of former experience; but by a tact or habit of the mind it is determined in a moment, as *that* which the recollection of the past assures us is correct.

If then it appears that certain data cannot be laid down to meet the numerous and varied cases that are continually occurring, does it follow that no *other* rules or modes of practice, less abstract and intricate, yet founded upon sound judgment and experience, may not have been provided for the aid and guide of the architect? Here again we should say that he must in a great measure depend on his own resources; no regular system is to be found upon this very interesting and essential point, and he is required to exert that talent and industry which obtains knowledge from a careful selection and ardent study of good examples.

There are, however, some reasons for supposing that the ancient architects, as well as those of the middle ages, possessed (to a certain extent) rules and instructions for the several proportions of their buildings, which in many cases may have materially abridged their labours, and aided their success. Mr. Joseph Gwilt, in his edition of Chambers's Civil Architecture, 1825, first noticed a work by M. Lebrun, entitled "Théorie de l'Architecture Grecque et Romaine deduite de l'analyse des Monumens antiques," fol. Paris, 1807, in which this curious subject is treated with much learning and ingenuity, but it seems to have attracted little attention in this country. Mr. Gwilt subsequently, in an excellent little treatise which he published in 1837, "on the Elements of Architectural Criticism," observes: "If it can be shown that those buildings of antiquity which are universally accounted beautiful, exhibit a certain constancy in their proportions of weight and loading, it seems but a fair inference that their beauty must at least in a great degree, if not altogether, be the

result of those proportions. Perhaps, if the subject were pursued *au fond*, it would be found that on these proportions might depend not only the requisites of magnitude and strength, which in construction are the qualities which affect the eye,—those of order and harmony, which in design are qualities affecting the understanding, but even the requisites of richness and simplicity, which are qualities more especially exciting the affections. Moreover, the principles in question will be found to involve the science of construction, which, to the architect, is what execution is to the painter, without which respectively neither can embody his ideas."[a]

Mr. Gwilt then proceeds to give a description of M. Lebrun's theory, which he illustrates with a few diagrams, and some very judicious remarks. It seems to consist of certain rules for the apportionment of the supports of bodies to the weights which they sustain; and it would appear that, upon an examination of the remains of some celebrated buildings of antiquity, and a due admeasurement and calculation of their parts, the results generally agree with those to which the author adverts.

Mr. Gwilt again refers to the same subject in a paper entitled "Observations on the heights of Entablatures," published in the second part of the Transactions of the Royal Institute of British Architects, London, 1842, and still more recently in his "Encyclopædia of Architecture."

Mr. Robert William Billings also, in a small work published in 1840, entitled "An attempt to define the geometric proportions of Gothic Architecture as illustrated by the Cathedrals of Carlisle and Worcester," has pursued a somewhat similar subject, and endeavours to prove the following positions:—"that in the projection of the plans of the nave and choir of Carlisle Cathedral, the architect was guided by the repetition of a circle, whose diameter in the first or Norman part was the extreme width of the building, not including buttresses; and in the second part or choir, erected about two hundred years after the nave, the diameter of the circle was the width between the internal walls; that the distribution and even the substance of the columns or piers, was regulated by some recognizable subdivision of the same circle; and lastly, that a circle, or arcs of a circle, regulated by the width of each compartment thus formed, was the basis upon which the heights of the different portions of the interior were framed, viz.: the choir, columns, and arches above them, the triforium, the clere-story, and ceiling."[b]

Mr. Edward Cresy, Architect, in a work which is at present in course of publication, entitled "A practical Treatise on Bridge Building, and on the Equilibrium of Vaults and Arches," refers likewise to certain principles practised in the construction of arches and vaults during the middle ages, and promises to illustrate them.

[a] Page 9. [b] Page 7.

The opinions and theories formed upon this subject by the authors we have named, will be best understood and appreciated by a reference to their works; and although it must be admitted that they afford a *probable* inference, that the proportions of the buildings of antiquity, as well as of the middle ages, were sometimes determined by certain systematic arrangements, generally known and understood at the time by the professors of the art, yet it would seem that we have not at present sufficient evidence upon the question to enable us to come to a distinct and definite conclusion.

A remarkable facility is acquired in judging of the proportions of a building, not only in its general outlines, but in the subdivided portions of its details, by practical experience and continued observations. The tutored eye (with a little care and attention) can immediately detect any considerable failure in the comparative dimensions of piers with their voids, and regulate the subordinate projections and recesses, so as to produce a pleasing and satisfactory relation with the adjacent parts. Still there is not a more common or fatal error in architectural composition than the want or neglect of this knowledge; the perception of such defects is not always confined to those who can explain the cause of the deformity that offends them; it is often palpable to the common observer, who feels disappointment, yet can neither describe the source of his dislike, nor propose a remedy to obviate it. Some minds may be more susceptible and alive to such faults than others, yet they are cognizable in a *degree* to *all;* and the effects of the evil are enhanced or decreased, as the ability and taste of the spectator has been matured or neglected.

There is another principle of architectural beauty which we must not pass over in our remarks upon this extraordinary and magnificent structure, namely, *harmony*, which is finely developed in all its arrangements and parts. Every portion is in keeping with the general features of its entire mass, enduring stability and masculine grandeur. There is no association of small parts with large ones, no broad and effective surfaces worked into contracted details; no junction of a grand and imposing style with feeble and constrained attempts at false ornament and puny effects, but the *whole* stands forth in majesty and repose, a splendid monument of a powerful and exalted mind.

It is by no means difficult to conceive, by a little reflection upon the subject, how these inspiring and pleasing impressions might have been marred, by inattention and want of judgment or refined taste in the architect.

If the proportions of the columns *only* of this temple had been the same as those of the Erectheus, without *any alteration* in the remaining parts of the ordinance, a degree of incongruity would have been immediately felt; they would *not* have assi-

milated with the entablature, or harmonized with the other portions of the building, yet these columns are themselves beautiful objects, and highly appropriate and effective as adjunets to the *particular* edifice in which they have been introduced, because they are in *harmony* with its general dimensions and character. So with respect to the triglyphs and the mutules in the entablature of the Parthenon; their boldness and distinctness are in unison with the stern simplieity of the entire mass; and in relieving the monotony of large and plain surfaces, they in no way interfere with the impression of grandeur which is called forth.

If, on the contrary, the entablature had been *reduced*, but the proportions of the columns *preserved*, and the cornice decorated with the enrichments of the Corinthian order, the general effect would have been impaired; and although carved modillions and mouldings are beautiful embellishments of the ordinance to which they properly belong, yet in connexion with the majestic proportions of the Doric, their magnifieenee would have become a blemish, and their elegance and delicacy of detail have been destroyed.

In referring to the buildings of ancient Rome we are enabled to follow out a line of reasoning similar to that we have already ventured to adopt, as to the eauses on whieh their power of exciting admiration mainly depends. Indeed, with respeet to some of *these* buildings, the theory seems strengthened by a failure in *those causes*, having apparently produeed a deterioration in their effects.

The remains of Greeian architeeture consist principally of temples dedicated to their deities; all the resources of the state, after the neeessary provisions for war, seem to have been applied to those purposes. We find no relics of large public edifices whieh appear to have had any eonnexion with the government or laws of the eountry; their wealth, their power, and all the exertions of their physical energies and exquisite taste were ehiefly dedicated to *one object*, an expression of the reverence and intensity of their religious feelings. Such was *not* the case with the Romans; their advancement in dominion, their conquest of foreign nations, and their acquirement of large possessions, with the consequent increase of all the luxuries of eivilized life, had the most potent influence on their growing population. New opinions were adopted, and additional wants created, of a description unknown to their more simple and primitive ancestors. These views are fully illustrated by the various remains of their amphitheatres, their baths, their triumphal arches, their forums, their villas, and their temples, whieh present an interesting, and in some respects a melancholy, memorial of the progress of a great people in those arts which are the emblems of an illustrious and powerful empire; and their subsequent gradual deeline to a state of feebleness and degradation, which are typical of a dark and barbarous age. Numer-

ous, however, as the several magnificent structures must have been, and various as are the remains of those which still claim our attention and admiration, yet they, for the most part, consist but of fragments, calculated only to give an idea of the beauty of certain portions, and to assist us in forming an opinion upon the grandeur of the whole. The very powerful feelings that are generally excited on viewing the ruins of ancient Rome, are, perhaps, in some degree to be referred to their association with the glorious names and actions formerly connected with them.

The investigation we have ventured to assume, and the results we are endeavouring to work out, undoubtedly require specimens beyond mere columns, and an imaginary outline of the building to which they belonged. Throughout the remains of ancient Rome, the once queen of cities, and wonder of the world, there are but few that come within the meaning of our purpose. Perhaps the Pantheon is upon the whole the best calculated to elucidate the views we would inculcate.

This edifice, the most magnificent, and perhaps the most complete, of any of the Roman temples, was originally dedicated to all the gods, from which circumstance it takes its name.

It was, in part at least, built by Agrippa; the view of it at the present time is under some disadvantage, as the ground which surrounds it has been raised by the débris from buildings that have been destroyed. It is one of the largest circular temples of ancient times; its internal diameter being about 139 feet; and the height to the springing of the hemispherical dome about 75 feet. The portico is octastyle, and projects about 62 feet; there are two columns in each of the returns, and four within, that divide the internal portion into three aisles or avenues, the centre one of which is the widest, and contains the great doorway; while each of the others has a large semicircular tribune.

This portico has three intercolumniations in depth on its flanks; but the order is continued in pilasters; making two additional closed divisions. The columns are 47 feet in height, with bases and capitals of white marble, and granite shafts.

Looking at it *externally*, we are immediately led to separate the portico from the heavy and discordant mass with which it is connected. It has been generally supposed, and most probably correctly, that they were erected at different periods; and certainly, if considered *together*, the grandeur of one portion is materially marred by the heavy incongruity of the other.

As an *isolated* part, the circular form of the body of the structure may not perhaps be considered an unsightly object; but it is one which should be at once presented to the eye, *whole* and *unbroken*. In the present instance, the parallelogram of the portico attached to a figure so entirely opposite and discordant, abruptly

breaking the continuity of its outline, can only be viewed as a deformity. Here then we have a clear and forcible example of the bad effects that may be produced from a disregard of the rules of harmony and proportion, which always become evident by a crude and unsuitable union of different forms, although *each* of them may *individually* be pleasing and interesting.

The portico, taken by itself, is very imposing; the extent of its general dimensions, and the symmetry of its internal arrangements, produce an impression on the mind of majestic solemnity, highly appropriate to the purposes for which the building was intended. The three intercolumniations of the flanks, with the two additional closed portions formed by the pilasters of the ordinance, increasing the projection from the main body, are very important features; while the height of the columns, with their embellished capitals and entablature, and crowning pediment, give to the *whole* a greatness, but at the same time richness of effect, which cannot fail to interest every beholder. The marble doorway, with its bronze pilasters and doors, harmonize both in proportions and decoration with the surrounding parts; and equally exhibit the judgment and taste of the architect.

The difference between this portico and that of the Parthenon at Athens, is striking and manifest; although both are objects of admiration, yet their merits are unequal, and rest upon separate grounds. In each we mark the developement of those ultimate principles to which we have alluded; and the superiority of the claims of the *one*, beyond those of the *other*, in their approach to perfection, may be referred to a strict adherence to such principles, in the Greek example, and a gradual declination from them in the Roman one. The characteristic of the former is *sublimity*, mingled with *beauty* of the most chaste and refined description: although massive and grand in its outline and proportions, still these impressions are so far subdued and softened by subdivisions and embellishments, as to reduce the stern and somewhat awful feelings which are often called forth by extension and greatness of parts; while the enrichments are in such perfect keeping with the remaining portions, as to produce most completely the combined effects required for the excellence of the *whole*.

In the portico of the Pantheon, variety of form and richness of material seem to have been substituted (to a certain extent) for simplicity of plan, and sublimity of style; and although its general dimensions, and remarkable projection, are eminently calculated to excite the latter, yet the marked character of the arrangement and details, are in unison with our ideas of *beauty*. The division of the internal part by the introduction of four columns, which range with those that form the three intercolumniations of the flanks, adds much to the pictorial quality of the

view. Here is an evident deviation from *simplicity* of plan; a degree of variety is brought into play, which produces those pleasing impressions it so generally calls forth. Yet these impressions are of an entirely opposite kind to those we have described as connected with sublimity. Such arrangements, if adopted with caution and judgment, may, and often do, produce very desirable effects; but the great difficulty in their management, is the exertion of that *sound discretion*, which enables us to confine them within proper limits, instead of carrying them so far as to become a source of confused and ill-defined ideas, at once inimical to grandeur of style, and beauty of detail. Allowing, however, to the Roman work the full extent of merit which its most ardent admirers would claim for it; and admitting without hesitation, that it is an object of great magnificence and interest, yet if examined in *strict* reference to those principles of good taste which may be considered as the standard of excellence in all productions of art, the *preference* will unquestionably be given to its Grecian rival. The simplicity, the grandeur, and the beauty of that structure, is unalloyed with any attempt at meretricious ornament or startling effect. It seems to stand alone, a perfect monument of the powerful energy and refined conception of the human mind. A work calculated to immortalize the age in which it was erected; and destined to become the wonder and admiration of succeeding generations.

The above observations upon both these remarkable buildings, refer of course to their *external* portions *only*. The remains of Greek *interiors* are neither likely to excite extraordinary interest, nor to call forth comparative criticisms with Roman ones.

The internal construction and decorations of the Pantheon, must be considered without a parallel. We have no model or guide for our high estimation of their beauties, but must refer to those *immutable* elements of pure taste and good sense, which always lead to just appreciation as to success or failure in works of art.

Mr. Woods, in his remarks upon the Pantheon, states, that he does not believe "there is any person so insensible to the effect of architecture, as not to feel the surpassing beauty of this building internally; the simplicity and grace of its form, the beautiful colour of its marbles, principally of the giallo antico, and the delightful effect of its single central light, force themselves upon our admiration."[a]

Now let us consider how far those parts which in Mr. Wood's estimation conduced to the surpassing excellence of the interior, assimilate with the peculiar causes of those effects upon the mind, that call forth sensations of sublimity and beauty.

First, the figure, a complete circle, is one of those forms that, under all circumstances, may be termed beautiful; but, in the present instance, the extent of its

[a] Wood's Letters of an Architect, from France, Italy, and Greece, Vol. I. p. 356.

diameter, and its great height, give to it a degree of sublimity, which, as we have already stated, is always sure to be produced by unusual magnitude. Again, the dome, rising immediately from the upper line of the circle, and covering the whole space with an hemispherical vaulting, forms an admirable continuous line of completion to the area which it surmounts; perfectly connecting every part with great simplicity and grandeur. No angles, no breaks, no contortions, interfere with the harmony and repose of the general outline of the plan; every portion which successively presents itself to the eye, in the view which it takes, either of the symmetry of the figure below, or the graceful extension of its altitude above, occasions those combined feelings which would be separately impressed upon our minds, on beholding an Egyptian pyramid, or the graceful and delicate foliage of a Corinthian capital.

To be convinced that these effects are produced by the *causes* described, we have only to reflect for a moment on the result of other modes of arrangement and finishing. Suppose the interior had been of a different figure; a parallelogram, a polygon, or an ellipsis; suppose the ceiling to have been flat, or coved, or planned into any of the various ingenious forms of vaulting; yet to a mind but moderately cultivated in architectural study, the difference *conceived* merely by the powers of imagination, would confirm the superiority of the present design and completion.

Suppose the dome, instead of rising from the extreme line of the circumference of the circle, had been reduced in dimensions, and the magnificent stream of light which is admitted from its centre opening, divided and frittered away into small portions, by windows at different parts; would not such alterations, even in the conception of those but little acquainted with the rudiments of the art, have been considered as a great deterioration from its original grandeur and splendour? But this remarkable interior has other beauties equally effective, and in perfect harmony with the surrounding parts. On the line of its circumference are introduced eight recesses, including the entrance; six of which are divided *each* into three intercolumniations, by two columns of the Corinthian order, between antæ or angular pilasters. Here again we may trace the successful result of the application of those *true* principles of taste, which invariably produce at all times the *same* effects. Without these recesses a certain degree of monotony might have been felt, by the great and continuous extent of plain surface round a circle of such magnitude. But the relief is given with the most judicious and correct judgment; all the advantages of light and shadow are obtained, without any sacrifice of the repose and keeping of the adjacent portions. No breaks are made in the entablature at these particular parts, which would have divided it into small lengths, and destroyed the graceful continuity of its form round the *whole* circle. Any separation would have materially

interfered with the harmony of the connecting lines, and have marred the opportunity that has been taken of obtaining a general and pleasing variety, by the most simple and legitimate means.

To have remedied the disagreeable sameness of an extended, uniform, and plain surface, would have been a task of no great difficulty, if all considerations had been abandoned of the evils likely to be produced in attaining the object. Projections of any description, piers or columns, might in a degree have answered that *particular* purpose; but without a cautious attention as to their situation, and the parts with which they would necessarily be combined; without matured reflection as to the effects of such adjuncts upon the *whole* of the surrounding portions, the symmetry and harmony of a magnificent composition would have been annihilated. The foresight which occasions the apprehension of such failures, and the talent that guards against them, are the marks which distinguish cultivated taste from the mere aspirations of an untutored mind.

These observations seem clearly proved in the very example which has called them forth. Subsequently, as it would seem, to the erection of the original building, and probably at the period of its conversion into a Christian church, small altars with columns and pediments have been placed against the piers that separate the recessed parts we have just noticed. They are protruded, as it were, at several points from the continued line of the circumference of the circle, that forms the figure of the interior; and they absolutely become the very deformities which, in the first instance, seem to have been guarded against with such correct taste and judgment. The repose and quiet beauty so eminently displayed, are broken in upon and diminished. The eye, in tracing the graceful curve of the wall line, is distracted by the interruption of these unfortunate excrescences; no excellence of style or detail in their composition can compensate for the general effect they produce; and they stand a fatal, but instructive *example* of the extensive mischief that may be caused to a mighty work by trivial and illjudged additions.

The style of architecture chiefly adopted during the middle ages, (to the greater portion of which the term Gothic has been applied,) although exhibiting certain peculiarities, yet, on careful investigation, seems to bear out the general principles to which we have alluded. This style is entirely different from those we have hitherto examined; its *principal* effects must certainly be referred to the sublime; but the sources from which they are produced are evidently *not* entirely the same as those we have ascribed to the ancient buildings of Egypt, Greece, and Rome. It is true the Gothic cathedral has magnitude as to the quantity of space which it covers, but its mass is broken and separated into various parts; it has, externally, recesses, but-

tresses, niches, pinnacles, and many other divisions, which, in our former remarks upon specimens of the sublime, we have considered to be opposed to such emotions.

How then (it may be asked) is it, that in buildings which are so generally considered to excite feelings of sublimity, the very essence and characteristic of their style consist in those peculiar modes of form and distribution, which in other cases have been considered as the means of deteriorating such effects?

Now it does not follow, because certain portions of a building are deficient in those qualities that have been described as requisite for the production of sublime sensations, that all its remaining parts or accessories should be equally barren and defective: nor can it be disputed that *other* causes of the sublime, differing perhaps in their *nature*, yet similar in their operations, may not be traced in peculiar associations connected with the purposes to which the edifice is dedicated.

Let us then consider how far these opinions may be borne out. It will not be requisite to refer to any *particular* cathedral, as the parts to which we shall more particularly allude, are general features in almost every example. In the first place, it may be remarked, that far more powerful effects are produced from a view of the *interiors* of such buildings, than from their *external* elevations. Yet even in *these* we perceive peculiar combinations, connected with the results we have anticipated. Their heights are generally considerable, and most of them have towers and spires of great and unusual elevation. Flying buttresses are likewise frequently introduced, which, to many observers, are extraordinary and interesting in their appearance; there is a degree of novelty and daring in the construction of a stone arch suspended as it were in the air, which calls forth feelings of surprise and admiration. The roof of the nave is also often a prominent feature, and presents an uninterrupted line of great extent and altitude. The discolouration and various tints of the walls, parts of which are usually covered with lichens, while others exhibit marks of gradual yet sure decay, tend to impress upon the mind of the beholder, those mysterious and certain changes in all bodies, which no strength of matter can resist, nor human influence avert.

It may be observed, that all these forms and appearances naturally lead to a train of thinking, calculated to excite peculiar feelings; not generated, in the present instance, with the strength and energy attributed to those resulting from a view of the pyramid; for the objects are of a more complicated and less potent nature; but the germ (if we may use the expression) is the same; partially developed in the one case, but vigorous and matured in the other.

There is, however, another and more effective source, in buildings of this description, to which we have hitherto made but slight allusion—their association in the

mind with the sacred and important uses to which they are consecrated. The holy observance of divine and religious duties seems to hallow the fanes in which they are performed; when we view them, a tone of feeling is awakened, intimately connected with the awful conviction of omnipotent power, softened by humble but fervent hopes of merciful consideration. We become elevated with the fervour of pious aspirations, and this excitement is perhaps the most pure and legitimate cause of sublime emotions. It is, however, to the *interiors* of Gothic architecture, that we must chiefly look for these forcible appeals to the imagination.

The arrangements of the internal parts of the cathedrals of the middle ages are exceedingly picturesque and interesting. The great height of the nave, over which is suspended vaulting, sustained by abutments not always apparent to the common observer; the extent of the general dimensions on the surface; the larger portion of which is *at once* presented to the eye; the ranges of columns, with the arches that sometimes form a clere-story; the boldness displayed in the management of the principal weights and their supports, creating a degree of amazement, sometimes perhaps bordering upon apprehension; are *all* causes calculated to excite wonder and admiration.

Again, the degree of light, and the modes of its distribution, are always peculiar in these edifices; never being admitted sufficiently to obtain those bright and cheering rays, necessary and effective to that class of objects which impress us with the idea of elegance and beauty; but so regulated as to quantity, and received from such situations, as to throw certain recessed parts into deep shade, and produce a sombre and solemn effect on all the other portions. The introduction of coloured glass has also an influence in aiding these impressions; for while it preserves in a great degree the general gloom, the partial reflection of the coloured rays seems to harmonize with the surrounding objects, and enriches them with the soft and mellow tints of a subdued illumination. The marble carvings of the various tombs and monuments are also powerful auxiliaries to the interest of the scene: the figures of celebrated men standing out in dim relief within dark and obscure recesses, the history of whose lives as warriors, statesmen, and poets, claims our veneration for the wisdom and noble principles of their master minds, with the recollection that their bodies have for ages mouldered into dust beneath the spot on which the gratitude of their country has endeavoured to preserve the memory of their services; are all objects and associations calculated to elevate our feelings and produce enthusiasm. It is true, they are occasionally accompanied by others, bordering upon if not directly connected with beauty. The rich and delicate tracery which sometimes adorns the vaultings and the windows; the wood carvings in high relief, and of exquisite workmanship, often exhibited in the choir; the paintings and gilding that frequently decorate the altar,

are all pleasing features, which, though subordinate in their effects to those we have already described, yet mingle with them, and increase the impressions on the observer. The arrangement of the plans of these buildings, and the forms of the prominent parts, are novel and striking, in comparison with all other classes of architectural works. In most of the principal cathedrals in this country, and on the continent, the display of grandeur and pictorial effect, (even on the first entrance,) is most extraordinary. The view does not terminate with the nave, but is continued to the choir, which elevated, and approached generally by steps, discloses a full and distinct display of its appropriate and rich embellishments. Sometimes the eye is carried even beyond these precincts by an opening above the crowning part of the altar; and we see, perhaps, at some distance, a magnificent window of stained glass in the Lady Chapel, which is frequently situated at the eastern extremity of the edifice.

It would seem, then, from the above observations, that there are certain *distinctive qualities* to be traced through the *whole* range of the ecclesiastical buildings of the middle ages, remarkable for the emotions which they excite in all minds, however different in constitution and cultivation; and although variable in force and intensity, they are still similar in their nature, and universal in their operations. That *sublimity* is the great and leading character in their effects, there can be no question; but it is also evident that they are sometimes blended with sensations of *beauty*, produced by separate causes, and definable on different principles. Indeed there are few objects of *art* which can be considered as causes of *sublime* sensations *alone;* they are almost always accompanied with certain feelings or perceptions of beauty, that in a great degree seem to relieve and sooth the mind. The examples we have referred to of unusually extended dimensions, in those enormous masses of matter, the pyramids of Egypt, certainly appear to be entirely free from any other influences, than those potent ones which they so instantaneously exert; but *they* must be considered as an exception to almost universal results.

The *natural* causes which occasionally excite these emotions, are often more simple and direct in their effects; and sometimes acting without the aid of *visual* impressions, are less likely to derive their power from combined or complicated sources.

The architecture produced in this country subsequently to the period which has been termed the *middle ages*, was of a very mixed and heterogeneous character; although some specimens perhaps occasionally exhibit interesting and picturesque composition, yet it generally consisted of compilations of inferior parts from existing remains of Roman buildings, selected without taste, and executed with all the defects of a rude and barbarous imitation. Indeed novelty and originality of design may be said to have terminated with the Gothic.

The restoration of ancient architecture was merely a revival of the prominent fea-

tures of the Greek and Roman works, to which we have already alluded. For examples of the developement of sublime and beautiful emotions, we must always refer to the *originals* for any theory we may suggest to illustrate the principles of taste and architectural design. It is true, the wild and chaotic combinations of the Romanesque structures were ultimately succeeded by a style of much splendour and magnificence, in which the ordinances of ancient art were, in a considerable degree, arranged and adapted to the views and wants of modern life. The achievement of this great and desirable end was the result of the successful labours of several Italian architects of superior talents, learning, and taste.

Although their productions may be classed in different degrees as to excellence, yet they all evince those elements of artistical feeling and refined imagination, which at once separate them from the presumptuous and ignorant attempts of the *first* innovators. The palatial grandeur exhibited in the best specimens of this style, (which has very appropriately been termed Italian,) is chiefly produced by the harmony and fine proportions in their composition, the continuity in their outline, and the richness of their embellishments; with a noble crowning cornice carried along the *entire* front of the edifice. At the same time we may remark, that the occasional introduction of attached columns, sometimes of *two* ordinances, one above the other, and an entablature broken round their projections; with the injudicious application of pediments, and other discrepancies, must be considered as failures too often perceptible.

We have endeavoured in the course of this little Essay to select, from *four* different styles of architecture, a few prominent and striking features, which seem distinguishing marks of their classification. We have traced in each, peculiar effects upon the beholder, apparently *invariable* and *immutable* in their results. We have also ventured to suggest that there are certain *ultimate principles* connected with these impressions, to which such effects may generally be referred. The subject is one of great difficulty—inferences drawn from the consideration of it can only be received as founded upon certain insulated phenomena; curious and interesting in themselves, but by no means sufficient for the construction of a theory.

It has been already stated that these observations are submitted as suggestions for further investigation; not as the result of those clear and logical developements which should always form the *basis* of a sound and perfect system. At the same time, however vague and subtile such subjects may be, they are neither *irrelevant* or *uninteresting* to the architectural student; they call forth a train of thinking which, though not perhaps productive at the *moment* of any *precise* views or *fixed* principles, are yet calculated to lead to reflections on the operations of the mind, eminently useful and instructive.

The cultivation and improvement of that faculty which we call *taste*, are not dependent upon fixed *rules* or *axioms*, acquired as it were by a peculiar course of study, and retained in the memory by frequent repetition: nor on an application at all *times*, and under all *circumstances*, of the *same* means to accomplish various ends; or on a schoolboy's process of *lines* and *diagrams* to work out results that have been long known and generally admitted. Neither are they to be attained by those premature flights of imagination, which lead the student to suppose that a susceptibility to the beauties of fine art, is a sufficient *test* of the correctness of his views and the soundness of his judgment.

No learning, no tuition is required to derive pleasure from objects of taste; it is a feeling ingrafted in our nature. But the talent which enables us to procure the greatest possible degree of this enjoyment, and bestows upon us the high and dignified quality of exciting such emotions by the energies and genius of our own minds, can only be obtained by patient and careful meditation. There is a great difference in intellectual power between the man who merely *admires*, and he who can analyze the causes of his admiration; a multitude will be delighted by the sight of a beautiful object, but a single individual *only* of the assemblage may be capable of producing one. The former possess their endowment, as it were, by natural inheritance; the latter cultivates and improves it by the application of his mental energies.

The principal sources from which this improvement is to be derived, are a careful investigation of those objects that have for long periods been considered as *models* of excellence by large majorities of men, under various states and phases of society. These examinations must not be cursory or superficial; if we feel that certain sensations are excited by them in our minds, we should immediately endeavour to trace the causes which have produced them, and consider whether by different combinations we could insure similar effects.

The student should endeavour to compare the structure that has delighted him, with one designed under similar views, and for the same purposes, which has occasioned no such results; and mark with critical acumen the effects produced by each. He must also avail himself of the experience and judgment of others; not with a timid and slavish acquiescence, often the consequence of a languid apathy, which renders him too indolent to think for himself; but with that zeal and ardent solicitude, by which opinions are received with avidity, but adopted with caution and circumspection.

No opportunity should be lost of profiting by the various specimens that are continually presented to our notice, although some of them perhaps may not be of sufficient importance to call forth public criticism. When the mind has been once

trained to that wholesome state of observation and reflection, which enables it to select with ease and promptitude the *little* which is good from the *mass* that may be bad, a store of pleasing and useful ideas is almost insensibly acquired, which by arrangement and combination render eminent service to him who has had the industry to collect them. There is not a more powerful obstacle to intellectual improvement than that fatal lassitude of mental energy, that requires a stimulus to perceive the beauties of nature and of art; a state in which we only see what we are called to look upon, and which limits our admiration and enjoyments to the perceptions and feelings of others. A general habit of reflection tends to a healthy and vigorous exertion of the mind, in pursuit of that knowledge which the higher department of architectural study so imperatively demands; not under the hope of exciting as it were *sudden* inspiration and a *perfect* developement of principles easy of application and decisive in their results; but rather as the means of obtaining those just and sound views upon which the productions of good taste are invariably based. It is upon the constant and active industry of the mind, that artistical education mainly depends; and the want of it often mars the efforts of the student, neutralizes his talents, and crushes his hopes.

There cannot be a more baneful error associated with initiation into art, than the dangerous dogma that the aspirations of genius need not be trammelled by the labour of study. It is alike seductive to the active and the idle, the intelligent and the feeble. It often impedes the advance of those who, by superior abilities, have already acquired some information; but it more frequently subdues the energies of others, who, with moderate pretensions, are merely endeavouring to obtain excellence.

Careful examination and mature reflection upon those models which are presented to us as standards of taste, almost imperceptibly produce a sensibility to beauty, and a correct appreciation of its sources. A store of ideas and images is acquired, the extent and value of which we can scarcely estimate, till by practical exertions we are enabled to adopt them. In short, the mind is imbued with a peculiar aptitude and faculty of execution; not from inferences and conclusions *separately* considered and admitted, but by the result of their concentration on those objects which have excited our interest, and called forth our admiration.

GREENWICH UNION POORHOUSE.

By R. P. BROWNE, Architect.

Amongst the numerous edifices which the requirements of our increasing population, and the progress of social economy, are calling into existence, from the luxurious club-house to the humble cottage, not any, perhaps, are more deserving the attention of the public than the Union Poorhouses, which, under the operation of the New Poor Law, are everywhere studding the land, offering an asylum to that large portion of the community whom imprudence, sickness, the infirmities of old age, and ofttimes the casual misfortunes of the world, have deprived of a home and of adequate means of existence.

When we consider the vast number of those who are thus dependent for a livelihood upon others, and constrained to urge the common right of the poor to support from the land of their birth, we must at once admit the great importance of any subject that has regard to their treatment and welfare; and when we further consider how much of human suffering and misery is to be found amongst the poor, who are "never to cease from the land," and how greatly the youthful labours of many of them have added to the wealth of the country, it must be manifest that every principle of justice and every dictate of humanity require that the buildings provided to afford them an asylum, should be distinguished by at least a decency of arrangement, a cheerfulness of character, and a due regard to the comfort of the inmates.

Again, when we still further consider the varied circumstances of the thousands and tens of thousands who seek, within the walls of the Union Poorhouse, a refuge from the pressing evils of poverty; the physical and social differences that prevail; that here are alike housed persons of all classes, of both sexes, and of every age, from infirm fourscore to the weak infant who has never known a father's care; the able-bodied and the feeble; the healthy and the sick; those who have fallen from the lap

of idle affluence; and those who, through life, have laboriously struggled with adversity, it will then become evident that a judicious and extensive classification is a point of the highest importance. Thus, separate modes of management are requisite for the able-bodied and youthful paupers in such a building; and whilst the former should be provided with appropriate occupation and employment, the latter constitute a class entitled to especial care. It is largely amongst these youthful tenants of the Union Poorhouse that the future labourers of our land are to be found, and to every reflecting mind it must at once be obvious how vitally important it must be to make every exertion to instil good principles into the pliant mind, to guide the twig whilst it may yet be bent, to instruct them in those useful employments, the steady pursuit of which may insure them an humble independence; to teach them practically the value of industry, and that to live on the earnings of the sweat of the brow is far preferable to an abject existence in a state of idleness; and to demonstrate to them, by their own observation, that, should their earnings be too scanty to anticipate and provide for a time of accidental suffering, or for the wants of honourable old age, their Union has provided an asylum, not a prison, against the day of their need.

Again, in such an institution, every care is required that, while real distress has the protection and relief to which it is both morally and legally entitled, yet a separation of the sexes is necessary to preserve those conventional proprieties which the poor are apt to disregard, and to check those passions and vicious propensities, an indulgence in which is but too frequently the accompaniment of extreme poverty; so that, if possible, the pauper, although, perhaps, only a temporary inmate, may go from the Union House a better member of society than when he first entered the asylum, and, for that reason, less likely again to enter its walls, and burthen the more fortunate or more industrious classes of society. In institutions of this nature, moreover, which the wisdom and public charity of the country have consecrated to benevolence, the infirmaries constitute an important branch of the arrangements provided for the little society amongst which they are established. Other modes of classification, of greater or less moment, are also necessary in the economy of such a society; whilst constant watchfulness is required over all, involving an indispensable provision for the master's easy supervision, and a ready access for him and his assistants to every part of the establishment. The domestic requirements for so numerous a family, although of the humblest description, are still numerous; and the supply of water and the provision of efficient drainage, are points of no slight importance.

On these general principles, it may be useful to consider the arrangements of the Greenwich Union Poorhouse, which has, indeed, been frequently termed the "Model Workhouse." This edifice, which is situated in one of the most densely populated

unions in this country, is capable of receiving twelve hundred inmates, besides the master's family and assistants. It is built on the lower Woolwich road, and occupies, with the ground surrounding it, altogether five acres of land. Constructed of brick, and designed in an appropriate style, it has an elevation of two stories above the ground floor, and presents a plain but cheerful and almshouse-like appearance. The building faces north and south, and the eastern half is wholly devoted to women and girls, and the western half to men and boys. The classes are sixteen in number, and are divided as follows. The probationers, or persons first admitted, until visited by the surgeon, and their state of health ascertained, two classes, men and women; infirm men, infirm women; able-bodied men, able-bodied women; women of irreclaimably bad character; boys, girls, nursery children. The infirmary is divided into two men's and two women's classes. In the front, near the Woolwich road, stands the board room building, containing on the ground floor, (through an arched way in which is the entrance to the establishment,) the hall in which applicants for relief wait until summoned before the guardians at their weekly meetings; the porter's apartments; a room divided into small compartments as receptacles for the old and filthy clothes, when exchanged for the union dress given to each pauper on his entering the building, and again restored to him on leaving the house; and the relieving officer's rooms. The one pair floor of this building comprises a spacious board room, committee room, waiting room for tradesmen, &c., attending on the board, clerk's office, and strong or fire-proof room. Each applicant for relief ascends the stairs near the waiting hall, and after examination in the board room, descends the stairs on the other side of the building, passing by the relieving officer's station, and not communicating again with the other paupers waiting for relief. The vagrants' reception rooms and yards are situate to the east and west of the board room building, and are entered directly from the front, having no communication with the establishment. The small buildings adjoining to these are strong rooms, for the temporary confinement of violent or criminal paupers, until taken before the magistrate for examination and punishment. They are placed in this situation as being less connected with the interior of the establishment, and contiguous to the vagrant wards, where turbulence and rioting principally have to be dealt with. Passing through the archway under the board room, those furnished with an order for that purpose, enter the establishment by the porter's admission; and, previously to proceeding farther, the new inmates are placed in the reception or probationers' rooms, near the gate, and immediately in the rear of the board room, there to await an examination by the union doctor. These establishments consist each of two rooms, one for suspicious cases, and the other for persons who appear

to be in health, with a warm or cold bath. When examined, cleansed, and clothed, the paupers are passed to their respective classes in the establishment.

A short description of the principal building will come next in order: it extends along a line from east to west of 450 feet. The master's house, commanding a complete supervision of the yards, forms the centre, separating the male from the female part of the establishment. The aspects are north and south; the south side being principally devoted to the old and infirm, for whom warmth and sunshine are desirable. The able-bodied adults, a small class, occupy a portion of the south side, principally from necessity, as the master's passage and entrance way to the several wards forms the division between the rooms appropriated to the young persons and that side of the house devoted to the adult inmates.

The basement floor is divided into cellars; store-rooms; furnace and boiler-room, in which are two boilers supplying steam for the cooking apparatus in the kitchen, and hot water for the probationers' baths, and the baths and sinks in the main building; the kitchen, and scullery.

On the ground floor, near the entrance, is the master's office, in which the accounts of the establishment are kept, with a well arranged list of the inmates, distinguishing the wards to which they belong. On the opposite side of the entrance is a room appropriated for interviews, at regulated times, between the inmates and their friends. A circular well staircase, for the use of the master and his servants, ventilated with a lanthorn at the top, assists in securing that circulation of air so necessary in such buildings. The apartments are divided into day rooms for the several classes; and each class has a distinct staircase constructed of stone for security in case of fire. The school rooms are fitted up with benches, with raised seats at the end, and the walls are covered with maps and pictures of various kinds, to facilitate the acquisition by the children of the rudiments of geography and general education; the master's and mistress's residences adjoin their respective schools, which gives additional facilities for effective superintendence. The girls have a large airing ground, a wash-house and laundry, and kitchen, affording them the means of acquiring, besides their elementary education, a knowledge of washing, getting up linen, cooking and needlework; thus fitting them for useful situations. The boys have also a large airing ground; and, besides their education, are instructed in shoemaking, tailoring, and other useful pursuits. A day room and yard adjoin the master's house, appropriated to dissolute women, and on the opposite side of his residence are the nursery and yard, both placed in situations immediately under his and the mistress's control and inspection. Three day rooms are appropriated to the aged and infirm of each sex, admitting of separation and classification to meet

their circumstances, and render them more comfortable. These rooms are placed to the southward, as having a warmer and more cheerful aspect, with spacious airing yards and sheds for those who are able to be provided with employ—the women with needlework, and the men in pulling rope to pieces, or, as it is called, picking oakum, for the purpose of caulking or stopping the seams in ships. The able-bodied adults, a small class in these establishments, seldom exceeding ten per cent., have each a day room and airing ground. The women have a wash-house and laundry to do the requisite work for the establishment; and the men have a powerful three-barrel pump, a fine piece of machinery, by which they furnish, with comparative ease, an immense supply of pure water to every part of the establishment, from an Artesian well, springing from a chalk stratum. The outbuildings for the men are appropriated to such labour as they may be capable of doing, and a yard in the rear is apportioned for breaking stones for road-making, a labour of which none can plead ignorance, and which can therefore be required from the most idle. The dining hall is situated in the centre of the building, near the kitchen, and ready of access from all the classes: it is entered directly from the rooms appropriated to the able-bodied classes, and by means of the gallery or central passage by the other classes: its form is that of the letter T inverted; the men occupying the west compartment, the women the east, and the boys and girls the stem of the letter. The family, when seated, all face towards the chaplain's desk, and so every one can be observed both during prayers and whilst taking meals.

The infirmary is detached, above 140 feet in the rear of the main building, and has two stories above the ground floor, it having lately been raised a story; indeed this part of the establishments, as in most other unions, was originally built too small.

The separation of the sexes is here followed out, as in the main building: the wards are divided into sick wards, having nurses' rooms in them, with hot and cold water supplied to the nurses' rooms, and water-closets opening out of the wards. There are also wards for dissolute patients, with separate airing grounds for this class. The fever wards are likewise separate; and there are two yards to each class for the convalescent. The surgery and kitchen for this establishment are near the entrance: there are also in the rear of the premises a room in which to deposit the dead, and an apartment for post mortem examinations. The privies are formed with glazed chimney pots, stepped into drains, which are washed out twice a day or oftener by large water pipes, having a perpendicular fall of thirty feet, and supplied from the large tanks in the roofs of the buildings; the urinals on the men's side are also connected with the privy buildings. By this arrangement these places are kept clean, and are not likely to cause offensive and dangerous effluvia.

The one and two pair stories of the main building are occupied by the sleeping

wards of the several classes, immediately over their respective day rooms. The infirm classes have several rooms, so as to admit of subdivisions to suit the cases and character of the paupers; they have also nurses' wards, with hot water continually supplied from the basement, water-closets to the rooms for the infirm and bedridden, and two baths, with hot and cold services to each class. A stone sink is fixed, with service and waste pipes, in each landing, for the general convenience of the wards. The cisterns to the main building are of slate, as least likely to injure the water. They are six in number, each holding 500 gallons; there are also four of these cisterns to the infirmary; they are served from the pump in the able-bodied men's yard, by means of two pipes, one branching to the main building, the other to the infirmary, with stopcocks to serve alternately as may be required. These cisterns frequently require replenishing, as the consumption of water in the water-closets, privies, sinks, baths, lavatories, services and wash-houses, is necessarily very great, equal at least to 30,000 gallons per day; the supply for this consumption is aided by spacious rain-water tanks connected with the wash-houses. The wards in the infirmary, and all the nurses' rooms in the main building, have hot water services, which arrangement frequently prevents opening the doors that divide classes, and going over the building.

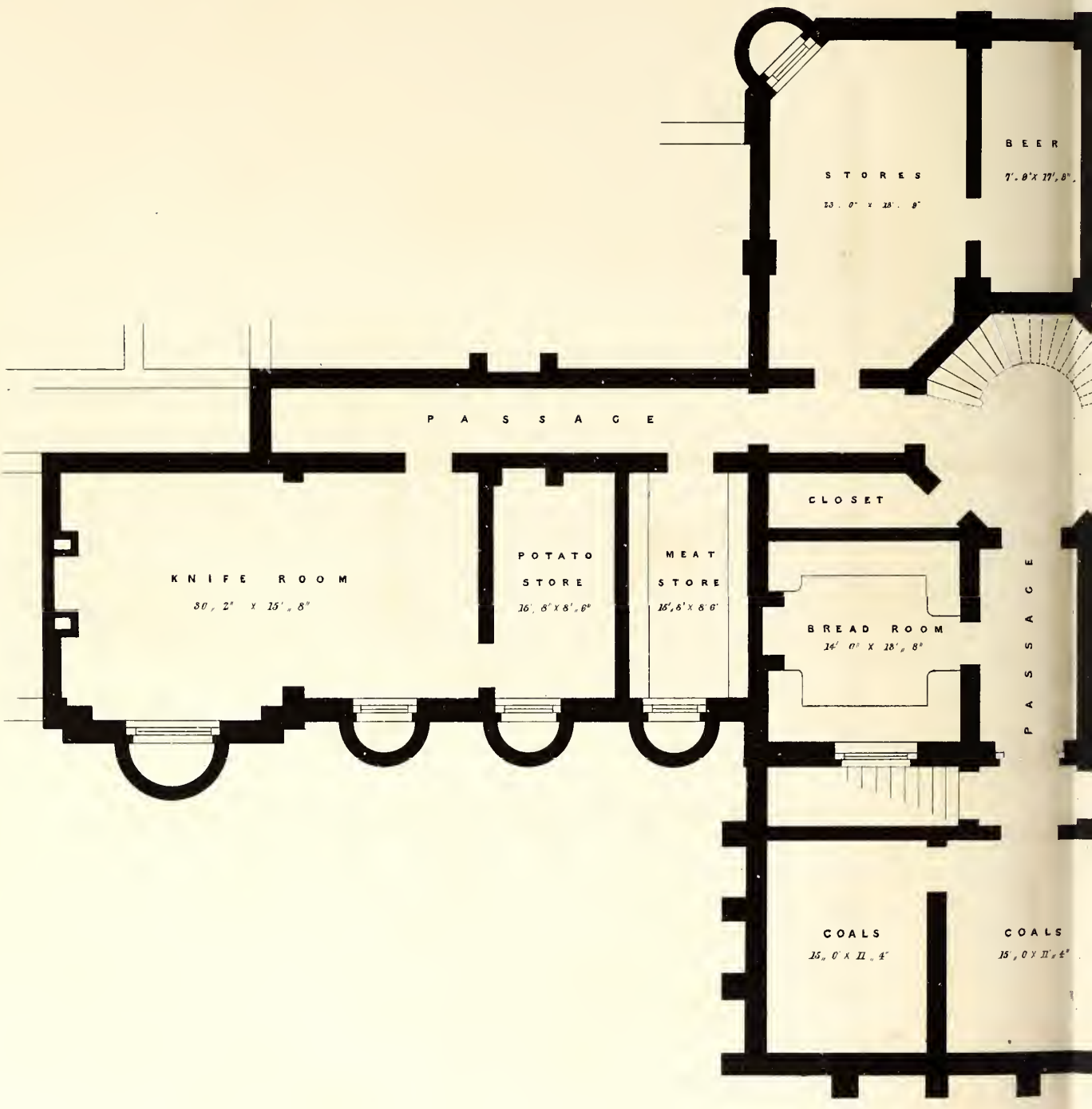
The kitchen of the main building has a steam apparatus, consisting of six steam cooking pans, with a boiler for generating steam built in an adjoining apartment. This apparatus provides for all the cooking for the numerous family, with a trifling expenditure of fuel, (not exceeding two sacks of coals per diem,) and is, for such an establishment, the least wasteful, most cleanly, and most economical mode of cookery. The cost of the house, inclusive of fittings, has been as follows:

Purchase of land and expenses		£1,865 2 6
Forming a sewer to the river of about 2500 feet, builder's contract, and other works		1,200 0 0
Contract for house	£18,674 0 0	
Additional works in buildings and fittings	3,664 0 0	
Artesian well and three-barrel pump . .	208 11 11	
Boilers and furnaces for washing . . .	68 5 0	
Steam cooking apparatus, eight baths, boilers, stoves, and fenders	720 0 0	
Additional works just completed for enlargement of infirmary department . .	1,546 0 0	
		24,880 16 11
		£27,945 19 5

Being, including cost of ground, expensive drainage, fittings, &c., an average of about £24 per head on the number it is capable of receiving. When the complete nature of this establishment is considered, with the cost of the building, it must be regarded as an instance creditable alike to the Poor Law Commissioners, the Board of Guardians, and all parties engaged in the undertaking. A reference to the plans and isometrical elevation will more completely explain the arrangement of this extensive Union House.

Plate 1. Cellar plan.
2. Ground floor plan.
3. First story plan.
4. Second ditto.
5. Isometrical view of the building.

GREENWICH UNIO



PLAN OF BASEM

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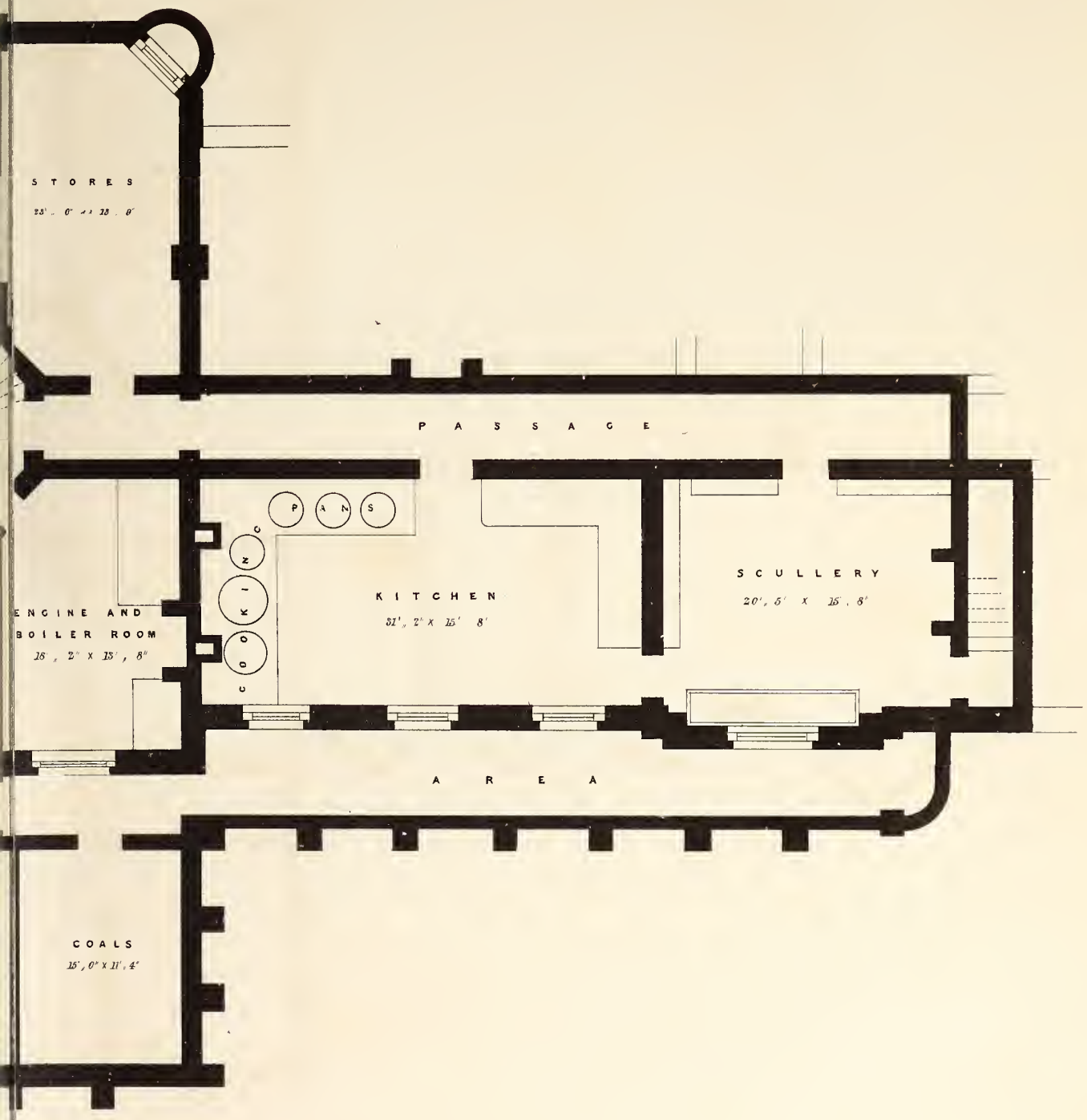
J. Weale, Architectural Library, 59, High Hol

WORKHOUSE.



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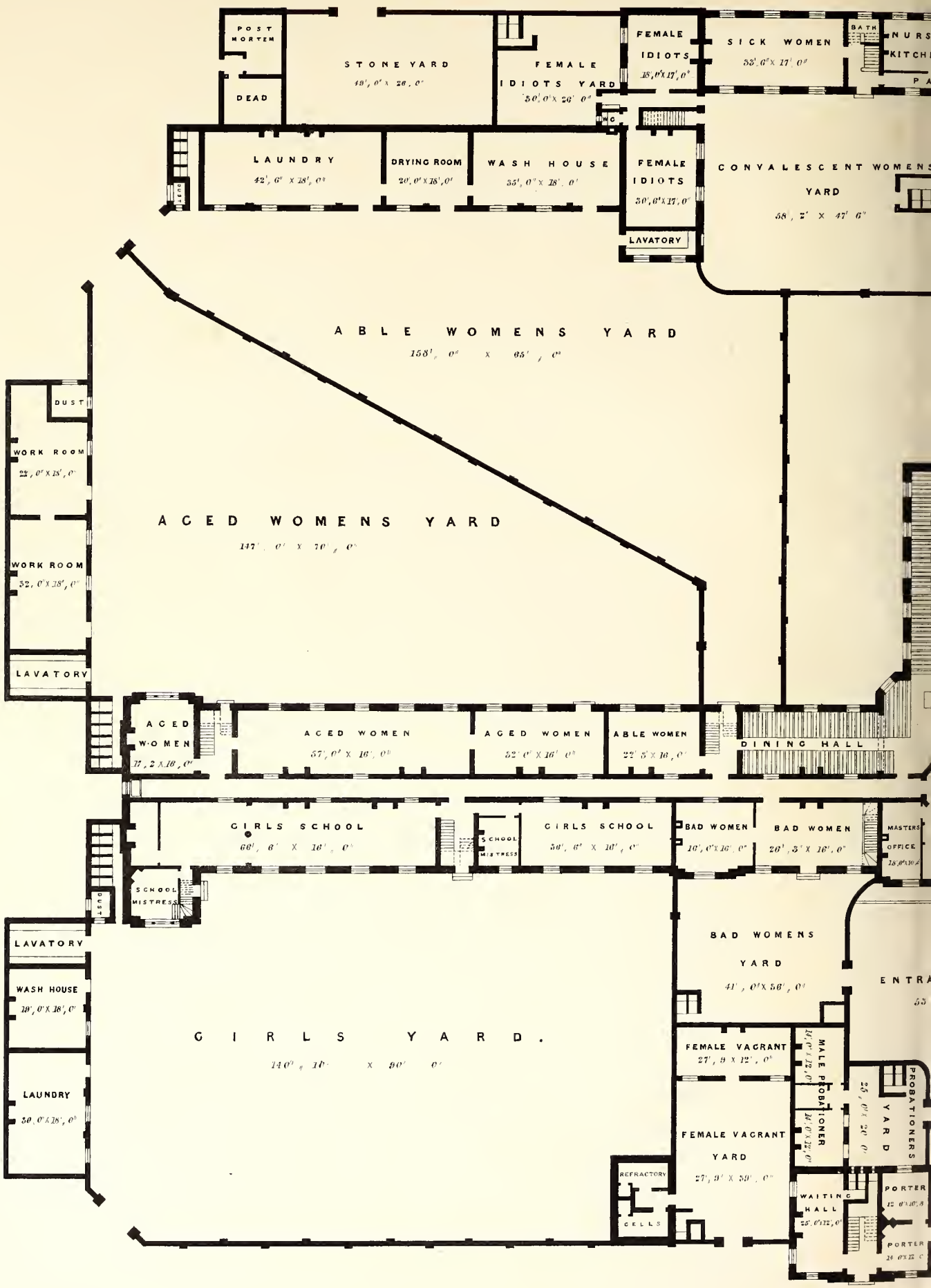

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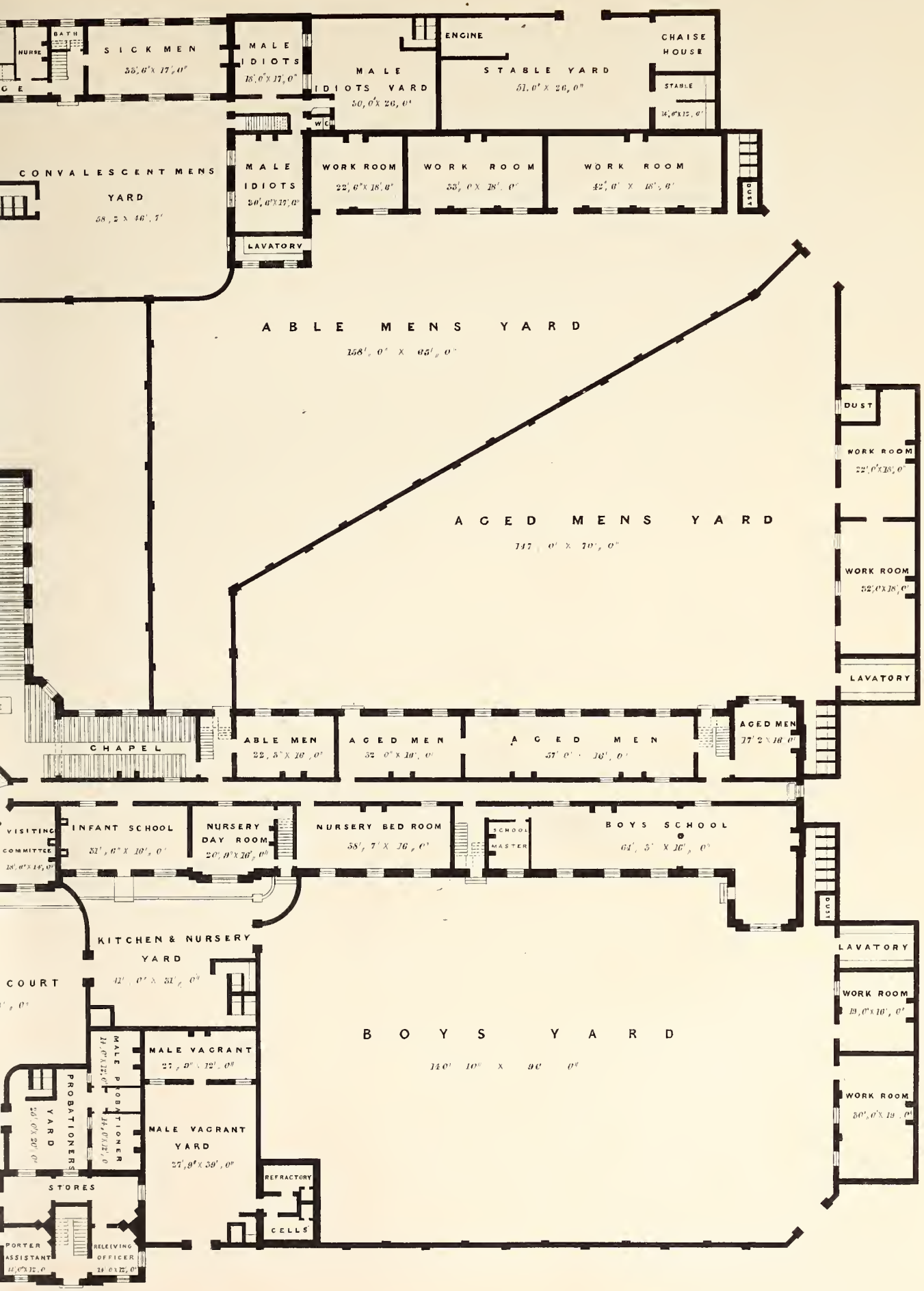
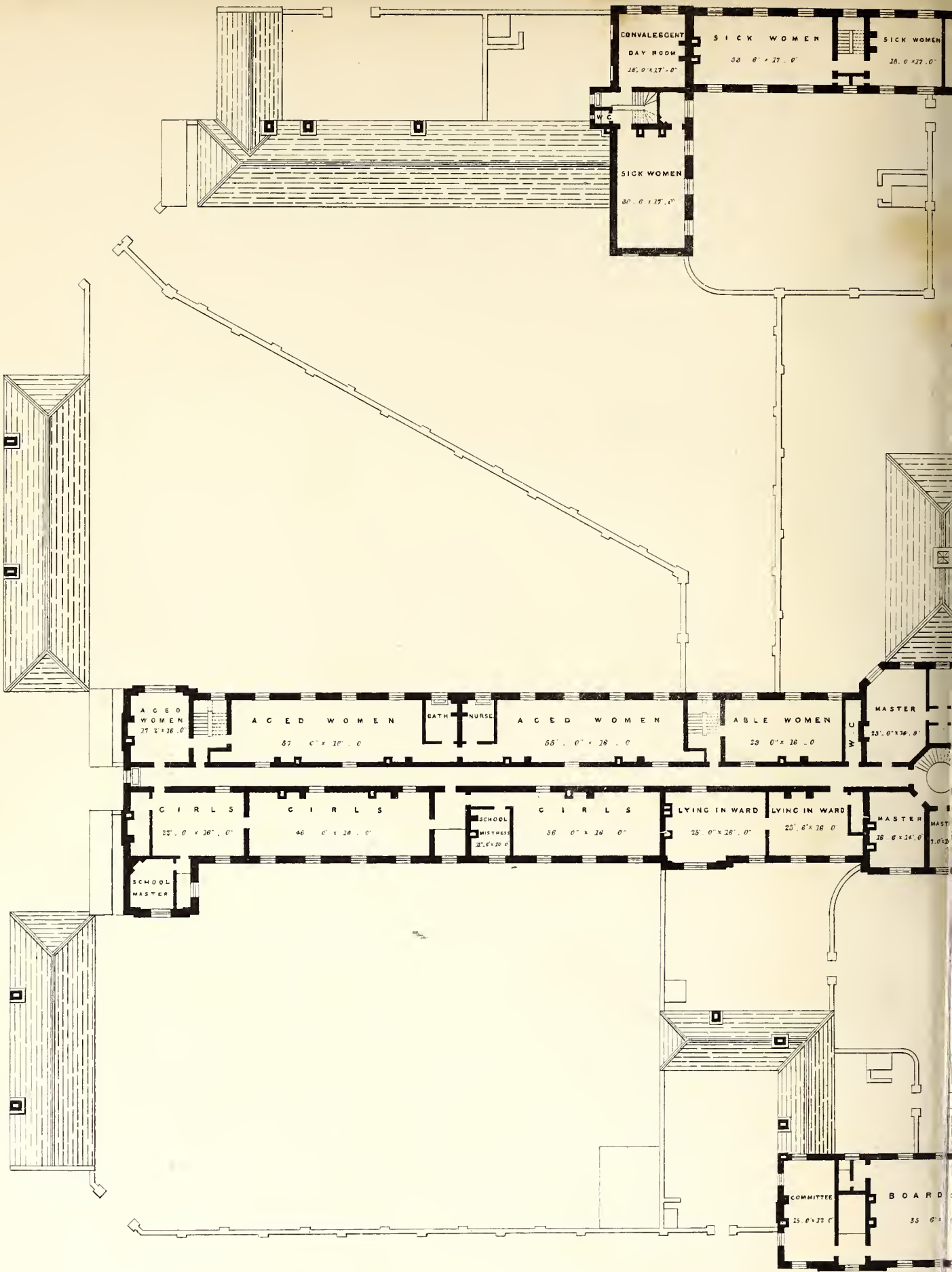
PLAN OF G

ON WORKHOUSE.



GROUND FLOOR.

J. Weale, Architectural Library, 59, High Holborn, October 1843.



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J. R. Jobbins, lith. 3, Warwick Ct

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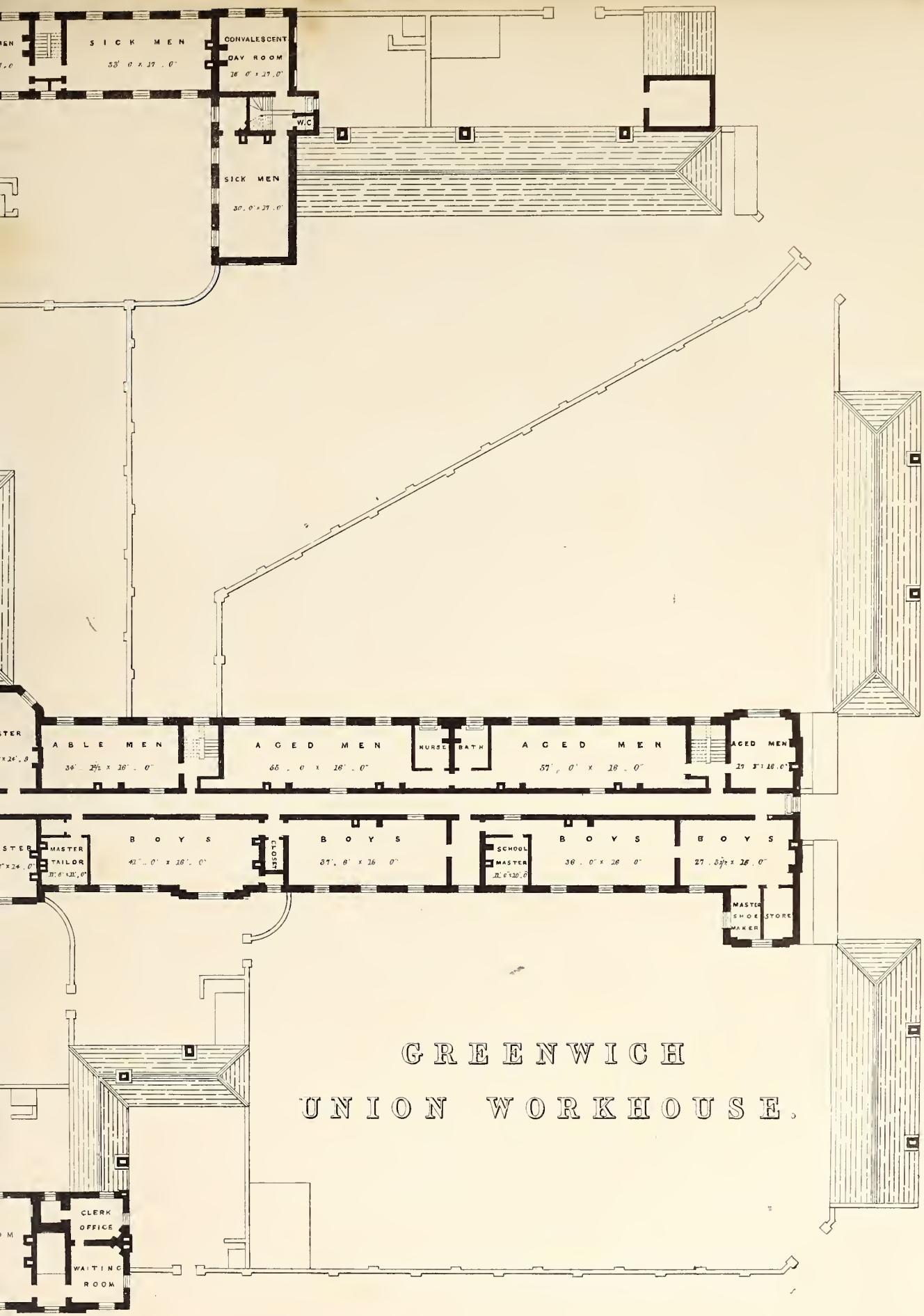

GREENWICH UNION WORKHOUSE.

PAIR FLOOR.

Feet.

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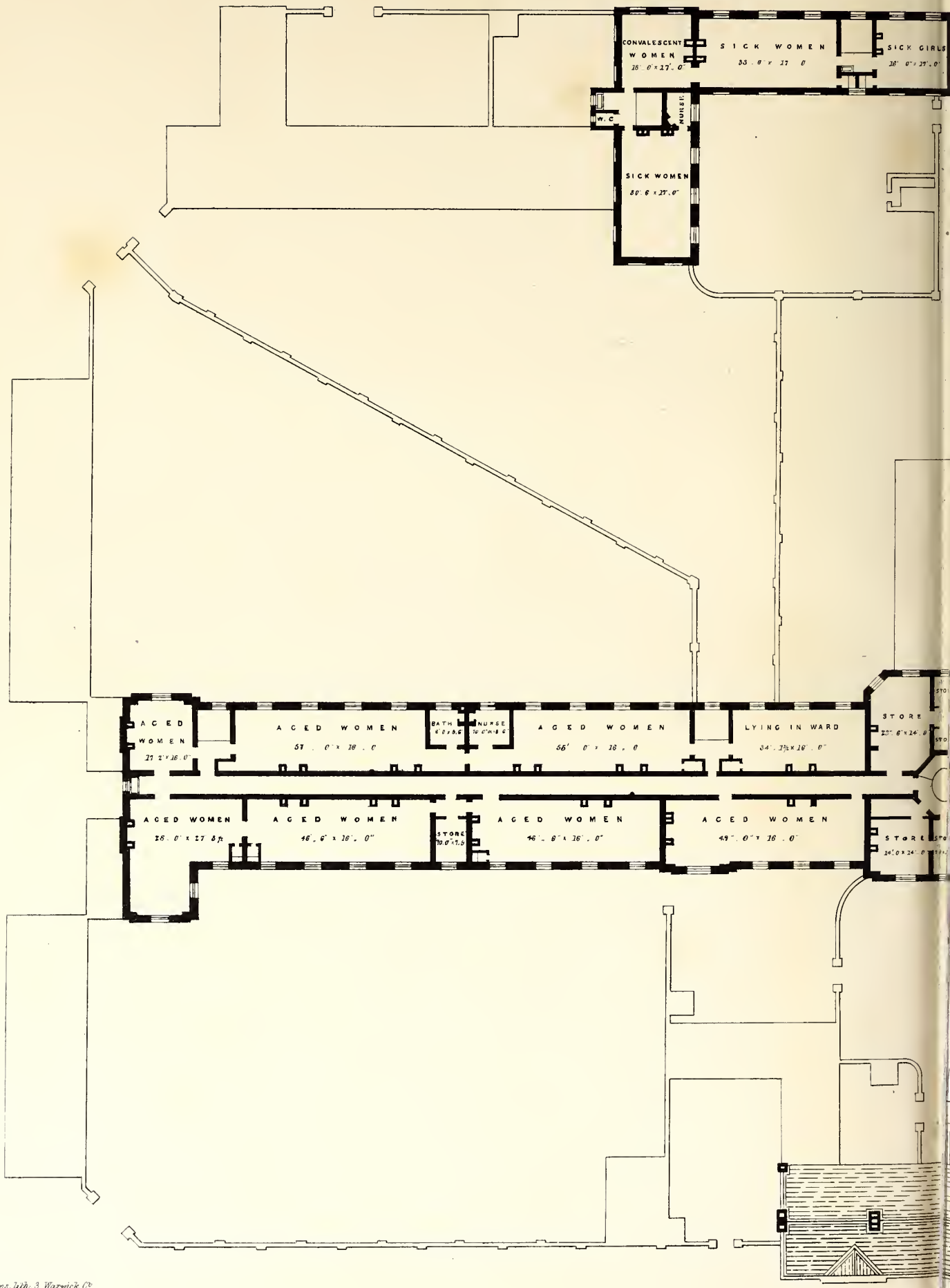
Holborn, October 1843.

GREENWICH UNI



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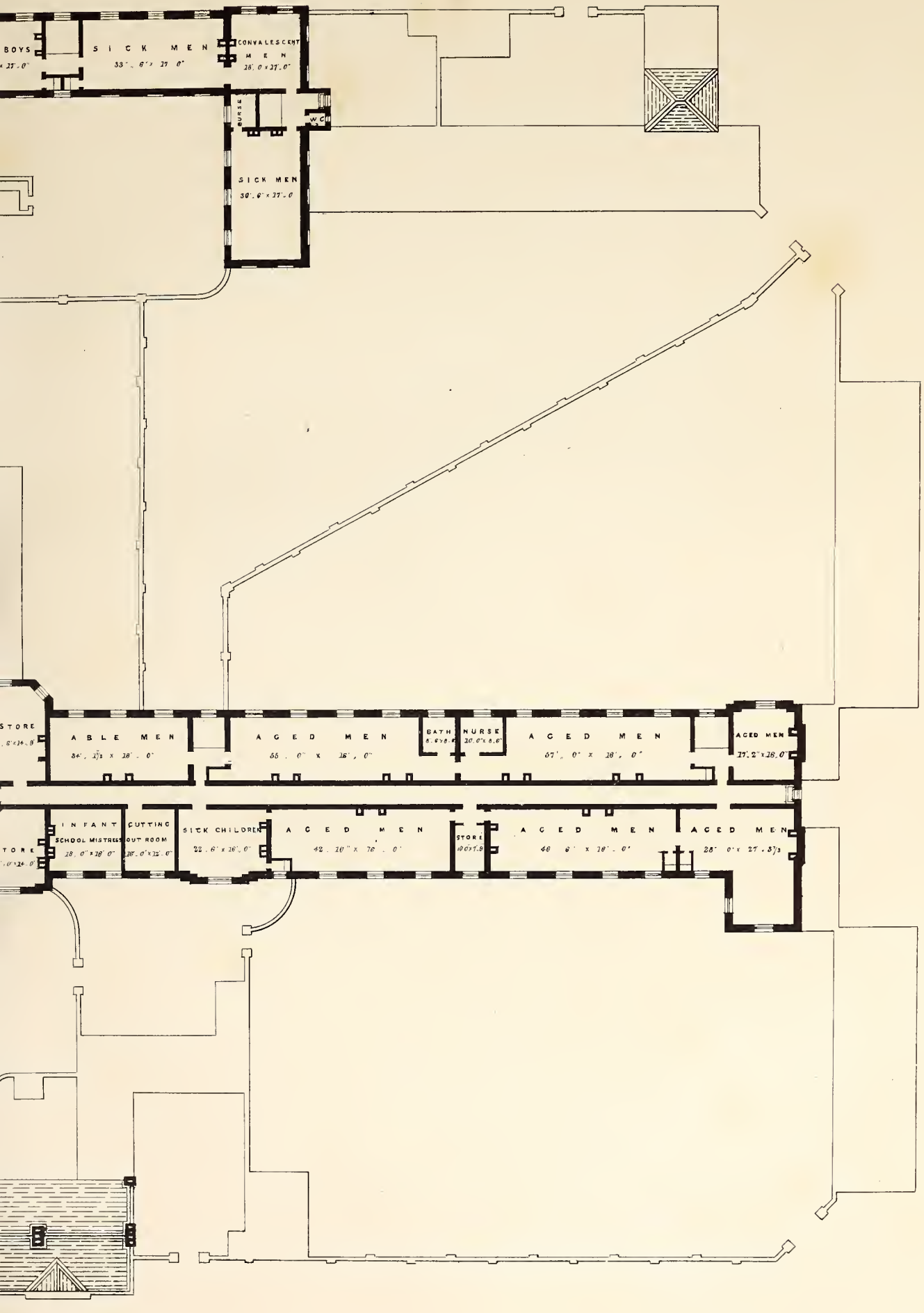
PLAN OF TW

N WORKHOUSE.

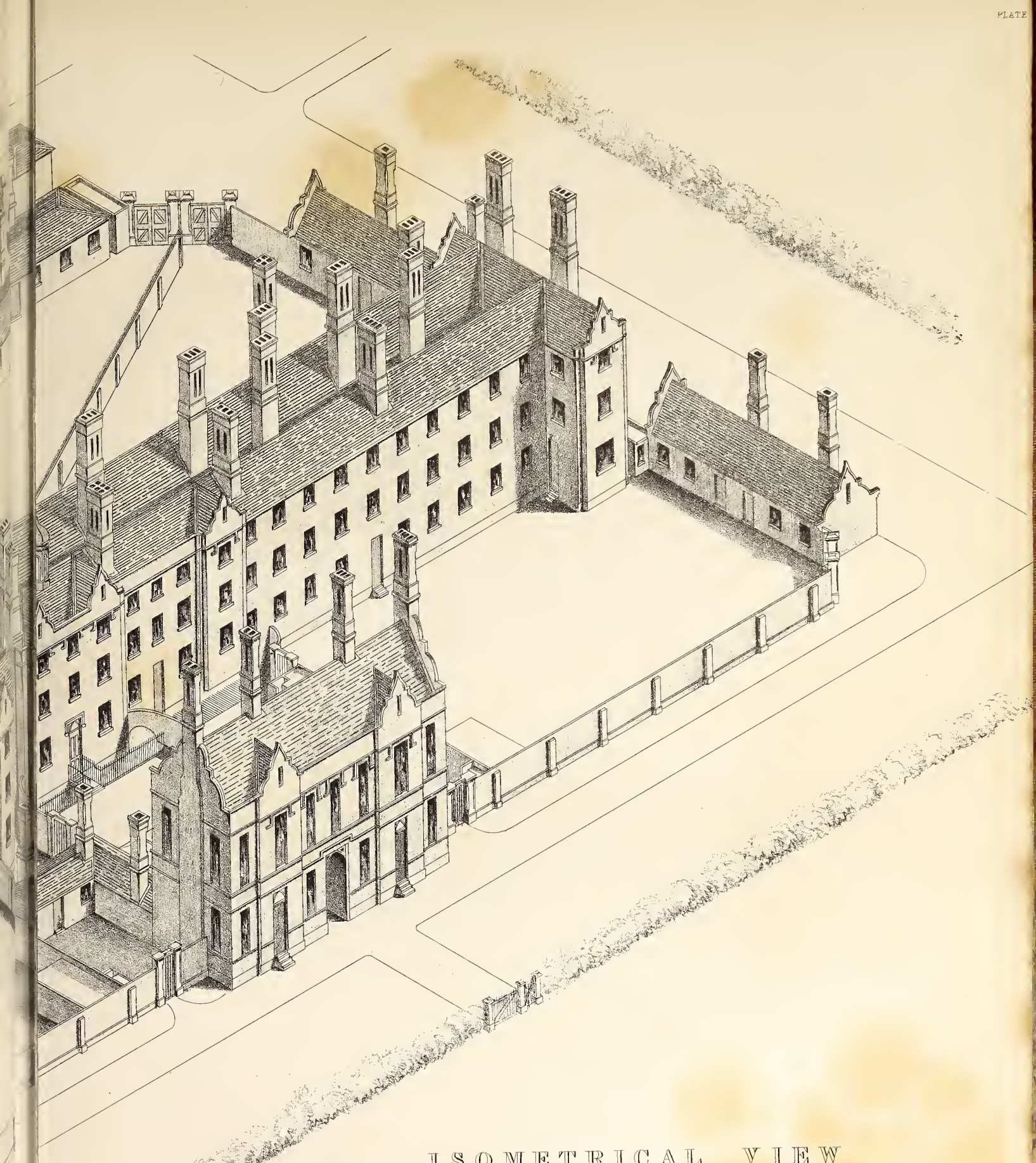


PAIR FLOOR.

J. Weale, Architectural Library, 59, High Holborn, October, 1843.

R. P. BROWNE ARCHT
GREENWICH.

J.R. Jobbins, Lith. 3, Warwick Ct



ISOMETRICAL VIEW

OF

GREENWICH UNION WORKHOUSE.

LIFE

OF THE LATE

WILLIAM VITRUVIUS MORRISON,

OF DUBLIN,

ARCHITECT.

BY HIS BROTHER AND EXECUTOR,

JOHN MORRISON, Esq., A.B. AND M.D.

William Vitruvius Morrison was descended from a race of architects: his father, grandfather, and great grandfather having successively exercised and illustrated that profession by their works.

The family had resided for several generations at Middleton, in the county of Cork, where the name and talents of his grandfather, John Morrison, are still remembered.

Numerous specimens of his taste and professional ability still exist in that part of Ireland. He was as celebrated for his mathematical and scientific as for his architectural abilities; he realized a handsome fortune by the exercise of his profession, which, however, he squandered away with the recklessness which characterized the age and the province in which he lived.

The father of W. V. Morrison (the present Sir Richard Morrison) left his native province early in life. His original destination had been the church, in which the connexions of his father gave a prospect of preferment.

Amongst those connexions may be numbered the late Earl of Shannon, and the talented and eccentric Earl of Bristol, Bishop of Derry. The intimacy in which these noblemen lived with John Morrison, may be inferred from the fact that they stood as sponsors for his son Richard at his baptism.

The state of his father's affairs changed the original destination of his son, whose tastes, moreover, leant strongly to the *family* profession, although discouraged by his

father, who seems to have been strongly tinctured with that professional *jealousy* which seems to characterize *that profession*, and which will not admit an emulator even in a *son*.

Richard Morrison arrived in Dublin at an early period of life, where he pursued, with avidity, the tastes which led him to the profession he had chosen under the most eminent professor of that art.

The name of his master, Gandon, will live as long as taste shall endure. The Custom House, the Courts of Law, the east façade of the Bank of Ireland, (then the House of Parliament,) the King's Inns, in Dublin, will hand down his fame and abilities to posterity.

Richard Morrison was enabled to pursue his studies with advantage from the emoluments of a government appointment in the Ordnance Department, procured for him through the influence of his godfather, the Earl of Shannon. He soon developed considerable talent in the profession he had selected, and having lost by reductions the place he held, he was shortly afterwards selected, from the superiority of the designs which he had furnished, to carry into effect some considerable alterations in the Cathedral of Cashel, in the county of Tipperary. He had shortly before this been united in marriage to Miss Eliza Ould, the daughter of Dr. William Ould, LL.D., Rector of Philipstown, King's County, and Chaplain of the Lying-in Hospital, Dublin, a lady descended from an ancient and respectable race, of English origin. Her grandfather, Sir Fielding Ould, held, during a long period, the highest rank amongst the physicians of Dublin, and his work on Midwifery is still a standard one in that branch of the medical profession. Sir Fielding was the grandson of Colonel Ould, who came to Ireland in command of the corps, (afterwards the 23rd regiment of foot,) he accompanied King William the Third, and fought at the head of his regiment at the battle of the Boyne.

Richard Morrison continued to exercise his profession in the south of Ireland for some years. He resided for some time at Clonmel, where he planned and erected the County Court House of Tipperary, and there William V. Morrison was born on the 22nd of April, 1794.

His constitution was very delicate from his birth, and with this delicacy of fibre, as he advanced in life, was developed the highest sensibility of character and feeling: these traits were the leading features of his nature, and ended only with his existence. His strong attachment to his relatives, his disinterestedness, his kindness of heart, his high sense of honour, were born with him and accompanied him through life.

His delicacy of temperament prevented his being educated at school, and it pre-

cluded him, likewise, during the age when study is pursued with the greatest advantage, from that degree of application which, combined with his high natural talents, would have gifted him with all that science can add to genius.

His education was entirely domestic; he applied himself with avidity, from an early period, to the pencil, and became, perhaps, the first architectural draughtsman of his age. This is, indeed, the first and greatest *artificial* requisite for the architect, and in this W. V. Morrison was *perfect.*

His talent for design developed itself at a very early period of his life. His father, Richard Morrison, had removed to Dublin, about 1800, and was applied to, about 1809, by Colonel James Crosbie, late Member of Parliament for the county of Kerry, to furnish a design for a new mansion in the castle style, for his seat at Ballyheige in that county. The site of the mansion was a cliff overhanging the great Atlantic Ocean.

More as an experiment to try the extent of his son's powers, than with any idea that he was capable of such a production, he suggested to William Vitruvius to make an essay at the design of the contemplated castle. (The boy was at this period scarcely fifteen years of age.) To the astonishment of his father, he, in the course of a few days, produced the noble design subsequently erected, which displayed an accuracy of knowledge of the details and *proprieties* of this species of architecture, which, in an artist of his years, ranked him at once amongst the few rare examples of early genius which illustrate the history of the human mind.

The studies of this boy had, however, from the earliest dawn of reason, been directed by the natural bias of his taste with avidity to the subject of architectural composition; he had examined, with an *intuitive* glance, the history and progress of every species of style and composition; he had marked the beauties, the *proprieties* and the *defects* of each, and he had, at a period when the reasoning faculties are scarcely developed in others, already become an *architect.*

Richard Morrison from this period found in his son a valuable assistant indeed in his professional pursuits; he found in him an exhaustless mine of taste in design and composition.

Shelton Abbey, the seat of the Earl of Wicklow; Kilruddery Hall, in that county, the seat of the Earl of Meath; the latter a noble and correct example of the Tudor or Elizabethan style; and Ballyfin, Queen's County, the seat of Sir Charles Coote, Bart., an edifice in the Grecian style, attested the rising of the bright *star* which was soon to illuminate the hitherto dark hemisphere of Irish architecture.

William Morrison visited the continent in 1821; he resided for some months in Rome, and bringing, as he did, so gifted a mind to that classic abode of ancient art,

he could not tread her soil and contemplate her majestic ruins without adding to the stores of taste and knowledge in which he was already so rich.

It is to be regretted, however, that at this so interesting period of his life and studies, he laboured under extreme ill health, the result, in a great degree, of his assiduous application to his professional pursuits. This prevented him from deriving as extensive advantage from his travels as otherwise might have resulted: it prevented, also, his visiting Greece, which he had purposed to do. He extended his journey, however, to the south of Italy, visited the ruins of Pæstum, remained for some time at Paris, and visited on his return all the most remarkable edifices of England. There he improved his knowledge of that style which he ever preferred, and which he indeed introduced into his native island, "*the Tudor;*" for I believe there exists no example of an edifice of this style in Ireland before its introduction in his works.

William Vitruvius, for some short time after his return to Ireland, carried on his professional pursuits in connexion with his father, but he soon found that the numerous applications to him individually, rendered it desirable that he should pursue his career independently. He was speedily, indeed, overwhelmed with business, which, with the aid of several assistants, he could scarcely accomplish.

At the end of this memoir we shall furnish a list of his works, with some remarks on the history of each, which will serve to shew the extent of his engagements, and the estimation in which he was held.

We have remarked, as the great and striking peculiarity in the works of this eminent man, on the *propriety* which characterized his designs. This extended to *every* department of his edifices; his interiors, his ceilings, his staircases, chimney or mantel-pieces, all harmonize so beautifully with the principles of his design, that we feel ourselves transported into the times which the work characterizes.

His sedulous care in thus guarding and exhibiting the *propriety* of design, extended to the laying out of the grounds and gardens of the mansions, a care which he ever took upon himself, and in which his nice judgment and intimate knowledge of his subject were equally displayed. The furniture of his Tudor buildings was likewise generally designed by himself, and his taste is exemplified in those minor details in all those edifices.

Whilst thus illustrating his noble art in his native country, and leaving monuments which *should* for ever establish his fame and his talents, he laboured under almost continued ill health, which seemed to have its seat chiefly in the nervous system. His malady produced the most extreme debility and dejection of spirits, which increased as he advanced in life, until at length every source of joy and pleasurable sensation

seemed (as he often stated to the writer of this feeble tribute to his memory) "shut out for ever," and life for him seemed a "dreary waste."

This melancholy state of health seems to have been connected with original delicacy of fibre and sensibility of temperament, but its *extreme* aggravation was certainly owing to the absence of those domestic affections and ties which his most sensitive mind was so formed to enjoy and appreciate, which he so ardently longed for, but which *fate* and circumstances, which his gentle spirit could not combat or control, shut out from his desires, whilst he was capable from physical power to enjoy them, and when strength and health were gone for ever, left him only poignant regrets, which hastened his progress to an early tomb.

The severe attacks of malady to which his latter years were subjected caused long and serious interruptions to his professional pursuits, as he was induced, with the hope of benefit to his shattered frame, to visit the continent. He resided during one winter at Nismes, in Languedoc, and visited the mineral springs of the Pyrenees, but so far was he from deriving benefit from his journey, that all his complaints seemed to have been aggravated by the change of climate, and on his return in the summer of 1837, he was attacked at Bourdeaux with an accession of malady, which brought on *phrenzy*, under which he nearly sank. He seemed to rally a little after his return to his native country, but was seized with a new attack in the following summer, much more violent than any which had preceded it. This attack produced paralysis; and after a cruel and protracted scene of suffering of nearly four months, he expired at his father's residence, near Bray, on the 16th of October, 1838.

During the long absence occasioned by his malady, the works were superintended by his father, a gentleman who has had the good fortune to carry the health, strength, and energy of youth into an advanced stage of life. Owing to this circumstance, it has occurred that the authorship of many of the designs of William Vitruvius has been attributed to Sir Richard Morrison, a circumstance the more to be regretted, as the latter very eminent architect has no need of *adventitious laurels*, having by a long series of admired works fully established his own professional fame and character.

The remains of William Vitruvius repose in the cemetery of Mount Jerome, village of Harold's Cross, near Dublin, where the piety of his friends has erected a mausoleum to his memory, from one of his own designs.

The following are the most remarkable buildings designed or executed by the late William Vitruvius Morrison, M.R.I.A.:—

1. Ballyheige Castle, co. Kerry, the residence of the late James Crosbie, Esq., M.P. Vide Neale's Views of Seats, Volume VI., octavo edition.

2. Borris House, co. Carlow, the seat of the late Walter Kavanagh, Esq., M.P. A Tudor building. Vide Neale's Seats, Vol. VI.

3. Oak Park, co. Carlow, the seat of Colonel Bruen, M.P.

4. Glenarm Castle, co. Antrim, the seat of the late Countess of Antrim. A Tudor building; situated in a most lovely spot on the sea-shore of Antrim, surrounded by a noble park, and in full view of the Highlands of Argyleshire, Scotland, distant not more than fifteen miles.

5. "Hollybrooke," co. Wicklow, the seat of Sir George Hodson, Bart. A building in the florid Tudor style. It is situated in a most romantic position under the lesser Sugarloaf Mountain, on a wooded bank overhanging a mountain lake, and surrounded by bold and varied mountain scenery, about 12 miles south of Dublin.

6. "Barons Court," co. Tyrone, the seat of the Marquess of Abercorn. A splendid edifice, in the Grecian style.

7. "Clontarf Castle," co. Dublin, the seat of John V. Vernon, Esq. An union of the Castle and Tudor styles of architecture. The castle, the ancient village of Clontarf, (the site of the celebrated battle fought under King Bryan Boroime, against the Danes, in the 11th century,) forms one of the most picturesque spots on the bay, in the vicinity of Dublin, distant scarcely two miles.

8. "Ormeau," near Belfast, the seat of the Marquess of Donegal. A building in the Tudor style, on the shore of the river Lagan.

9. "Ballygiblin," near Mallow, co. Cork, the seat of Sir W. W. Beecher, Bart.

10. "Mount Stewart," Newtown Ards, co. Down, the seat of the Marquess of Londonderry.

11. "Brittas Castle," co. Tipperary, the seat of the late Captain Langley. The design of this edifice was by the desire of the proprietor, both in form and proportions, that of the ancient English baronial castle of the earlier period: the building, owing to the sudden death of Captain Langley, never was completed.

12. The "Priory," co. Tipperary, the seat of Sir Henry Carden, Bart. A building exemplifying the union of the Abbey with the Tudor style of architecture, as seen in many edifices of the reigns of Henry VIII., Edward VI., Mary, and Elizabeth, when the confiscated abbeys were converted into dwelling-houses by those to whom they had been granted on their dissolution.

13. Cottage, Lough Bray, co. Wicklow, the seat of Sir Philip Crampton, Bart. An example of the Swiss cottage style combined with the old English cottage.

This building was erected at the expense of the Duke of Northumberland, when Lord Lieutenant of Ireland, as a complimentary offering to Sir Philip Crampton, for his professional services.

14. Monument to the memory of the late General Ross, at Rosstrevor, co. Down; erected by his widow.

15. Monument to the late Captain Skinner, at Holyhead; erected by subscription.

16. Court House, at Carlow. A superb example of the Grecian style of architecture.

17. Court House, at Tralee, co. Kerry.

18. Two designs for Court House at Tullamore, King's County. One a Grecian, the other a Gothic design (not executed).

19. Design for Gaol at Longford. (Not executed.)

20. Gaol erected at Wicklow.

21. Design for Combermere Abbey, Cheshire, the seat of Viscount Combermere. (Not executed.)

22. "Fassero," near Bray, co. Wicklow, the seat of Judge Crampton. Tudor style.

23. Cottage, Rosstrevor, co. Down, seat of S. Hamilton, Esq.

24. Design for tower and other alterations, proposed at Trinity College, Dublin.

25. "Miltown," co. Kerry, the seat of Sir John Godfrey, Bart. Tudor style. Vide Neale's Seats, Vol. VI.

The following buildings designed by W. V. Morrison, were erected and carried on whilst in partnership with his father, R. Morrison, Esq. (now Sir Richard Morrison):—

1. "Ballyfin," Queen's County, the seat of Sir Charles Coote, Bart. A superb edifice, in the Grecian style.

2. "Kilruddery Hall," co. Wicklow, the seat of the Earl of Meath. A noble example of the florid Tudor style. This edifice stands in a most romantic position in the midst of a mountain park, and surrounded by the grandest scenery of the county. The interior decorations correspond with the majestic style of the exterior, and it is a noble example of the taste, talent, and science of William Vitruvius.

3. "Shelton Abbey," co. Wicklow, the seat of the Earl of Wicklow. Vide Neale's Seats, Vol. VI. An union of the Abbey with the Tudor style of architecture. A great part of the old fabric having been preserved by desire of the proprietor, and adapted to the modern building, the taste of the architect was much fettered in his design, and the building rendered much less perfect than it otherwise would have been.

STAINED GLASS.

The many existing and attainable specimens, rich in execution and colour, of ancient painted and stained glass in this and other countries, particularly at home, has induced us to devote a portion of the work to this very interesting subject.

The accompanying plates in this Part, selected by Messrs. Bell and Gould, Architects, are from the ancient churches of York; from whence others will be received in time for insertion, like these, as correct models, in the Christmas Part of the work. The specimens also from West Wickham Church, Kent; the Temple Church, London; and the Church of St. James of Liège, in the kingdom of Belgium, will be added in the second and succeeding parts.

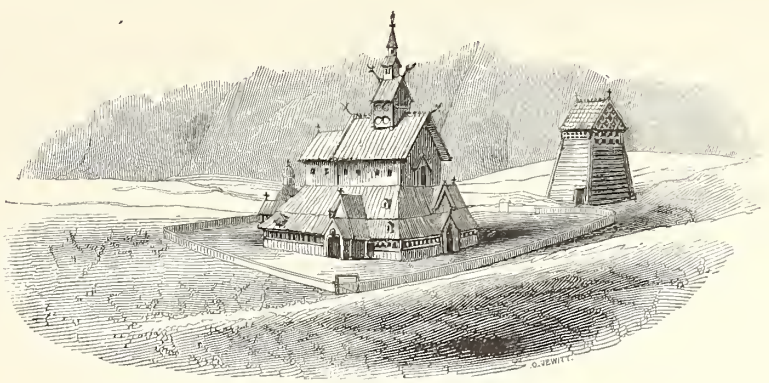
Plates 1 and 2. St. Anne teaching the Virgin to read; from the east window of All Saints', York.

3. St. Christopher with our Redeemer above; from ditto.

4. St. John the Baptist; from ditto.

5. From the Tracery of the east window of the south aisle of St. Martin's Church, Micklegate, York.

PRIMITIVE CHURCHES OF NORWAY.



The north-west regions of Europe, or ancient Scandinavia, have been so rarely visited by artists and professional men, that very little is known relative to the peculiar mode of building which was formerly prevalent there. The mode itself is in fact rather an object of antiquarian curiosity than of architectural study; for it does not seem to have ever so developed itself as to become an organized system or style, capable of accommodating itself to various purposes; but, on the contrary, to have been stunted in its growth, and to have had a rigid fixity impressed upon it, ere its forms were properly fashioned and moulded. Still it is interesting, as making us acquainted with an aboriginal timber construction essentially different in character from that which is usually presumed to have been the primordial type of Grecian architecture and its orders; therefore, supposing the latter theory to be more than merely a convenient hypothesis, it would follow that the employment of the same material led to totally dissimilar results in the one case from what it did in the other,—a difference to be attributed, no doubt, partly to that of climate also, yet not to such an extent as to account for the very opposite taste respectively manifested.

Judging of the older timber churches of Norway, from such examples of them as have been published, we should say that they have a singularly rude physiognomy,

and are essentially *cottage-like* in character, inasmuch as they consist of diminutive features and parts added to and fantastically piled-up one on the other. This is most notably the case with the Church of Borgund, in the province of Bergen, where, what would else be a very low building, is carried up to a considerable height by deep sloping penthouse roofs, rising up one behind the other, with lucarne windows and gables, some of the latter surmounted by peaks that curve forward in a singular manner. The entire roof is nearly five times the height of the outer walls below; consequently the structure appears to be nearly all roof, and produces an effect as uncouth as it is singular, and is considerably enhanced by the diminutiveness of the windows, which is such as to render it difficult to understand how it can be lighted within; nor does Dahl, who gives this as one of his examples in his Holzbaukunst, or Timber Architecture of Norway, offer any explanation in regard to that point, notwithstanding that it is a rather important one. Neither does he furnish us with any information relative to a variety of other particulars which require to be expressly stated and defined. In fact, he leaves his drawings to speak for themselves, and that they can of course do but very imperfectly, leaving very doubtful, perhaps, some of the circumstances most important to be understood. As a style, hardly does this species of timber architecture deserve to be called a "perfect" or perfected one, (*eine sehr ausgebildete Holzbaukunst,*) its character being rather decidedly the reverse. There certainly is a great deal of both profuse and elaborate ornament, but then it is only in a few particular parts, and those not sufficiently finished up beforehand to be prepared for such a degree of embellishment. In fact, it might with far greater propriety be described as a rude style enriched prematurely. We find doors, for instance, which are in other respects quite unfinished, with scarcely an architectural moulding of any kind, surrounded by very broad borders, entirely covered with intricate scroll-work carving, sufficiently grotesque, but rich in its general effect; yet, after all, amounting only to mere pattern applied *ad libitum*, without an attempt at consistency of architectural design.

In the church at Urnes, which is also in the province of Bergen, the same species of decoration is spread over portions of the external walls from top to bottom, but is neither carried on regularly nor distributed into corresponding compartments; it therefore has the look of being something quite accidental. Instances also occur of the same mode of ornamenting being applied to the shafts of columns, no better than mere posts in other respects; therefore, such repetition of the same embellishment for parts in themselves so dissimilar, argues, if any thing, rather poverty of invention than the contrary. In fact, the character of this species of architecture is just what might be expected from the circumstance of the carving being the work of the

peasantry themselves, displaying their skill and their patience, and manifesting their zeal to adorn their churches to the best of their ability, but without any intelligence of æsthetic principles, as regards uniformity and consistency of general architectural character, the due relation of parts with each other, and the proper distribution of ornament. Every thing has evidently been wrought piece-meal; consequently what decoration there is, is to be looked at merely as so much separate detail, by itself, without reference to any thing further. Without the means or else the skill requisite for constructing buildings that in themselves would rank at all as productions of artistic ability, the people sought to supply that deficiency by embroidering patches here and there with carved work, leaving all the rest in its original homeliness and rudeness.

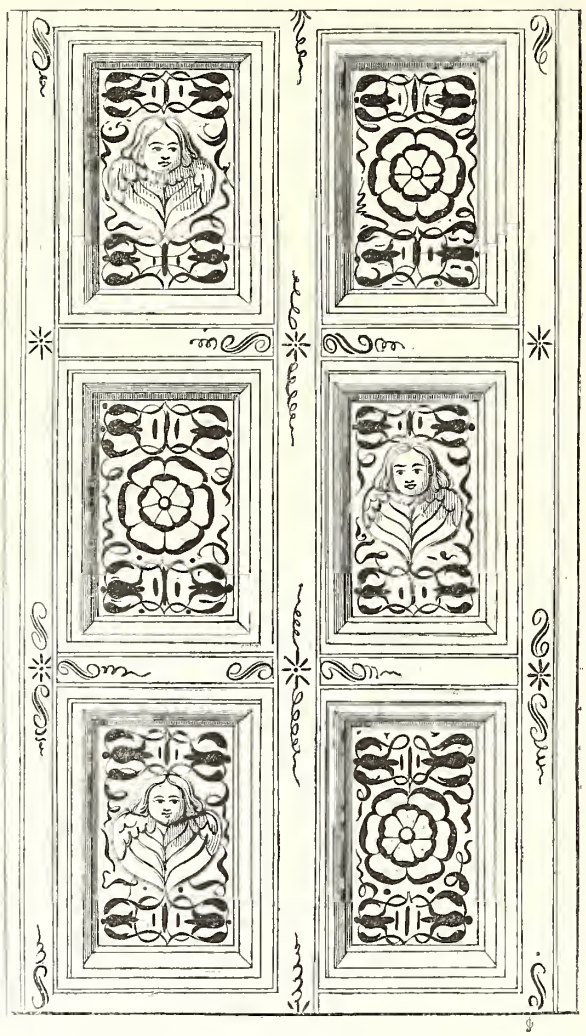
We do not perceive any attempt to give character or even decent shape to such important features as windows; those apertures being left quite bare, and altogether insignificant and mean, notwithstanding that doorways are highly enriched. No thought seems to have been bestowed on the former for the purpose of rendering them consistent architectural features, arising out of any sort of system, but they seem to have been determined altogether by necessity and by accident.

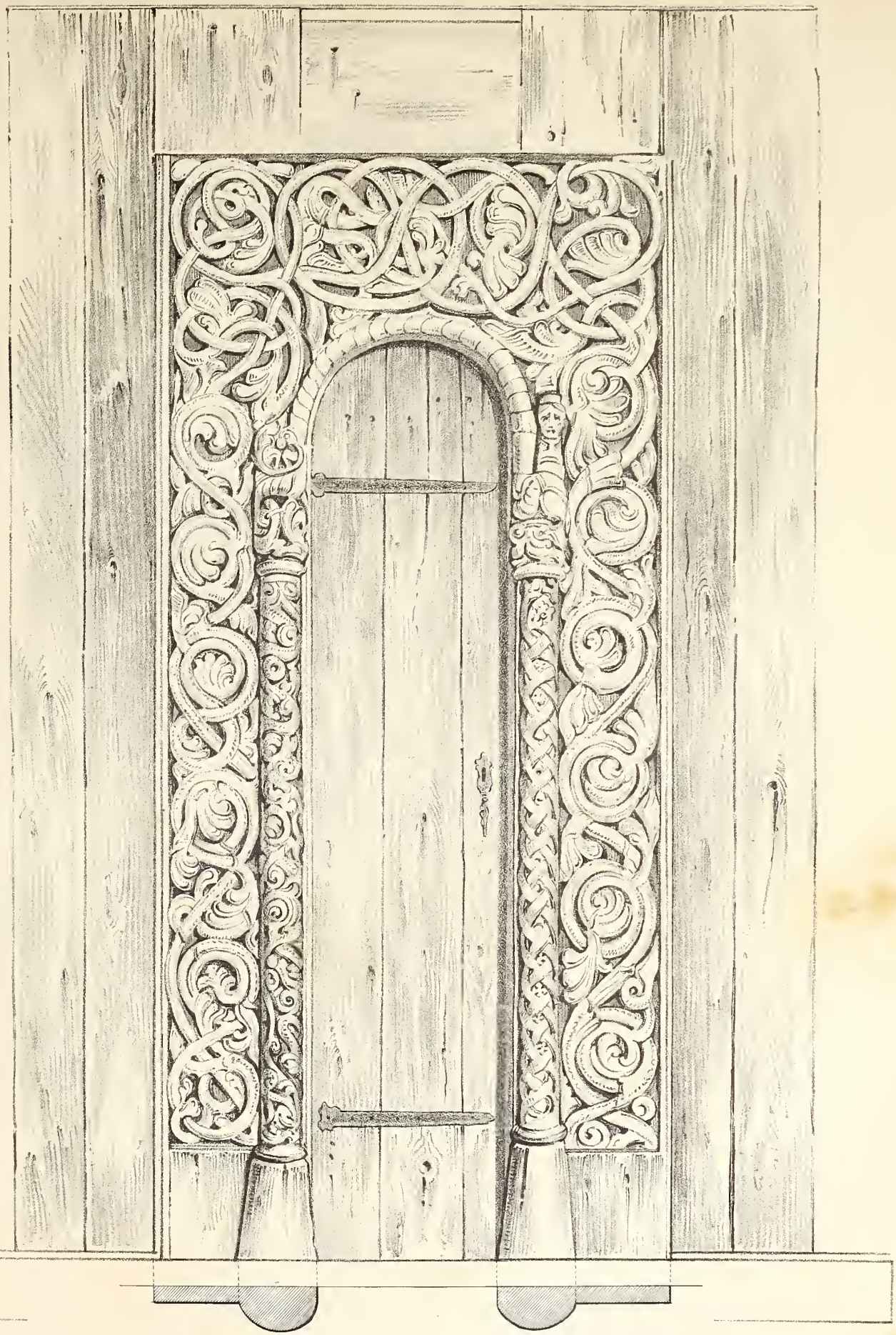
If, however, we cannot recognise in this timber architecture a style both distinct and complete in itself, it is not without its historical interest; and though it holds out nothing for direct imitation, (most assuredly not for the same class of buildings at the present day,) it affords hints and ideas that might occasionally be turned to account, and among other purposes, for ornamental metal work. The accompanying specimens—

Plate 1. . . . . North door of Hitterdal Church,
,, 2. . . . . South door of ditto ditto,
,, 3. . . . . West door of ditto ditto,
,, 4. . . . . Principal door of Tind Church,
,, 5. . . . . Door of Borgund Church,

will serve to make evident the fanciful and arabesque-like character of the decoration applied to doors; which, *outré* as it is, is not altogether without elegance in itself, though in extravagant contrast with the general poverty and uncouthness of nearly all the rest of the respective buildings. The door of Hitterdal church is perhaps one of the most satisfactory examples upon the whole; and in the choir of the same building we have a specimen of a flat panelled ceiling, (see vignette at the end,) which is worthy of attention, as exhibiting some elegance of design. Hitterdal has also supplied us with some further illustrations, viz., details and portions of its north, south, and west sides. The two other subjects are from Tind and Borgund,

which last church is also introduced as a vignette, for the purpose of indicating the general form and physiognomy of these ancient Norwegian structures, which are altogether *sui generis*, with scarcely any thing in common with the timber or half-timbered buildings of any other part of Europe.

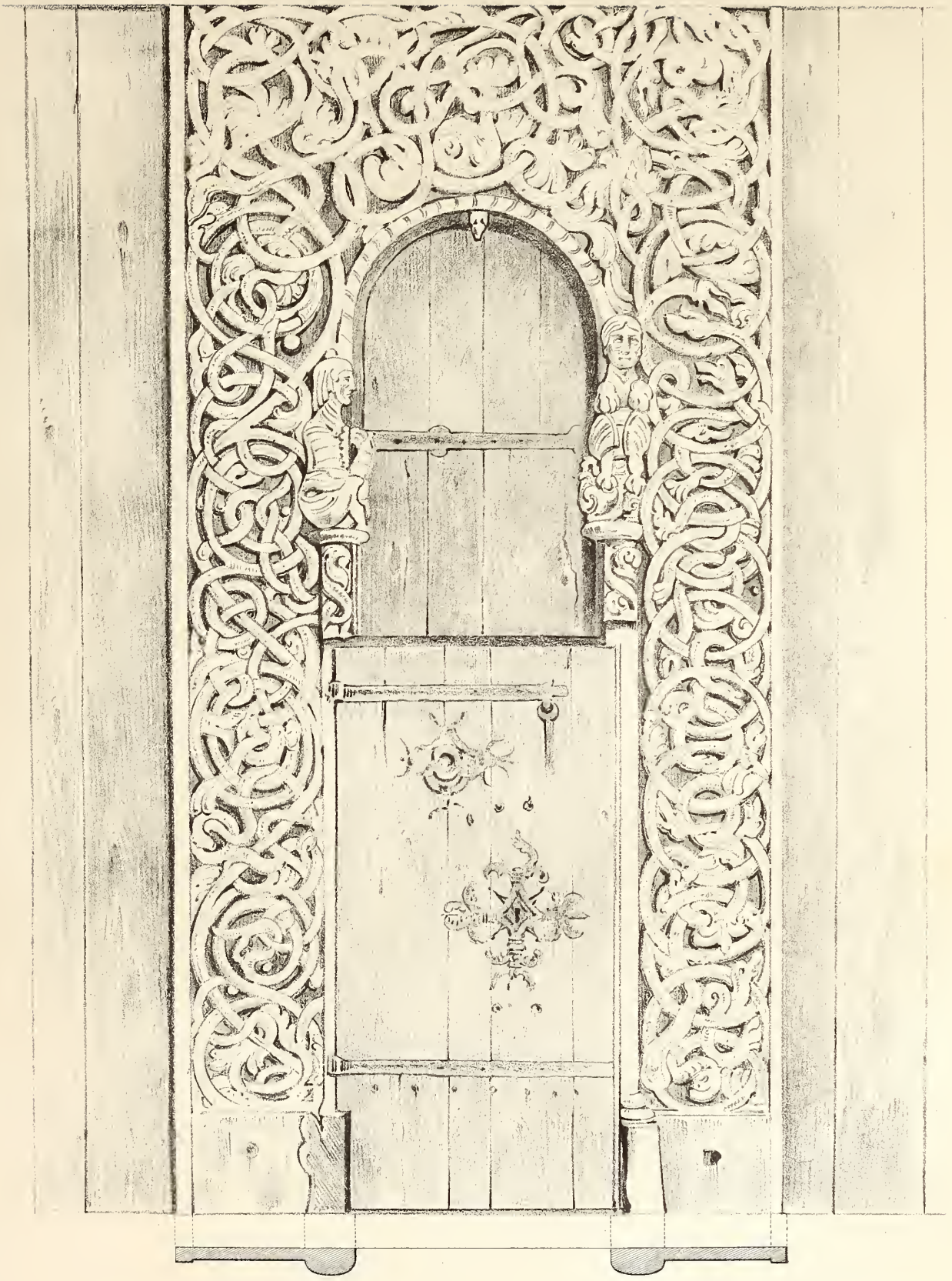




C.F. Cheffins, Zinc^r London

NORTH DOOR OF THE CHURCH AT HITTERDAL.

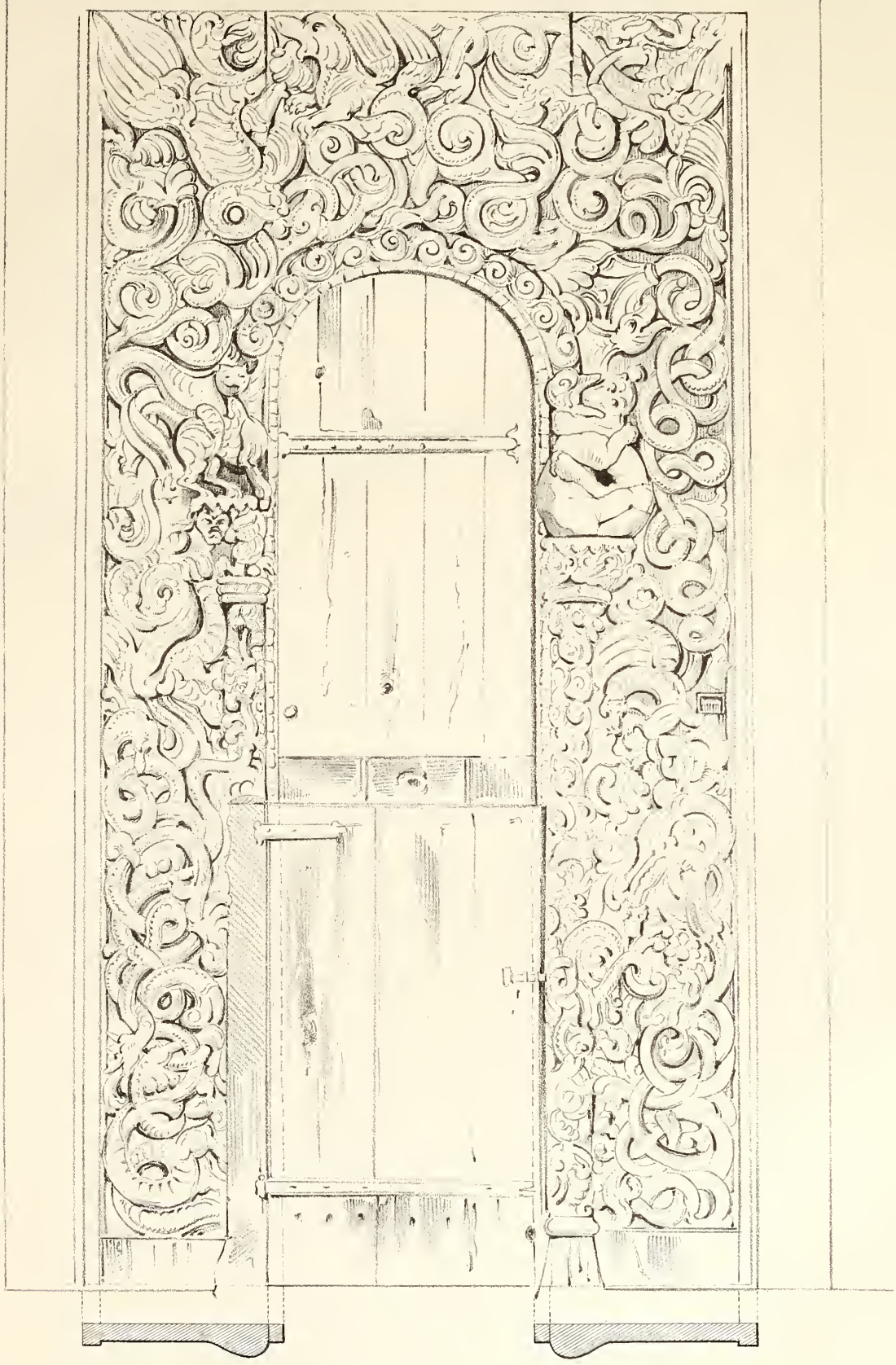
London: John Weale, Architectural Library, 59 High Holborn.



C.F.Cheffins, Zinc^y London.

SOUTH DOOR OF THE CHURCH AT HITTERDAL.

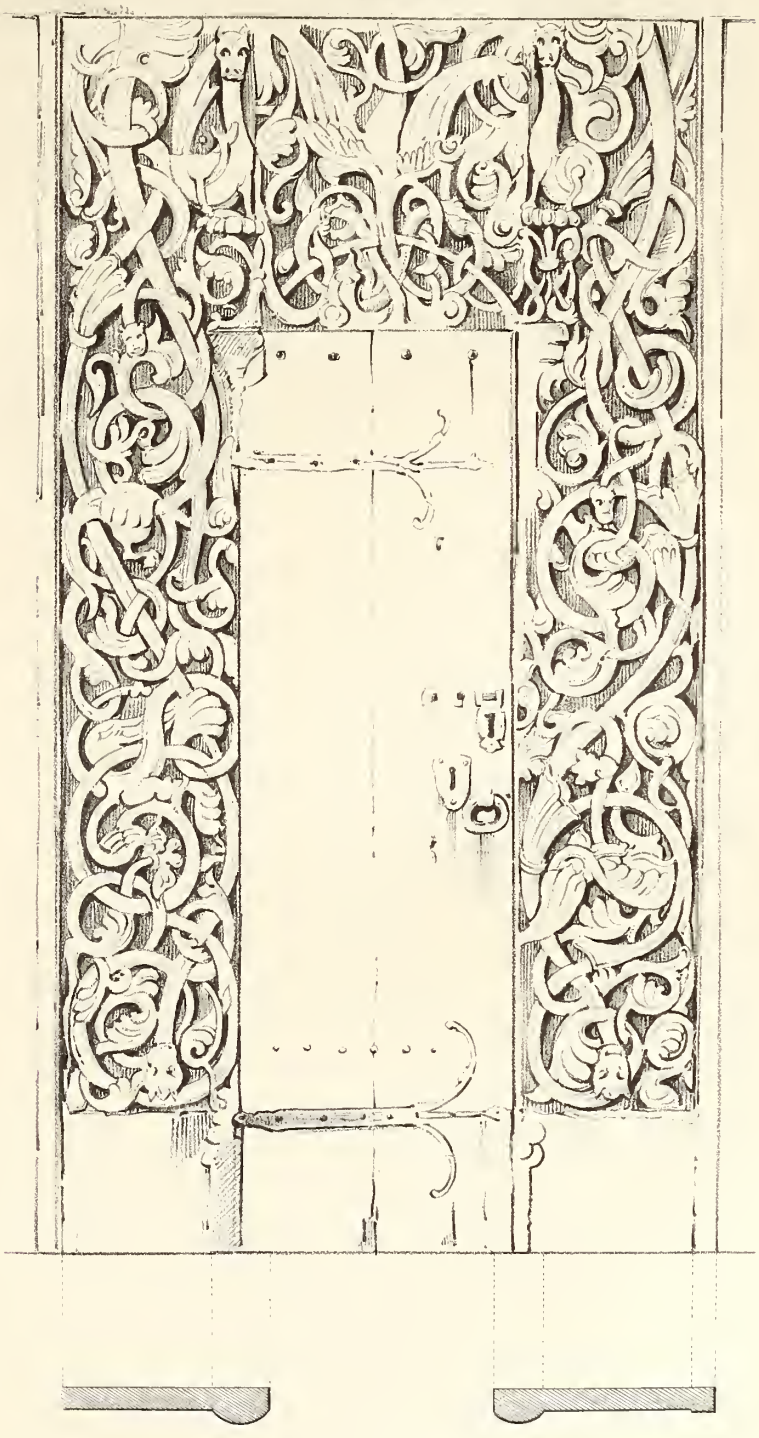
London. John Weale. Architectural Library, 59, High Holborn.



C.F.Cheffins, Zinc.r London

WEST DOOR OF THE CHURCH AT HITTERDAL.

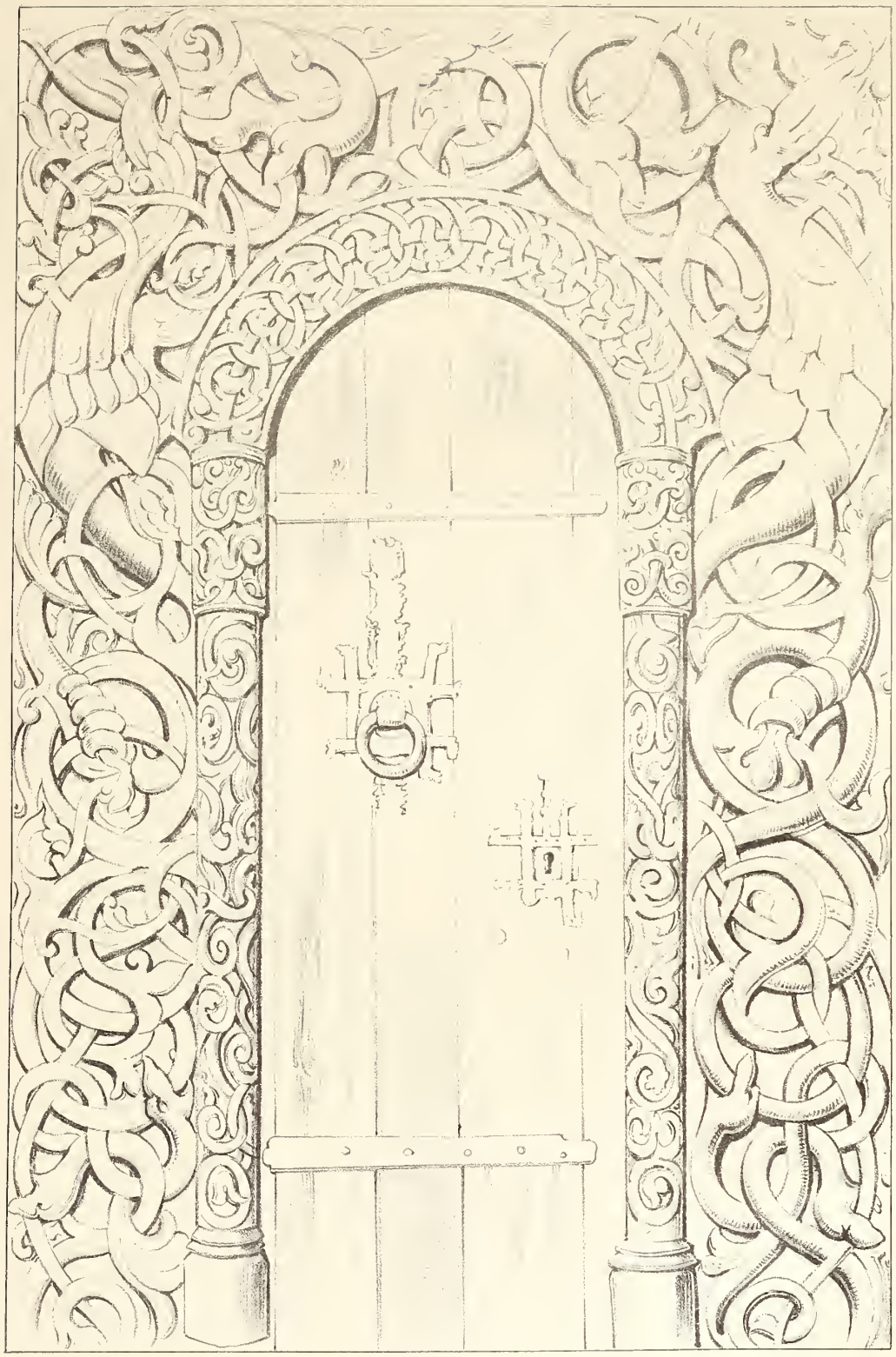
London: John Weale, Architectural Library, 59 High Holborn



C.F.Cheffins Zinc. London

PRINCIPAL DOOR OF THE
CHURCH AT TIND.

London. John Weale. Architectural Library. 59. High Holborn.



C.F.Cheffins Sculpt. London.

DOOR OF THE CHURCH AT BORCUND.

London John Weale 59 High Holborn

NOTICES

OF

WORKS ON ARCHITECTURE,

PUBLISHED IN THE PRECEDING QUARTER.

Waller's Series of Monumental Brasses, Part 13, folio.

Charpente de la Cathedrale de Messine, dessinée par M. Morey, Arch. Atlas folio. A very sumptuously coloured and gilt work, showing the painting and gilding of the very ancient roof of the Cathedral Church at 'Messine,' in Sicily. This work is sold at a very low price (45*s.*) for so fine a production.

Bedford's Chronological Chart of Anglican Church Architecture, in a Case, small size. A very beautiful pocket manual, sold at a price to suit all.

Luke Price and Joseph Nash's exterior and interior Views of the Buildings at Venice. The interiors showing the gorgeous fittings and decorations of the dwellings of the nobles and wealthy merchants. It is in imperial folio.

The Gallery of Antiquities, consisting of Selections from the British Museum. From drawings by F. Arundale, Architect, and J. Bonomi, Sculptor: with Descriptions by S. Birch, Assistant in the Department of Antiquities, British Museum, &c., &c.

> For some years our National Collection has been accumulating beautiful works of Nature and Art, whilst the numbers of all classes that daily visit the British Museum, shew the deep interest excited on visiting a collection that may now be said to vie with any in the world. Catalogues of this collection are to be obtained on the most reasonable terms, but to those who make inquiries, and wish for instruction respecting the objects they are viewing, a work like the present is of incalculable benefit. The first Part, forming the Mythology, was published some few months since; we have now the Historical Illustrations, which are equally attractive. Monuments of a country so celebrated as Egypt, both in Sacred and Profane History, appear the works of giants; and to the many who visit the splendid collection of Egyptian Art in the Museum, they must always excite equal wonder and admiration. Forming, as they do, the primitive state of art, an acquaintance with these Monuments is highly useful to the student; it is needless to mention the interest they must always excite to the Antiquary, whilst to the Historian they

establish what might appear fabulous. The exertions of Dr. Young and M. Champollion have led to many valuable interpretations of the Hieroglyphical Text; in the present part a facsimile of the Rosetta Stone is given, with a Translation of the Greek Text. We have not before seen this interesting fragment published in a convenient size, and assisted by an English Translation.

The Tablet of Abydos, showing the succession of the monarchs, is one of the first Plates given in this part of the Work, with the names of the Kings and references to the Plate accurately given in the letter press. The Conquests and Tribute of the Ethiopians to Rameses the Great, taken from the two friezes in the Room containing the Mummies, is full of interest—to this monarch Mr. Birch has devoted considerable attention, and a detailed account of the Plate. Some statues of kings from the tombs at Thebes, having no cartouches attached to them, are given amongst the illustrations; as also figures of Priests, Scribes, Royal Bards, and Officers of State, showing the costume and colours at present existing.

As the apparent object of the present Work is not a history of the successive monarchs of Egypt, but Illustrations from the Monuments existing in the British Museum, we think that it will be found a valuable work of reference to subjects connected with Egyptian art. The Parts on Mythology and History being complete, there are many unique and interesting specimens connected with the civil life and funeral rites of this nation, which we hope to see illustrated in a future volume. The present Part contains 30 Plates, including an appropriate ornamented Frontispiece; it is a Part complete of itself, though forming, with the Mythological Illustrations, the First Volume on the Antiquities of the British Museum. The Authors, we trust, may be encouraged to proceed in the Selection which may embrace and illustrate many beautiful specimens of Greek, Etruscan, and Roman Art, and form a valuable addition to the Library of the Student, the Historian, and the Antiquary.

Designs for Sepulchral Monuments, by Carl Tottie, Arch. and C.E., in 25 Plates, in folio. This work contains a variety of admirable specimens, principally in the Greek style and form, containing projecting sections. The Plates are exceedingly well engraved by Mr. Adlard.

Student's Guide to the Practice of Measuring and Valuing Arificers' Work; containing directions for taking Dimensions, abstracting the same, and bringing the quantities into bill; with Table of constants, and copious memoranda for the valuation of labour and materials in the respective trades, as follows:

BRICKLAYER AND SLATER.
CARPENTER AND JOINER.
SAWYER.
STONE-MASON.
PLASTERER.
SMITH AND IRONMONGER.
PLUMBER.
PAINTER AND GLAZIER.
PAPER-HANGER.

With eight Plates and two Wood-cuts. This is an extremely useful work to the very numerous classes connected with building. It has been got up with considerable care, and revised by an experienced hand.

A TREATISE

ON THE

POINTED STYLE OF ARCHITECTURE IN BELGIUM.

WRITTEN IN REPLY TO THE FOLLOWING QUESTIONS:

About what period did Pointed Architecture, improperly termed Gothic, first make its appearance in Belgium?

What peculiar characteristics has this style of Architecture assumed at different epochs?

Who were the most celebrated Architects who employed it?

And which the most remarkable works erected by them?

BY A. G. B. SCHAYES,

Correspondant de l'Académie, Attaché aux Archives du Royaume.

TRANSLATED

By HENRY AUSTIN, Architect.

INTRODUCTION.

L'étude de toutes les œuvres et de toutes les variations de l'Architecture, est à la fois le commencement et le résumé de tous les arts.—GUIZOT.

THE history of Pointed Architecture in Belgium is a novel subject, or, at any rate, one that has not hitherto been specially treated. In nearly all the works relating to the topography of Belgium, such for instance as "La Description des Pays Bas," by Guicciardin; "Antiquités du Brabant et de la Flandre," by Gramaye; "Flandria Illustrata," and "Brabantia Sacra," by Sanderus; "Le Théâtre sacré et profane du Brabant, les Délices du Pays de Liège, les Délices des Pays Bas," &c., &c., our ancient religious and civil edifices are described with great negligence and inaccuracy. For the most part, indeed, the information given in these works, of our most remarkable monuments, is confined to mere indications of the dates of their erection, and even these are oftentimes vague, confused, or erroneous [a]. To give a proper reply then to the questions proposed by the Academy, it became necessary that we should not only devote our attention to much literary research, but that we should personally inspect these edifices and visit every province and locality of the kingdom where we suspected the existence of any building which might be of interest in our treatise. This we accomplished in a tour of some weeks' duration, undertaken solely with this view.

This treatise is divided into three parts. In the first we have expressed our opinion on the origin of the pointed style of architecture, and the date of its first introduction into Belgium. This opinion coincides with that of the celebrated German archæologist Boisserée; but it has been our endeavour to substantiate it by additional proofs.

[a] This blame does not attach, however, to some articles published in scientific reviews, such as "Le Messager des Sciences et des Arts" and "La Revue de Bruxelles." We must make exception also, as to the historical part, of the excellent treatise of M. Lambin, on the Hall and Church of Notre Dame, at Ypres, honoured by the Antiquarian Society of Morinie.

In the second part, we have illustrated the modifications that pointed architecture has undergone in Belgium, from the 10th to the 16th century, by a number of examples in the country, cited in support of our assertions.

In the third part, which is in answer to the last questions: "Who were the most celebrated architects who employed this style in Belgium, and which the most remarkable works erected by them?" we have not confined ourselves to giving a simple list of these architects and their works; on the contrary, we have considered this the most interesting portion of our treatise, in fact, as the accomplishment and fulfilment of what has preceded. We have given the date, ascertained or presumed, of the construction or reconstruction of each remarkable edifice; we have both architecturally and archæologically described them, and have mentioned the principal engravings of them that have been published. We had originally intended to follow, in the description of these buildings, the systematic order of the styles; but as two or three different styles are not unfrequently seen in one and the same building, this plan could not have been adopted without confusion and intricacy; we have therefore thought proper to adopt a system purely chronological, with the intention of appending to this part of our subject, a table in which each edifice or portion of an edifice will be classified according to the style of its architecture and the date of its erection.

In the description of each building, we have given the name of the architect who furnished the designs, or superintended its construction, so far as the name of that artist has descended to us, for in Belgium, as in the rest of Europe, the known architects, previously to the 14th or even the 15th century, are very small in number; "this arises from the fact, as those are justly of opinion who have made the middle ages their study," says M. de Caumont, "that during this eminently Catholic period, an individual, so to speak, existed not, his identity was lost in the fraternity or monastery where he gave up in common not only his life, his substance, and his prospects, but his very thoughts, his genius, and his soul."[a] Among the most remarkable of our edifices of the 15th and 16th centuries, there are several whose architects were to the present moment unknown, whose names we now publish for the first time. In fine, this part, the longest of the treatise, establishes the date of the construction or reconstruction of a great number of buildings which have been hitherto but vaguely or inaccurately given, and contains an entirely new architectural description, founded on personal observation, of the greater part of the principal edifices of the pointed style, constructed in Belgium during the middle ages, some of the most important of which have never yet attracted the attention of either archæologist or architect.

[a] De Caumont, Cours d'Antiquités Monumentales, 4th part, p. 279.

As to the form and style of our treatise, we have considered that, on a question exclusively scientific, a simple narrative, systematic and clear, would be more suitable than a too flowery language, or that fashionable style of writing so strangely abused in the literature of the modern school, more especially in descriptive writing, which usually sacrifices truth to the ambition of parading a brilliant imagination and a factitious love of the arts[a].

[a] " Je n'ose plus vraiment," dit M. de Reiffenberg, " parler de l'effet produit sur moi par cette grande architecture religieuse du moyen âge. . . ., on a tellement entassé les banalités, les phrases nébuleuses et frénétiques sur le vol des ogives, la sublime obscurité des nefs, les visions radieuses des vitraux peints, que je demeure muet en presence de ces objets, malgré l'émotion qu' ils me causent." (Souvenirs d'un pélerinage en l'honneur de Schiller, p. 114.)

Note by the Translator.—As any attempt at translation of this beautiful effusion would greatly mar its effect, the translator prefers submitting it to the reader in all its native elegance and simplicity.

A TREATISE

ON THE

POINTED STYLE OF ARCHITECTURE IN BELGIUM.

PART I.

ON THE PERIOD OF THE FIRST INTRODUCTION OF POINTED ARCHITECTURE INTO BELGIUM.

At the commencement of the sixteenth century, said to be the period of the revival of literature and the arts, nearly the whole of Europe, seized with a sudden and exclusive enthusiasm for the artistic and literary works of the ancients, renounced its national literature, and rejected as a shapeless and barbarous conception that architecture of the middle ages, which for a period of five centuries had been covering all Christian countries with a crowd of magnificent monuments, vast cathedrals and magic towers, which now excite the greatest admiration, and will not cease to merit that of generations to come. Italy (where the ancient Roman spirit, ever alive and ever hostile to the inhabitants of the north, gave the impulse to this reaction) first disgraced with the name of Gothic (equivalent to that of barbarous) every monument erected subsequently to the destruction of the empire of the Cæsars, as if the German colonies, who had shared with them the spoils of that empire, had there effaced the last traces of the art of Ictinus and Vitruvius, which had fallen into oblivion for more than a century before their conquests, and had raised upon the ruins of Roman temples, churches constructed in the architectural style of their own country; they who were ignorant of the merest elements of any style of architecture, and who in the sombre forests of Germany had never erected any thing but cottages, as primitive and uncouth as the miserable cabins of American savages. Nevertheless, utterly inappropriate as it was, this denomination of Gothic, affixed indiscriminately to every edifice of the Lombard style, Roman or pointed, erected subsequently to the sixth century, prevailed throughout all Europe[a].

[a] "The term Gothic," says M. de Caumont in his Cours d'Antiquités Monumentales, "had been for a long time employed to designate every kind of architecture varying from the principles of the Grecian and Roman

There are found, even in our own day, learned men, such as Warburton and the illustrious Chateaubriant, who, struck with the resemblance between an avenue of trees and a vast cathedral of the fourteenth and fifteenth centuries, have believed they saw the origin of pointed architecture in the natural arches of the forests of the north, where the Druids celebrated their sacred rites [a].

Towards the close of the sixteenth century, or the commencement of the following, a new name came into vogue for pointed architecture, which, if not more exact, was at least more rational than the term Gothic, namely Moorish, Arabian, or Saracenic architecture. In reality, the pointed arch is the essential feature of Arabian architecture, as well as of the ogival or pointed style. From this fact many learned writers have concluded that the latter had its origin in the East. This opinion has been received and sustained by zealous and able defenders. While some attribute the discovery of the pointed arch to the Arabians, others assert that it must first have been employed by the Persians, under the Sassanide dynasty, and from them would have passed to the lower empire of the Grecks, and thence to the Arabians [b]. Others, again, go as far back as the Romans, the ancient Greeks, ay, even to the Egyptians and the Hindoos [c].

Those who attribute the invention of pointed architecture to the people of the East, differ again in opinion as to the period of its introduction into the centre and north of Europe. Some fix upon the period of the reign of the Moors in Spain; others assign the date of the wars of the crusades. A few, among the latter, even pretend that the Church of St. Sepulchre, at Jerusalem, served as the type of the earliest church erected in Europe in the pointed style.

styles, as if the Goths, who took possession of Italy in the fifth century, were the authors of this corruption of taste. At the present day, this opinion is in fact rejected, but the expression has outlived the opinion which caused its adoption." To avoid, in this treatise, the too frequent repetition of the term pointed, the denomination of Gothic will at times occur here also in describing the edifices of the pointed style of architecture.

[a] Hope's "History of Architecture," vol. i. p. 331. The comparison that has been established between a large cathedral and the avenues of a secular forest, appears just only when applied to those churches of the pointed style, of which the naves are supported by large columns, formed by a number of slender shafts and mouldings clustered and bound together, and which, instead of being provided with capitals, branch off into the mouldings of the vaults and arches. Now, as columns of this description were not introduced until after the twelfth century, it will be seen how little reason there is in the opinion of those who go as far back as the Gauls and ancient Germans for the discovery of the origin of pointed architecture.

[b] Hope's "History of Architecture," vol. i. p. 118. 130.

[c] Mr. Hope considers that the depressed pointed arch appears for the first time among the Moguls. (Hist. of Arch. vol. i. p. 135.) We do not at all agree with this opinion, for reasons which would be too long to explain in this treatise.

These different hypotheses, specious as the arguments may be with which their authors have sought to uphold them, do not appear to us better founded on one hand than the other. That traces of the pointed arch may be found in very ancient constructions, in Egyptian, Hindoo, Pelasgic, Greek and Roman monuments[a], we are far from disputing; still these rare examples of its employment do not constitute a system, and can only be looked upon as errors or mere accidents, oftentimes resulting from necessity[b].

There is nothing to prove that the Arabians of Spain made use of the pointed arch before other Europeans. The cathedral of Cordova, and all the great monuments erected by them before the twelfth century, were, according to M. de la Borde, and the English archæologist, Milner, constructed in the Byzantine or semicircular style[c]. Again, if the Arabians of Spain were really the authors of pointed architecture, would it not have been in the southern countries of Europe that this style of architecture would have first flourished, and in which would have been found the most ancient and most numerous edifices belonging to this style of construction? Just the contrary, however, is found to be the case.

Nor was it at the period of the crusades that pointed architecture began to be known and employed in Europe, since Germany, Belgium, and France possessed a considerable number of churches with pointed vaults and windows, constructed long before the first expedition of the crusades in 1093; and a very few years afterwards pointed architecture had already attained a high degree of perfection, and produced *chefs d'œuvre*. Further, according to Milner and the Count de la Borde, there did not exist in all Palestine and Syria a single building of the pointed style which was anterior to the thirteenth or to the fourteenth century, being at the least two centuries after the introduction of the pointed system into Europe[d]. Those who have

[a] Hope, vol. i. p. 135. De Caumont. "Cours d'Antiq. Monum." part iv. p. 201. "Messager des Sciences Historiques de la Belgique," 1839, No. 3.

[b] It may be inquired further whether the pointed arch, observable in the monuments of the people of antiquity, be really the veritable ogive. The drawings of some of the constructions called Pelasgic, or Cyclopean, exhibit only large rough stones placed slantingly one upon the other, so as to form an angle more or less acute, a geometrical figure which is far from constituting the pure ogive. This kind of construction may be remarked among others in a gallery forming part of the Cyclopean ruins of the ancient tower of Tyrinth, in the Morea. We must look for the cause of this, it appears to us, in the poor skill of the Egyptians and primitive Greeks in the construction of vaults and semicircular arches.

[c] Hope, vol. i. p. 338.

[d] In the Holy Land, says Milner, there is not a single church to be found of the pointed style, if we except that of St. Jean d'Acre, and even that was built by Christians.—"Treatise on the Ecclesiastical Architecture of England."

advanced the opinion that the church of St. Sepulchre served as a model for the early churches of the pointed style, have without doubt seen only very inaccurate drawings of this church; for with the exception of the parts of this edifice reconstructed since the conquest of the Holy Land by the Crusades, the church of St. Sepulchre, before the fire of 1808, was built entirely in the Byzantine style[a].

However, in granting even that pointed architecture had its origin in the East, it would not result from this fact alone that the pointed or ogival style, improperly termed Gothic, was derived from the Arabians and the Persians; for besides that the Moorish arch is in no respect that of the primary pointed style, the architectural system of Eastern nations differs almost entirely from that which flourished in Europe from the eleventh to the sixteenth century. "We should search in vain among the monuments of the East for that predominant tendency to height of proportion and form, that system of vaults and pyramids derived from the equilateral triangle, and that rich decoration of foliage, which are the distinguishing characteristics of the pointed style of architecture. The columns of Arabian architecture are otherwise composed and proportioned, and never approach the height of the columns of our cathedrals. The capitals are in the Byzantine style, and are, like all the rest of the edifice, decorated with arabesques imitating the ornaments and embroideries of fabrics, intermixed with inscriptions."[b]

Nevertheless, while rejecting the idea of the priority of the East to the pointed style, we do not deny the influence that Arabian architecture may have exercised in the progress of the pointed style, notwithstanding the essential difference that exists between the two styles[c].

Since the period that, renouncing unjust prejudices, a special study has been made of pointed architecture, and the splendid productions of this art have been appreciated as they deserve, different countries of Europe have claimed in their turn the honour of its discovery. Italy has no right whatever to this title, since of all the countries of Europe it is there that the buildings purely of the pointed style are the fewest in number, and that this system of architecture was the shortest period in vogue; it may be said, indeed, in some measure, that its very existence in that country was barely tolerated[d]. The finest monuments of the pointed style without admixture of the semicircular worthy of admiration in Italy, were even erected, for the most part, from the plans of foreign architects.

[a] See the beautiful plans of this church in Dapper's work, entitled "Syrien en Palestyn."

[b] Sulpice Boisserée, "Mémoire sur l'Architecture du Moyen Age. Messager des Sciences et des Arts," 1re serie, tome iii. p. 314.

[c] See Hope, vol. i. p. 382. [d] Hope, vol. i. p. 410. Wiebeking, "Geschichte der Burgerl. Baukunde."

The claims of England and the South of France have no greater value. Still less must we seek the first germs of the pointed style in the northern parts of Europe, in Russia, Poland, Sweden, and in Denmark,—countries that were for the most part still barbarous in the eleventh and the twelfth centuries, and where only was known at that time the art of constructing fragile houses of wood. Russia received the first elements of the arts from Constantinople, a city in which flourished, until the destruction of the Eastern empire, the Byzantine architecture, emanating from that of the ancient Greeks and Romans[a], and which contributed so powerfully to the reaction which, in the fifteenth century, manifested itself in Italy in favour of classic antiquity.

Of all the opinions until now set up as to the period of the introduction of pointed architecture, the best established seems, in our view, to be that of M. Wiebeking[b], the Bavarian architect, who looks for its origin towards the close of the tenth century, in the plains of Westphalia, watered by the Elbe and the Weser, and that again of M. Boisserée, of Stutgard, who attributes the invention of pointed architecture to the North of France, the West of Germany, and the Netherlands[c]. In fact, architecture was cultivated with the greatest success about the ninth and the tenth centuries in the monasteries and chapter-houses in the neighbourhood of the Rhine. It was on the banks of this river that were founded the first and chief corporations or lodges of freemasons, which rendered such eminent services to pointed architecture; it was on the borders of the Rhine, and from the plans furnished by the lodges, that were erected the Cathedral of Cologne and the Tower of Strasbourg, the two most admirable productions of this style; it was in the countries pointed out by M. Boisserée that the ogival system flourished the longest, and with the greatest éclat; in fine, the very forms of these edifices, elevated and contracted, with their sharp-pointed roofs and gables, do they not indicate that they were destined for a climate exposed to abundant falls of snow, and that every part was considered and combined to guard against the inconvenience of their long duration[d]?

[a] Mr. Hope advances the opinion, erroneously, it appears to us, that the pointed arch became at Constantinople, about the sixth century, the rival of the semicircular. He instances in support of this assertion the aqueduct of Bourgas, built by the Emperor Justinian II.; but he forgets that this aqueduct was restored at different periods, not only under the Greek emperors, but again subsequently to the conquest of Constantinople by the Turks.

[b] Wiebeking, "Geschicht der Burgerl. Baukund," and his "Mémoire sur l'Etat de l'Architecture au Moyen Age. Messager des Sciences et des Arts."

[c] See his Memoir before mentioned. Mr. Hope, while attributing the discovery and the first use of the pointed arch to the Persians, the Greeks, and the Lombards, still admits that the invention of the pointed style of architecture, considered as a system complete and connected in all its parts, belongs to the Germans. Vol. i. p. 377.

[d] Hope, vol. i. p. 375.

Belgium, situated in the proximity of the Rhine, and in the centre of those countries to which M. Boisserée assigns the discovery of the pointed style, must have performed a prominent part in the introduction of this system. In fact, if according to the testimony of the most learned German archæologists, traces of the pointed style earlier than the tenth century are not to be found in the most ancient edifices of Germany, Belgium, which possesses even now some churches which date indubitably from this period, and in which the ogival character is observed to be already strongly marked, has equal claims with Germany to the important invention that M. Boisserée attributes to the one and the other country. And not only did the pointed style already flourish by the side of the Roman in several of our religious edifices of the tenth century, such as the Church of St. Croix at Liège, that of St. Vincent at Soignies, the Cathedral of Tournay, and several other churches of that town, but Gothic architecture had attained in Belgium the highest degree of perfection towards the close of the eleventh or in the earliest period of the twelfth century, in the admirable choir of the Cathedral Church of Tournay,—proof evident that this style had already flourished in the country for a great number of years.

In solution, therefore, of the question proposed by the Academy, "About what period did pointed architecture, improperly termed Gothic, first make its appearance in Belgium?" we reply, that according to historical data, which appear of unquestionable authenticity, the employment of the pointed arch, but connected with the semicircular, first took place in the latter half of the tenth century, and that pointed architecture, pure and unalloyed, there flourished and developed all its beauties, about the close of the eleventh or the commencement of the twelfth century.

PART II.

ON THE SPECIAL CHARACTER AND THE MODIFICATIONS OF POINTED ARCHITECTURE IN BELGIUM, FROM THE TENTH TO THE SIXTEENTH CENTURY.

The pointed style of architecture, of which we observe the first attempts in several of our buildings of the tenth century, and which, as we have just remarked, arrived at its perfection in Belgium about the commencement of the twelfth century, continued to flourish there without interruption until the latter half of the sixteenth century. Thus Belgium is not only one of those countries where the ogive began the soonest

to flourish, but at the same time one of those where it yielded the last to the Greco-Roman architecture now in vogue.

During the five centuries that it flourished in this kingdom, the pointed style underwent considerable modifications, which, however, as to general character, were the same as those that it experienced in France, Germany, and England, and differed only from these last in its ornamental details.

Since the recent progress of the archæological studies of the middle ages, antiquaries have acknowledged three great epochs, or different styles, which the system of classification almost universally adopted, designates under the denominations of *style ogival primaire ou à lancettes*, *style ogival secondaire ou rayonnant*, and *style ogival tertiare ou flamboyant*[a]. To these three styles a fourth may be added, the earliest of them all, that in which the pointed character has not completely freed itself from the semicircular, and which, for that reason, has been called *style de transition*. *Le style de transition* flourished in Belgium from the latter half of the tenth to the latter half of the thirteenth century; *le style ogival primaire*, from the eleventh to the close of the thirteenth century; *le style ogival secondaire*, from the fourteenth to the latter half of the fifteenth century; and *le style ogival tertiare*, from the latter half of the fifteenth to the latter half of the sixteenth century.

These several styles did not suddenly expel those antecedent to them from the moment of their birth; the transition style was employed nearly as long as the primary style[b]; in a great number of edifices the lancet alternates with the secondary period, and in the buildings of this style again are already found ornamental details belonging to the tertiary division. This last, still more irregular, contains even more frequently instances of the several preceding styles.

M. de Caumont's "Cours d'Antiquités Monumentales" is, to the best of our knowledge, the most complete work that has been published on the history of the architec-

[a] M. de Reiffenberg gives to the three epochs or styles of pointed architecture, the terms *gothique ancien*, *gothique moderne*, *et gothique corrompu*. These denominations are good and very rational, particularly the last, which is perhaps better than that of *style ogival tertiare*. We have preferred the classification we have adopted simply because it is better known and more generally in use. (See de Reiffenberg. "Essai sur la Statistique Ancienne de la Belgique.")

Note by the Translator.—These divisions are cotemporaneous with our *early English*, *decorated*, and *perpendicular*.

[b] Some of our churches, particularly in the country, although dating from the twelfth and the thirteenth centuries, are of the pure Roman style. It is in the construction of the towers of this period that we observe the most frequently this architectural fashion; for instance, in the tower of the church, ci-devant collegiate, of St. Jacques, at Louvain; in that of the church of St. Germain, at Tirlemont; and in that of the church of St. Laurence, at Bruges.

ture of the middle ages; we have taken this excellent work as our guide in the description of the modifications which characterize each epoch of the pointed architecture of Belgium; but as this treatise was written chiefly for the west and centre of France, we shall follow its author so far only as his observations will apply to Belgium, and will coincide with our own study of the edifices of the kingdom. We shall take upon ourselves to differ also somewhat from his system of classification of the different styles of pointed architecture. Whereas M. de Caumont couples the transition style with that of the Roman, we shall define it with that of the lancet or primary epoch, because in reality the transition style, particularly in the twelfth and thirteenth centuries, is nothing more than the primary or lancet style, but alternating nevertheless with the semicircular. It appears to us also that M. de Caumont does not sufficiently define at all times the limits which separate the secondary from the tertiary pointed style, and that instead of dating the commencement of this last from the year 1400, and dividing it into two epochs, M. de Caumont would have acted more wisely in applying to the secondary or rayonnant style, the chief characteristics that he attributes to the first period of the tertiary or flamboyant; for, in adopting the system of classification that he has established in this respect, it becomes often difficult to distinguish between the secondary and the tertiary pointed style of architecture [a].

The principal edifices erected in Belgium during the middle ages are of three kinds; 1st, the religious buildings, which comprise churches, chapels, monasteries, and chapter-houses; 2nd, the civil edifices, such as hôtels de ville, halls, bell-towers, palaces, and the principal city habitations; 3rd, the military buildings, fortifications, and castles. "The military buildings," says M. de Caumont, "present little more than

[a] M. de Caumont in his "Cours d'Antiquités Monumentales," (4th part, published in 1831,) divides pointed architecture into four periods, *le style ogival primaire*, *secondaire*, *tertiare*, *et quartaire*; but in the continuation of this work ("Histoire Sommaire de l'Architecture au Moyen Age,") printed in 1837, he returns to the system he had adopted in 1823, in his "Essai sur l'Histoire de l'Architecture Religieuse au Moyen Age," and reduces these periods to three, *le style ogival primitif*, (thirteenth century;) *le style ogival secondaire*, (fourteenth century;) and *le style ogival tertiare*, (fifteenth and sixteenth centuries.) He subdivides this last into the tertiary style of the first epoch, extending from 1400 to 1480, and the tertiary style of the second epoch, from 1480 to about 1550. "Moreover," says this learned writer, "in archæology, as in many other sciences, the best methods of classification necessarily have their foundation on the variously marked circumstances of the case. It is difficult to define precisely the limits to which we should confine the reign of such or such style of architecture: these limits may vary to a certain extent, according to the localities." Further on, in specifying the characteristics of the tertiary style, he says, "You will permit me to remind you that there is nothing absolute in our divisions. They are based on the progress of changes observable in comparing a great number of buildings; but it must not be forgotten that these modifications took place gradually; that the art had no decided gap in its progress, and that the innovations were not introduced everywhere at the same period." ("Cours d'Histoire Monumentale," 4th part, pp. 47 and 290.)

masses of masonry, often without any ornament or sculpture, that could demonstrate, as in religious architecture, the prevailing taste of the period in which they were erected. The ancient castles have not met with the same respect as the churches. They have been subjected to much greater changes and vicissitudes; oftentimes they are the work of several generations, and present a medley of construction of which it would be impossible to distinguish the dates. The greater part have been destroyed or dismantled; of the rest, the character has been completely effaced by fresh arrangements of the interior, and by openings, additions, and mutilations externally."[a] The remarks of M. de Caumont on the castles of France, are equally applicable to the ancient feudal castles of Belgium, masses irregular and without style, and of which the interior arrangements have been completely altered since the sixteenth century. These edifices are therefore of none or very slight importance in the study of pointed architecture. Other military constructions, such for instance as city gates, which are always in the form of a tower, or two connected towers, do not offer greater interest in this respect.

Although pointed architecture has displayed the greatest luxuriance in some of our hôtels de ville, our halls, and our ancient city habitations, civil buildings cannot be taken as a type of this architecture at its different epochs, for scarcely do there exist in our time above five or six of these edifices constructed in the primary pointed style, (including the transition period,) and although we possess a greater number of civil buildings belonging to the two subsequent periods, yet the changes of the pointed style of architecture can be observed in little more than their decoration, and not in the disposition of their plans, which always present to us a square form more or less regular, according to the nature of the ground[b].

It is, on the contrary, in our numerous churches of the middle ages that we find perfect models of each period of the pointed style of architecture, and that we observe, as much in the general arrangement as in the slightest ornamental detail, every change which has successively modified the system. And not only is the plan of

[a] "Cours d'Histoire Monumentale," 5th part, pp. 6 and 7.

[b] Our ancient hôtels de ville, and some of our ancient halls, are constructed in the manner of the chief city habitations of the nobility, known by the name of *steen*, being built of stone, while the houses of the citizens were generally constructed of wood. The usual form of these hotels was a long square, pierced with two or three tiers of windows, either square or pointed, flanked at the angles with turrets, and crowned with battlements, from behind which rose a roof, covered with slates, and ornamented with dormer windows. Several of these hotels of the fourteenth and fifteenth centuries are still to be seen in Ghent; the most remarkable is that known by the name of the Castle or Steen of Gerard-le-Diable, erected about the end of the thirteenth century. (Steyaert. "Beschryv. der Stad Gend." p. 112.)

these buildings designed on a fixed principle of universal application, but their decoration is considerably more rich and varied than that of buildings erected for civil purposes, for it is in the churches only that we find to admire those deeply recessed porches decorated with a profusion of sculptures, those rose windows of such magical effect, those elegant galleries encircling the great nave, the transepts and the choir, and those flying buttresses constructed with such boldness. The religious buildings, then, appear to us alone worthy to be considered the veritable type of pointed architecture from the moment of its first appearance to the period of its decay.

In describing the characteristics and modifications of the pointed style in Belgium, it will doubtless not be required that we should indicate the precise date of each innovation, and the introduction of each separate detail. Such a labour could only become possible, if we could be made acquainted with and could study every building that had been erected in the country in the pointed style from the period of its first invention and employment; moreover, we should be in possession of positive data as to the period of their erection, and of the works of restoration and repair that have from time to time been executed. We should therefore confine ourselves to the pourtrayal of those features which characterize in this country each of the three epochs of the ogival style. The architectural description, and the systematic table of the principal religious and civil buildings of this, improperly termed Gothic, style of architecture, which exist in Belgium, or have existed, (as far as we are acquainted with them,) will serve as proofs and as a conclusion to this analysis.

THE TRANSITION, AND THE PRIMARY POINTED OR LANCET STYLES.

(FROM THE TENTH TO THE MIDDLE OF THE THIRTEENTH CENTURY.)

That which chiefly characterizes the pointed architecture of the first period, is the long and narrow form of the windows, doors, and arches, as much in the buildings of the transition as in those of the strictly pointed style. From this form of opening, which resembles somewhat the point of a lance, the English architects have denominated the primary Gothic *the lancet period.* In the churches of the transition, the summit of the lancet arch is frequently slightly rounded, which constitutes what is usually called the horse-shoe arch.

The windows are sometimes single (as in the Churches of St. Jean at Tournay, and the Abbey de Villers) and sometimes coupled (as in the Church de Pamele at Audenarde, the Choir of St. Martin at Ypres, the Church of St. Jean at Tournay, &c., &c.) We call these latter, according to M. de Caumont, *twin lancets.* The fronts of the churches are frequently adorned with three windows or connected arches,

of which the centre is higher than the two side lancets, as in the Churches of St. Jean and St. Quentin at Tournay. We meet also with triple lancets in the apses of the choirs, (Church du Béguinage de Louvain,) or upon their sides and along the naves, where they are usually inclosed in a semicircular arch; (Church de Pamele, Notre-Dame at Dinant, and the choir of St. Martin at Ypres;) sometimes, although this seldom occurs, we find even four connected lancets. Among the lancet windows, some are plain and without ornament of any kind; others, of which the archivolts spring from small cylindrical columns, are trefoiled (composed of three lobes), or have torus mouldings separated by deep channels: (Church de Pamele, St. Quentin, and several other churches of Tournay; the Choirs of St. Gudule and of Notre-Dame de la Chapelle at Brussels; the bell-tower of Ghent, and the ancient hôtel de ville d'Alost, &c., &c.) The finest are composed of a moderately sized pointed or semicircular arch, inclosing two plain or trefoiled lancets, connected by a column, and surmounted by an ornament in the form of a trefoil, quatrefoil, or rose: (Hôtel de Ville, market and hotel of the Templars at Ypres, Church de la Chapelle at Brussels.) We see also in the front, in the ends of the transepts, and in the apsis of the choir, if this be terminated by a flat wall, bull's-eye openings either isolated or flanked with two lancet windows, or occupying the space comprehede d within the extrados of the pointed arch of two twin lancets: (Gates of the Cathedral and Church of St. Jean at Tournay, transepts of the Church of St. Quentin in the same town, refectory of the Abbey of Villers.) In the finest specimens of the primary pointed style, the bull's-eyes are transformed into grand and magnificent rose windows, formed by tracery radiating from the centre, and uniting again at the circumference in trefoiled arcs: (Rose of the Church of St. Memin at Dinant.) In the thirteenth century they are not unfrequently found in compartments in the trefoiled ogine, or a series of regular figures, such as roses, panelled quatrefoils[a], trefoils, &c.

The usual form of our churches of the transition or primary pointed style, is a Latin cross, the anterior portion of which is turned towards the west. The principal door, situated at the head of the great nave, is always isolated. The archivolt, when composed of one member, simply rests upon the piers; when the arches are ornamented with torus or roll mouldings, they usually rest upon clustered columns, the capitals of which are either a rude imitation of the Corinthian, or are composed of grotesque figures and heads of monsters: (St. Pierre at Ypres, St. Martin at St.

[a] Quatrefoils, in pointed architecture, are similar to trefoils, but having four leaves instead of three, either round, or elongated and pointed. When this ornament is inclosed in a square or circular border, it is termed a panelled quatrefoil.

Trond, Church de Pamele at Audenarde, St. Quentin and St. Jean at Tournay, St. Leonard at Léau, Church of the Dominicans at Ghent, &c.) Several churches of this period have no principal gates, the entrance is by a very simple doorway, situated on one of the sides of the nave, and in such instances the front portion of this is terminated by a flat wall, pierced with one large pointed window or a rose: (St. Vincent at Soignies, Notre Dame at Louvain.) In the churches of the transition, the lateral entrances are found on the sides of the nave or the choir: (St. Vincent at Soignies, St. Jervais at Maestricht:) in those of the primary pointed style, particularly of the thirteenth century, they are ordinarily placed at the extremities of the transepts, and at times under a deeply recessed porch, with the walls covered with niches intended to receive statues, with canopies, small figures, and numerous other sculptured ornaments: (St. Martin at Ypres, St. Lambert at Liège, Notre Dame at Dinant, and at Tongres.) The ancient cathedral of St. Lambert at Liège, and that of the Virgin at Dinant, are, to the best of our knowledge, the only churches of Belgium in the primary pointed style, of which the principal entrance has been decorated with such a porch. As to the triple porches attached to a considerable number of the French cathedrals, such as the Cathedral of Rheims, that of Chartres, &c., we do not believe that they have ever existed in the front of any of our religious edifices. Neither have we found in any part, the signs of the zodiac, so frequently met with at the entrances of the French and German churches.

Towers of a square form, and pierced with one or several tiers of small windows, semicircular or pointed, are situated by themselves at the head of the nave, or are placed one on each side of the entrance: (St. Lambert at Liège, and St. Sulpice at Léau.) Two other square towers at times arose in the angles formed by the intersection of the choir and transepts: (Abbey of St. Bavon at Ghent.) In the most ancient churches of the transition, the towers are of moderate height, and covered with a flat roof of four sides; in the twelfth and thirteenth centuries they rose to greater heights, and were terminated with flat roofs, or were crowned with lofty stone and wooden spires, massive and plain; the base of these spires was usually flanked with four pentagonal or octagonal turrets, the angles of which were edged throughout their height with volutes in the form of curved leaves or crockets. When the principal entrance is not provided with one or with two towers, the angles are often concealed with cylindrical or angular turrets: (St. Nicolas and St. Jacques at Ghent, St. Quentin at Tournay, and the Church de Pamele at Audenarde.) Then the tower of the church rests on the centre of the transepts, and is of a square form, but is more frequently furnished, particularly in Flanders, with an octagon pierced with eight lancet or horse-shoe openings: (St. Jacques at Ghent, Church de Pamele at Audenarde.)

The naves and choirs of the first churches of the transition and of the primary pointed style, are strengthened exteriorly with counterforts of very small projection, in the form of pilasters, the thickness of which is concealed in some measure by a kind of recess. In the principal churches of the twelfth and thirteenth centuries, these counterforts give place to large square isolated pillars, divided at various heights by cornices, and united to the body of the church by flying buttresses in the form of moulded arches. These flying buttresses, of a greater or less magnitude, are usually adorned with crockets, pinnacles, and grotesque figures or heads of animals, called *gargoyles*, which serve as gutters: (Ste. Gudule at Brussels, St. Martinat Ypres, choir of the Cathedral of Tournay, church of the Abbey of Villers, Notre Dame at Louvain, &c.)

The cornices which surmount the principal walls of the edifices, as well sacred as profane, of the transition and primary pointed styles, are composed of simple rounded and angular mouldings, sometimes adorned with consoles with the form of grotesque heads. These cornices frequently rest on a row of mouldings cut into the form of the teeth of a saw, or on a row of small blank arches, either semicircular or pointed, plain or trefoiled, supported on consoles, either flat or ornamented with grotesque heads: (choir of the churches of La Chapelle and Ste. Gudule at Brussels, Church of St. Jean, in the same town, the Town Hall of Ypres, Church of St. Sauveur at Bruges, Churches of the Abbeys of Affighem and Villers, &c.)[a]

Balustrades, usually the accompaniment of the cornice in the exterior of the principal edifices of the primary pointed style, but very rarely in those of the transition, are formed in the twelfth and thirteenth centuries, with pointed or trefoiled arches, some with, others without columns: (entrance of the Cathedral of Tournay, choirs of St. Léonard at Léau, of Notre Dame at Antwerp, of St. Donat at Bruges, St. Lambert at Liège.) In the richest examples of the latter period of the lancet Gothic, they are composed of quatrefoils and panelled trefoils. In churches, these balustrades are placed above the aisles and around the principal roof; we are acquainted with one only of our ogival churches, that of Léau, where, as in many of the Roman churches, a balustrade or gallery surrounds the exterior of the choir. The façades of secular buildings, instead of being surmounted with balustrades, are for the most part crowned with battlements: (Hôtel de Ville of Ypres).

[a] As to all those mouldings which the modern archæologists have denominated star, zigzag, embattled and lozenge fret, billet, nebule, angular, hatched, nail-head, cable, twist, labyrinth, chequer, pellet, bandelet, dentil, reticulated, &c., we have found no traces of them in Belgium, either in the buildings of the transition or those of the primary period of the ogival style. (See "Le Cours d'Antiquités Monumentales," by M. de Caumont, 4th part, p. 127.)

The naves of the churches of the transition period, are formed by square pillars or round columns, heavy and short; (Church of Pamele;) oftentimes the square pillars alternate with the columns: (churches of St. Piat, and of St. Brice at Tournay.) Sometimes the arches of the small naves and of the choir, when the latter has no side aisles, spring from very slender columns, placed one upon the other in such a manner that the bases of the upper columns rest immediately upon the capitals of the lower range: (apsis of the choir of Ste. Gudule at Brussels.) The columns which divide the naves of the churches of the lancet style, are generally cylindrical, but more slender and better proportioned than those of the earlier churches of the transition, or they are composed of a pillar, around which are clustered a great number of long and very slender columns, surmounted with capitals, or continued uninterruptedly to the springing of the arches[a].

The capitals of the columns of the interior of the transition churches are either in imitation of the Corinthian order, or consist of simple mouldings. We are not acquainted with any composed of grotesque heads, entwined serpents, sea monsters, and other fantastical figures. The capitals of the principal columns of the primary pointed style are generally adorned with foliage or triangular volutes terminated with crockets. The arches springing from these columns are almost always lancet-shaped with moulded archivolts: (churches of Notre Dame at Tongres and at Dinant, of St. Martin at Ypres, Ste. Walburge at Furnes, the choir of the Cathedral of Tournay, St. Paul at Liège, &c.) In some buildings, however, the arch is not so acute as the lancet: (choir of Ste. Gudule at Brussels, churches of St. Piat and St. Brice at Tournay.)

In the earliest churches of the transition period, the choir is very small, and at times of a less height than the naves, (St. Vincent at Soignies,) and terminated with a flat wall, or a circular or octagonal apsis. In the twelfth and thirteenth centuries it is considerably lengthened, and rivals in extent the choirs of the principal churches of the primary pointed style: (churches of Pamele, St. Quentin at Tournay, and St. Martin at Ypres.) The latter occupy the third, and sometimes even the half of the whole length of the body of the church: (Cathedral of Tournay, Ste. Gudule at Brussels.) They are sometimes without side aisles, and have long lancet windows all round; others are inclosed within aisles in which are generally ranged five chapels radiating from the apsis. Some, however, possess a greater number of chapels; but many of them have none whatever, or those which they do possess have been added at subsequent periods: (Ste. Gudule, Notre Dame at Tongres,

[a] We have not seen in any of our churches annulated columns, that is to say, columns in which rings or annulets of stone divide the shafts into equal parts.

St. Léonard at Léau, Church of Villers, Notre Dame at Dinant.) Lastly, the side aisles do not extend at all times entirely round the choir. We find churches, especially of the transition period, where they are finished on the sides of the apsis: (Ste. Walburge at Audenarde.) The naves, either in the transition or the primary pointed style, were never lined with chapels; those which do exist have been subsequently added.

Between the arches and the windows of the principal nave, and round the transepts and the choir of the large churches of the transition and primary pointed styles, a gallery exists, known in England under the name of *Triforium*, answering to the galleries of the ancient Roman basilicas and Byzantine churches[a]. These are formed of arches, usually semicircular, in the churches of the transition, (St. Martin at Ypres,) and pointed in those of the primary period; (Ste. Gudule, nave and transepts of St. Martin at Ypres, Notre Dame at Tongres and at Dinant, &c., &c.;) sometimes isolated, plain or trefoiled, with or without columns, (naves of Ste. Gudule, Ste. Walburge at Furnes, St. Martin at Ypres, Notre Dame at Tongres and at Dinant, St. Paul at Liège, St. Sauveur at Bruges, &c.;) and sometimes coupled, and ornamented with trefoils and quatrefoils in the space comprised between the two arches, the whole inclosed in a blank pointed arch: (choir of Ste. Gudule, choir of the Cathedral of Tournay, and transepts of St. Martin at Ypres[b].) It is more especially around the transepts and the choir that these galleries are decorated with the greatest elegance; sometimes we only meet with them in this part of the body of the church (St. Léonard at Léau).

The vaults of the churches of the lancet style are invariably pointed, and have groined mouldings. In the space between the windows they spring from consoles, or semi-cylindrical columns, isolated or clustered. In the churches of the transition

[a] The Roman basilicas, which fulfilled the office of our exchanges and tribunals, were buildings of greater or less extent, of a trapezium form, divided interiorly into three (and sometimes into five) avenues, by two rows of columns, the entablature of which supported another order. The cathedral of Tournay, the church of Soignies, and that formerly of the Jesuits at Antwerp, are tolerably perfect models of this kind of construction. The basilicas had no other covering than the bare roof of the building, or a simple platform of wood; the hemicycle alone, which terminated the central avenue, and contained the prætor's tribunal, was covered with a stone vault, and for that reason took the name of *apsis*. The Christians of the fourth and fifth centuries adopted for their churches the plan of the basilicas, because these buildings being much larger than the heathen temples, were capable of containing the whole assembly of the faithful, who could not have found room in the narrow *cellæ* of the temples, where the pagan priests alone had the privilege to enter, the public remaining in the vestibule, or in the court surrounding the temple.

[b] In France we sometimes find three, and even four, united arches inclosed in one pointed arch. We have not met with this in any church in Belgium.

the vaults are pointed or flat arched, and often have nothing more than a flat wooden roof: (Church de Pamele.)

THE SECONDARY POINTED OR RAYONNANT STYLE.

(FROM THE FOURTEENTH TO THE LATTER HALF OF THE FIFTEENTH CENTURY.)

The enlargement of the windows, doors, and arches, the abundance and angular form of the ornaments, the mouldings and mullions which take the place of the small columns in the galleries, doors, windows, and clustered columns, are the principal features which distinguish the pointed style of the fourteenth and fifteenth centuries from the primary period.

The width of the windows situated along the naves and the choir equal half and sometimes two thirds of their height, particularly in the fifteenth century. They are subdivided into three, four, and sometimes five and six lancets, with long and wide mullions, surmounted with roses, trefoils, and quatrefoils. The whole of the windows of the same church are seldom of one design. The windows of the great nave are generally of two different forms, and it is the same with those of the aisles and the choir. Sometimes every window differs in its ornament; but this more frequently occurs in the churches of the tertiary period. It is more particularly in the large windows which adorn the entrances and the transepts, that all the luxuriance and richest forms of ornament of the *rayonnant* gothic are displayed. Some of these windows are as much as forty and fifty feet in height: (St. Pierre at Louvain, St. Sauveur at Bruges, Notre Dame at Huy and at Tongres, Ste. Gudule at Brussels, &c., &c.) Rose windows are also frequently met with in the secondary style. They have the same ornaments as the large windows, roses, quatrefoils, trefoils, and other radiating figures: (tower and right transept of Notre Dame at Huy, and transepts of the Church of Dixmude).

The windows of the civil edifices are generally of a much less width and height than those of the churches, and are usually divided only by one or two mullions. Sometimes they are even of the lancet form, more or less lengthened, or the rounded ogive; but from their style of ornament it is at all times easy to distinguish them from the openings of the primary period: (Hôtels de Ville of Bruges, of Louvain, and of Brussels.) About the beginning of the fifteenth century we find square windows, divided by lintels, with chamfered sides, isolated or inclosed in a blank pointed arch: (Hôtels de Ville of Brussels and Louvain, Market Hall of Bruges.)

The churches of the secondary pointed style preserve the general form of those of the preceding period, with the addition, however, of a row of chapels on each side of the nave, an arrangement that we do not find in those erected prior to the

fourteenth century. M. de Caumont considers also as an innovation of this period the large chapels dedicated to the Virgin, and placed at the end of the church at the back of the aisles surrounding the choirs, from which they are separated by columns. These chapels, however, are not often found in our churches: (St. Martin at Alost, Notre Dame at Malines, and St. Sauveur at Bruges.)

The church doors, situated at the end of the nave, are single, coupled, or sometimes three in number; we have only met with four doors in the single instance of the Church of Ste. Gudule at Brussels. They are pointed, of varying proportional width, with chamfered archivolts, and in the churches somewhat ornamented, are flanked with pinnacles and canopied niches, and frequently surmounted with gables, of which the tympanum is decorated with small blank arches, and the sides covered with pinnacles and crockets: (Ste. Gudule at Brussels.) Several doorways of churches of the fourteenth and fifteenth centuries have deeply recessed porches, with moulded archivolts, but generally not so rich in sculpture as those of the primary pointed style. They are usually surmounted with a flat roof, and a balustrade composed of panelled quatrefoils: (Notre Dame at Tongres, St. Martin at Ypres, Notre Dame du Sablon at Brussels, Notre Dame at Courtrai and at Antwerp, two churches at Poperinghe, St. Rombaut at Malines, &c.)

When the principal entrance is not situated underneath the tower it is terminated by a gable, the base of which is furnished with a balustrade. The sides of the gable are ornamented with crockets, and its tympanum is decorated with blank trefoiled arches: (St. Rombaut at Malines, Notre Dame du Sablon, and Ste. Gudule at Brussels, Church of Anderlecht, &c., &c.)

Balustrades, composed of arched openings, or more frequently of panelled trefoils or quatrefoils, surmount the exterior walls of the naves and choir of the principal churches of the secondary pointed style: (St. Gommaire at Lierre, Notre Dame de Hal, &c.) In a great number of churches the side aisles of the naves are surmounted exteriorly with a row of gables, the tympana of which are ornamented with blank arches, between which are placed crocketed pinnacles similar to the sides of the gables. These gables rarely exist except when the aisles are bordered with chapels: (St. Waudru at Mons, Ste. Gudule and Notre Dame de la Chapelle at Brussels, Notre Dame de Hal, Church of Anderlecht, &c.)

In the fourteenth century, the principal nave and the choir of the large churches are supported exteriorly, as in the two preceding centuries, by flying buttresses, ornamented with pinnacles and crockets; but about the middle of the fifteenth century, the flying buttresses were replaced in many churches by simple counterforts, with very slight projections, hidden, if we may so express it, under the roof. The

balustrades surrounding the high roofs generally disappear with the flying buttresses : (nave of Notre Dame at Antwerp, St. Michel at Ghent, Notre Dame at Malines, Notre Dame du Sablon and de la Chapelle at Brussels, &c.)

The single towers over the principal entrance at the head of the naves, and the two similar towers flanking the sides of the porch are of a square form, (Ste. Gudule,) or square at the base, and octagonal in the upper stories: (Bell Tower of Bruges, tower of the Hôtel de Ville at Brussels, of the ancient Hôtel de Ville of Alost, of Notre Dame at Antwerp, St. Bavon at Ghent, St. Gommaire at Lierre.) Wherever they are covered with flat roofs, they are almost always unfinished, and were intended, according to the original plan, to carry a lofty spire of stone or wood: (St. Martin at Ypres, Notre Dame at Tongres, St. Rombaut at Malines, St. Michel at Ghent, Notre Dame de la Chapelle at Brussels, &c.)

Until the fourteenth century the towers were massive and devoid of ornament. It was only towards the close of this century, and in the early part of the next, that those magnificent towers were constructed, with their carving of network, which from their great height, the boldness and beauty of their construction, and the richness and delicacy of their ornaments, will be ever looked upon as the triumph of pointed architecture, and as an original work, the first idea of which arose among the artists of those middle ages so much depreciated by the exclusive admirers of the Greeks and Romans: (northern tower of Notre Dame at Antwerp, tower of the Hôtel de Ville at Brussels, of the Hôtel de Ville and Church of Ste. Gertrude at Louvain.) In the fourteenth and fifteenth centuries were erected also in Belgium spires of wood, of extraordinary height and boldness : (spires of Ste. Gertrude at Nivelles, Ste. Julien at Ath, St. Gommaire at Lierre ; Church of Aerschot, St. Bavon at Ghent, &c.) These spires were generally flanked at the angles of the square stone tower, which formed their base, with four octagonal turrets with crocketed pinnacles, and surrounded with a balustrade, which did not exist at the period of the primary pointed style.

Massive spires of brick are rarely to be seen, except in Flanders, and nearly the whole of these are in Western Flanders, where they are very numerous, and of considerable height, as well in the towns as in the villages: (Notre Dame at Bruges, parish church of Ostend, St. Nicholas at Furnes, parish churches of Roulers, of Lombardzyde, of Boesingen, of Beerlaere, of Vlaemertingen, of Elverdingen, of Menin—before the reconstruction of this church, &c.) A great number of these churches date as early as the fourteenth and fifteenth centuries; others as late as the sixteenth and seventeenth centuries. The Church of Notre Dame at Huy is, to the best of our knowledge, the only church of the secondary pointed style in Belgium, decorated with similar towers placed on each side of the choir. The octagonal or

square towers, frequently situated at the intersection of the choir and transepts of the primary pointed churches, are superseded also in the secondary period by wooden spires of moderate height. The Church of St. Nicholas at Ghent, the tower of which was constructed in 1407, is one of the rare exceptions to this universal rule.

The columns which form the naves and the choir of the churches of the secondary pointed style, are either round with octagonal bases and capitals adorned with leaves of the vine, colewort, and thistle, or are composed of angular and square members connected in clusters, without capitals, part of them continued up to the arches of the vaults of the nave, and the rest branching off to form the mouldings of the arches of the nave and choir, and those of the vaults of the side aisles of the church: (St. Pierre at Louvain, St. Waudru at Mons, Notre Dame at Antwerp and at Hal, &c.)

The galleries which run between the arches and the windows of the nave and choir, and around the transepts, are generally composed of trefoiled pointed arches, ornamented at their lower or upper parts with a balustrade of panelled quatrefoils or trefoils: (St. Pierre at Louvain, Notre Dame at Antwerp and at Huy, St. Rombaut and Notre Dame at Malines, St. Gommaire at Lierre, St. Waudru at Mons, &c.)

In the edifices of the rayonnant gothic, the vaults are invariably pointed with groined mouldings.

The description of the Hall and Hôtel de Ville of Bruges, of the Hall and Hôtel de Ville of Louvain, and that of the Hôtels de Ville of Brussels and Mons, will give a tolerable idea of the plan and general arrangement of the principal civil buildings of the secondary period of pointed architecture.

We have already said that one of the features which distinguish the secondary from the preceding style, is the great abundance of ornament; those most generally employed at this period are panels, crockets, canopied niches, pinnacles, foliage, blank arches, quatrefoils, and trefoils.

Panels, which are never found in the buildings of the primary style, are composed of a series of blank arches, trefoiled and separated by lines or vertical mouldings. They serve to hide the nakedness of the walls both exteriorly and interiorly; they cover particularly the interior walls of the side aisles of the churches, when they are not bordered with chapels, but often the walls of the chapels themselves are decorated with them: (St. Rombaut and Notre Dame at Malines, Notre Dame at Antwerp and at Huy, St. Pierre at Louvain, Chapel des Comtes in the Church of Notre Dame at Courtrai, St. Croix at Liège, &c., &c.) When panels are employed to disguise the heaviness of counterforts, or to surround the doorways, they are placed one over the other.

Crockets, which are fewer and farther apart in the thirteenth century, are found in profusion in the buildings of the secondary style. They appear in nearly every external part of the churches, in the gables of the doors, the porches, the transepts, the chapels ranged along the side aisles of the nave and choir, the stone spires, the turrets, the pinnacles, &c. Crockets decorating the archivolts of arches, doors, and windows, and terminating above them with finials, are one of the characteristic ornaments of the pointed buildings posterior to the thirteenth century.

Corbelled niches between the windows, on the sides of the doors, on the counterforts, and the bases of the flying buttresses, and on turrets and towers, are also one of the most frequent decorations in the buildings of the secondary style. The pyramidal canopies which cover them, much more elongated than those of the preceding period, are of very rich design, and present in miniature the appearance of the large open-worked towers: (Hôtels de Ville of Bruges, Louvain, Brussels, and Mons, &c.)

The plinths or bases of these niches are sculptured in bas-relief, representing historical subjects or grotesque figures: (Hôtel de Ville of Louvain, choir of the Church of Notre Dame at Hal, &c.) We sometimes find a long series of niches placed one against the other, forming a sort of gallery in appearance: (hall and lobby of the Church of St. Pierre at Louvain.)

Pinnacles, decorated with crockets, surmount the flying buttresses, the balustrades of the principal roofs, and sometimes the gables of the porches: (principal and right side entrances of Ste. Gudule, Hôtels de Ville of Louvain and Bruges, &c., &c.) *Entail foliage*, so called from its forming borders on the projecting parts of entablatures, and particularly on cornices, is composed, in the transition and primary pointed styles, of acanthus leaves; in the fourteenth and fifteenth centuries they were changed for the leaves of the colewort, thistle, vine, &c.: (Hôtel de Ville of Bruges.)

Saw-tooth mouldings and consoles, whether flat or ornamented with fantastic heads, have now completely disappeared. We find too, but rarely any longer, cornices resting upon blank arches: (Hôtel de Ville and Bell Tower of Bruges, St. Martin at Liège.)

Blank arches are almost always surmounted with gables ornamented with crockets and terminated with finials. These arches generally inclose others, of less dimension, and trefoiled. The façade of the ancient Hall of Louvain (now the University) is decorated with a range of blank arches of the equilateral form.

The quatrefoils and trefoils are terminated sometimes with rounded, and sometimes with angular or sharp-pointed cusps[a]. Trefoils and quatrefoils panelled or inclosed in a circle, and roses form the chief ornament of the windows and balustrades,

[a] M. de Caumont gives the name of "fleurons crucifères" to the quatrefoils with lancet-shaped cusps.

and of the galleries above in the interior of the churches. The finest of the civil edifices are surmounted exteriorly with balustrades or galleries, in the form of open embattlements, filled in with chequer-work or trefoiled arches. (Hôtels de Ville of Bruges, Brussels, and Louvain.)

Pendants or bosses, formed at the junction or intersection of the vaults, are ornaments common to the tertiary pointed style, but are seldom met with in the buildings of the preceding period. The roof of the great room of the Hôtel de Ville of Bruges is decorated with very elegant pendants, which bear the date of 1398.

Trefoiled festoons, suspended from the archivolts of doors, windows, and arches, are still more rare in the buildings of the *rayonnant* pointed style; they are found only in a very small number of the edifices of the second half of the fifteenth century, such as the entrance of the Church of Notre Dame at Antwerp.

In concluding this sketch of the secondary pointed style of architecture, we may add that it was in the buildings of this period that brick began to be more generally used. Flanders, where the absence of quarries rendered building in stone very expensive, and where the means of communication were rare and very incomplete, appears to have been that part of Belgium where the use of brick first took place[a]. Hallam is even of opinion that it was from this country that England borrowed the art of building in brick[b]. However this may be, there exist in Western Flanders a great number of important buildings constructed of brick, of about the beginning of the fourteenth century; and some even date from the twelfth and thirteenth centuries.

TERTIARY POINTED STYLE, OR FLAMBOYANT.

(FROM THE SECOND HALF OF THE FIFTEENTH TO THE SECOND HALF OF THE SIXTEENTH CENTURY.)

Just as the transition style of the tenth and eleventh centuries marks the passage from the semicircular to the pointed, so the tertiary pointed style exhibits the return from the pointed to the semicircular; for this style is in a measure nothing more than the secondary Gothic, perverted by a mixture of ornament belonging in part to the period called the *renaissance;* whence the denomination of *style ogival ou Gothique corrompu*, that M. De Reiffenberg very justly gives to this last period of pointed architecture[c].

[a] The churches of St. Sauveur and of Notre Dame at Bruges, and the Hospital de la Byloke at Ghent, are among the number of the most ancient edifices constructed of brick, which now exist in Belgium.

[b] "L'Europe au Moyen Age," vol. iv. p. 215. De Reiffenberg, "Essai sur la Statistique Ancienne de la Belgique," 2nd part, p. 95.

[c] "Essai sur l'Ancienne Statistique de la Belgique," p. 148.

The edifices of the tertiary pointed style are chiefly recognizable by the following traits, of which the main characteristics of this style consist:—First, By distorted and irregular figures, resembling *flames*, or elongated hearts, which decorate the compartments of the windows, roses, and balustrades, from which this last period of the pointed style of architecture has derived its name of *style flamboyant*. Secondly, By the groins or projecting mouldings which divide the vaults into a great number of angular compartments. Thirdly, By the depressed, flat-pointed, and elliptical arches, sometimes plain, sometimes trefoiled, which succeed the equilateral arch of the windows, doors, and exterior arches[a]. Fourthly, By the ornaments peculiar to this style, festoons, pendants, finials, wreaths, arabesques, foliage, and medallions.

Although, as we have before observed, bosses or pendants, trefoiled festoons, and the elegant fretwork which encircles the archivolts of doors, windows, and arches, occur in some edifices of the secondary pointed style, their employment, so to speak, is scarcely more than accidental. Frequent use, on the contrary, is made of them in the buildings of the subsequent period, for which reason M. de Caumont considers festoons one of the characteristic ornaments of the latter periods of pointed architecture.

The same may be said of pendants, which are very commonly met with in the flamboyant style. They are usually covered with ornaments of the most varied and delicate character. "Sometimes," says M. de Caumont, "pendants of prodigious size present the form of stalactites with which nature adorns certain grottoes, and it is impossible to walk without astonishment beneath these fretted vaults, from which are suspended stones weighing many thousand pounds." The finest and most extraordinary pendants that we have seen in Belgium are those which adorn the lobby of the Church of Dixmude.

The finials and wreaths are composed of the leaves of the colewort, thistle, vine, and some other plants. They supply the place of crockets in the archivolts of doors, arches, windows, and canopies of niches.

The arabesques, foliage, and medallions, borrowed from the Roman architecture of the *renaissance*, cover the vaults, the spandrils of the arches, and sometimes the shafts of the columns: (vault of the nave and choir of Notre Dame at Huy, and of St. Paul at Liège; vault and walls of the principal nave of St. Jacques at Liège, façade of the Chapel du St. Sang at Bruges, columns of the Bourse at Antwerp, and of the ancient episcopal palace at Liège.) Besides the ornaments which belong to the tertiary pointed style, we find in the buildings of this period most of those of the

[a] We say exterior arches, because in the interior of our churches of the tertiary style the arches of the naves and choirs are invariably pointed.

rayonnant pointed, crockets on the sides of the gables, of the entrances and transepts, entail, pinnacles, niches, of which, however, the canopies are often of most complicated design, quatrefoils and trefoils with pointed cusps, panels, blank arches, &c. (Hôtel de Ville of Ghent, Chapel du Sacrement des Miracles at Brussels, St. Jacques at Liège, Notre Dame at Malines, &c.)

The plan and general form of the churches of the tertiary pointed style do not differ from those of the fourteenth and fifteenth centuries. It becomes, indeed, often difficult to distinguish interiorly a church of the tertiary from the secondary Gothic period; for as the arches of the nave and choir, in the churches of the tertiary style, are invariably pointed, and do not differ from those of the preceding period, and as many churches of the sixteenth century have preserved the pointed vaults and groined mouldings, it is only by the decoration of the windows, of the entrances and transepts, that we perceive the difference of style of these edifices: (Church des Dominicains at Antwerp, St. Michel at Ghent, Notre Dame at Malines, St. Gommaire at Lierre, &c.)

The columns which form the interior divisions of the churches are either cylindrical or are composed of angular mouldings united in clusters; the former are frequently of less diameter than those of the churches of the secondary period, (Church des Dominicains at Antwerp,) and the latter longer, of greater lightness, and frequently of extreme tenuity, for it is less by the perfection and harmony of proportions that the chief edifices of the flamboyant style are distinguishable, than by the boldness of their construction,—boldness which sometimes degenerates into veritable *tours de force;* witness the Chapel de l'Ancienne Cour at Brussels, destroyed about 1772, the ruined Church of the Abbey de Lobbes, the spiral staircase in the choir of the Church of St. Jacques at Liège, and the pendants of the lobby of the Church of Dixmude.

In the churches of the latter period of pointed architecture, the galleries situated over the arches of the nave and choir are often succeeded by simple balconies placed underneath the windows: (Church of St. Jacques and des Dominicains at Antwerp.) Other churches, although of the first class, have neither galleries nor balconies.

Flying buttresses outside the churches have in nearly every case, in the fourteenth and at the close of the fifteenth century, been superseded by counterforts decorated with panels and false pinnacles, or devoid of any kind of ornament. Balustrades, with some rare exceptions, disappear at the same time from the roofs of the naves and the choir.

At this period also were designed open-worked towers of stone, which would even have surpassed in height and richness of decoration every building of the kind

hitherto erected; (triple towers of the Church of St. Pierre at Louvain;) but these ideas were not carried into execution, and far from constructing towers to be compared with those of the Hôtel de Ville of Brussels, of the Church of Notre Dame at Antwerp, and even that of Ste. Gertrude at Louvain, the towers commenced in the fourteenth and fifteenth centuries were left incomplete, (tower of St. Rombaut at Malines, of St. Jacques at Antwerp, of St. Michel at Ghent, &c.,) or where the works were continued, the original plans of the buildings were simplified and departed from: (tower of Notre Dame at Antwerp.)

The finest towers constructed in Belgium, in the period of the tertiary pointed style, are simple spires of wood, remarkable solely for their height (St. Bavon at Ghent, St. Gommaire at Lierre). A great number of brick towers, in Western Flanders, (we may mention particularly that of the tower of the Church of Notre Dame at Bruges,) belong to this period. The spires constructed at the close of the fifteenth and during the sixteenth century have frequently the form of spherical or angular domes.

The fine octagonal cupola of the flamboyant style, situated at the intersection of the transepts of the Church of Notre Dame at Antwerp, is, to the best of our knowledge, the only one constructed in Belgium during the whole period of pointed architecture, and is at the same time the first building of its kind to be met with in this kingdom.

As perfect specimens of the civil edifices of the last period of pointed architecture, we shall content ourselves with mentioning the Hôtel de Ville of Ghent, the building called *la Maison du Roi* at Brussels, and the house of the ancient corporation *des bateliers* at Ghent.

PART II.

HISTORICAL AND ARCHITECTURAL DESCRIPTION OF THE PRINCIPAL BUILDINGS OF THE POINTED STYLE, ERECTED IN BELGIUM, FROM THE TENTH TO THE SIXTEENTH CENTURY; WITH THE NAMES OF THE KNOWN ARCHITECTS WHO FURNISHED THE DESIGNS OR SUPERINTENDED THEIR CONSTRUCTION[a].

Of all the edifices of Belgium now in existence, the earliest in which the use of the ogive may be remarked, are, to the best of our knowledge, the Cathedral of Tournay, the Church of St. Vincent at Soignies, and that of Ste. Croix at Liège.

[a] It is perhaps unnecessary to observe, that it must not be expected to find a complete list of all the important buildings erected in Belgium in the middle ages, but of those only of any interest as examples of pointed architecture.

CATHEDRAL OF TOURNAY.

The origin of the Cathedral of Notre Dame at Tournay, is traced as far back as the fifth or sixth century[a]. Poutrain, historian of this city, pretends that the body of the church which we now see, was rebuilt under the kings of the second race of Franks,—an evident error, which a mere inspection of the structure contradicts[b]: We do not possess authentic information as to the period of the rebuilding of the Church of Notre Dame, but every thing leads us to believe that, sharing the general destruction of the city by the Normans, in 882, it was rebuilt in the beginning of the tenth century, when the inhabitants of Tournay, who had found an asylum at Noyon, began to return to their city, which had been left ruined and deserted during a period of thirty years, an event which seems to be alluded to in the ancient bas-reliefs which ornament the piers and archivolts of the side doors of the church[c]. Although a great length of time must have elapsed before this immense and superb church was finished, the doors are evidently one of the most ancient parts of the building; they are composed of a blank semicircular arch inclosed in another arch formed by three curves in the form of a trefoil; the central curve being higher than the other two, is formed by two curves which meet in a point forming the true ogive. The vast and beautiful naves and admirable transepts of this church, are constructed entirely in the finest style of Roman architecture[d]. The height and decoration of the five towers with

[a] Some of the evidence cited to establish the great antiquity of this church, is not without the pale of all criticism. We may instance, among others, the charter by which King Chilperic gave to Bishop Chrasmarus and the clergy of the church of Notre Dame the tolls of the river Escaut at Tournay. There are strong reasons to doubt the authenticity of this act, as we only possess a "vidimus" of the thirteenth century.

[b] In a remarkable article on the Church of Notre Dame at Tournay, published in the "Revue de Bruxelles," (December, 1837,) M. Dumortier is of opinion that the transepts and towers of this church, as they now exist, date from the reign of Clovis, and that the naves are of still more ancient date. We are sorry we cannot agree in this point with the opinion of this distinguished man.

[c] These bas-reliefs are of most barbarous design and execution. M. Renard, architect, of the city of Tournay, an artist of much talent, has made an exact tracing of these sculptures, which represent under many grotesque and satirical forms, the Norman destroyers of Tournay. Below the figure of a Norman with a large beard and flowing hair, armed with a sword and buckler, is written the word "*superbia.*" Above this figure is seen that of a woman, (probably Religion,) holding in her hand a long staff terminating in a cross; at her feet is engraved the word "*pietas.*" We also find the figures of hares pursued by dogs, serpents with the heads of bearded Normans, Goliath slain by David, &c., &c.

[d] Mr. Hope says that the arched vault of the nave (this must be since the eighteenth century, the nave before that time had only a flat wooden covering) is supported by a colonnade. This is a mistake: it is supported by two tiers of thick square pillars, one over the other, carrying semicircular arches.

obtusely pointed roofs, which rise from the centre of the transepts, do not permit us to fix the date of their construction before the eleventh century[a]. Four of these towers are pierced with several rows of small semicircular windows; the fifth with semicircular openings alternating with openings in which the pointed arch is feebly discerned.

The chancel of the Church of Notre Dame, a chef d'œuvre of the primary pointed style, was commenced about the year 1110, and finished about the middle of the thirteenth century[b]. From its great extent, this chancel forms of itself a large church, and by the beauty of its architecture and the boldness of its construction, may sustain a comparison with the most admired religious edifices of the pointed style[c]. It is 190 feet (Tournay measurement) in length, 100 feet wide, and 111 feet high to the top of the work. Its vaulted roof, which is pointed and groined, rests upon twenty pillars of more than 80 feet in height, composed of long and slender clustered columns, of such tenuity that we stand amazed at the hardihood of the architect who furnished a support so weak in appearance to a mass of the extent and weight of the three vaults which they have sustained for so many centuries. Nineteen large pointed windows, many of which are ornamented with stained glass, remarkable for their

[a] The introduction of bells is attributed to St. Paulin of Nola, of the Kingdom of Naples, who lived in the fifth century; they were called *Campanæ* and *Nolæ* of the province and of the city where they were first introduced. Before Charlemagne, bells were rare in France and Belgium, and of small weight. It was sufficient to place them between two thin joists on the gable of the church porch. Under the reign of this emperor bells became much more numerous; but one bell to a church was generally considered enough, and their use was confined to cathedrals and parish churches; there was nothing however at this time corresponding to the towers of churches subsequently erected. The bell towers were generally merely four pieces of wood, surmounted by a very simple roof, forming a double gable. They were generally placed at the point of junction of the four arms of the cross, and were only raised some few feet above the ridge of the church. It was only in the eleventh or the latter part of the tenth century that they commenced to build towers properly so called. These towers flanked the principal entrance of the church, of which they were generally not higher than the gable, and mostly not so high. Sometimes these towers were erected at the side doors of the churches, or were entirely separate from the church. Roman or transition towers as high as the five towers of the Cathedral of Tournay, could not certainly have been constructed before the end of the eleventh century. These were probably built after the fire which destroyed the upper part of the church in 1054.

[b] The vaulting was not finished till 1242. The ancient chancel was formed of a circular Byzantine apsis, similar to those of the transepts. According to the manuscript annals of Tournay, quoted by M. Hoverlant in his "Essai Chronologique pour servir à l'Histoire de Tournay," vol. iii. p. 163, the new chancel was commenced as early as the latter half of the eleventh century, since it is there said that Bishop Radbod the second, in 1068, contributed to the expense of this building.

[c] The chancel (of the Cathedral of Tournay) may pass for one of the finest that can be seen. "Voyage Littéraire de Deux Religieux Bénédictins," vol. i. part 2. p. 215.

antiquity, complete the decoration of this admirable chancel, the outer walls of which are supported by double flying buttresses [a].

The grand entrance of the Cathedral of Tournay appears to have been constructed about the same time as the chancel. Thirteen lancet-pointed arches, the imposts of which rest on very slender pilasters, support a flat roof, bordered by a balustrade composed of small pointed curves. The walls of the door under this portico are ornamented with statues, and covered with figures in alto and bas relief, representing the principal events in the legend of St. Piat and St. Eleuthère, the first Christian apostles of Tournay. The lower figures are as ancient as the entrance itself; those on the upper portions were not sculptured until 1589; they are probably nothing more than a modern copy of those which existed there before, and were destroyed by the Calvinists in the revolution of the sixteenth century. Above the platform of the porch or portico which we have been describing, the front wall of the nave of the church presents a large blank pointed arch, inclosing three long lancet windows, over which are three bull's-eye openings [b], placed in a triangular form; it is crowned with a cornice, and flanked at the angles with two slightly projecting buttresses [c].

CHURCH OF ST. VINCENT AT SOIGNIES.

The parish, and formerly collegiate church, of the little city of Soignies, was built by St. Vincent Maldegaire, in 650 or 655, and rebuilt in the manner in which we now see it, by St. Brunow, Archbishop of Cologne, in 965 [d]. The great nave is, like that of Tournay Cathedral, separated from the aisles by two rows of semicircular arches, placed one over another. In both of these churches the upper arches form a gallery or triforium over the aisles, but while in Tournay Cathedral all the arches spring from square pillars, in the Church of Soignies the lower pillars alternate with cylindrical columns, and the arches of the upper gallery rest on round columns only. The naves of the Church of St. Vincent are lighted also by small semicircular windows, and have neither flying buttresses nor counterforts. The choir and transepts are lower than the rest of the building, and are terminated by flat walls. Those of the

[a] Between the arches and the windows of the nave of the chancel formerly existed a very fine gallery, composed of trefoiled openings in couples, resting on columns. M. Renard, who is entrusted with the restoration of the Church of Notre Dame, proposes to throw this gallery open, which was probably filled up at the period when Louis XIV., master of Tournay, gave directions to strengthen the chancel with enormous bars of iron, traversing it horizontally.

[b] It is pretended that there existed formerly rose windows.

[c] We find a view of the principal entrance of the Cathedral of Tournay, in the "Voyage Pittoresque dans le Royaume des Pays Bas," vol. i. fig. 190.

[d] Ghisleberti "Chron. Hann." p. 15; Balderici "Chron. Camerac." Lib. II. c. xxxi.

two transepts are pierced with three lancet windows; similar openings occur in a chapel to the right of the narrow passage which surrounds the chancel, like an aisle. These are the only vestiges of the pointed style that occur in this church, which, with the square tower at the head of the nave, is entirely Roman.

The great door of the Church of Soignies is also pointed, but appears to be of much more recent construction than the rest of the building.

CHURCH OF STE. CROIX AT LIÈGE.

Among the numerous churches in the city of Liège, a great many are of Roman architecture; one only, that of Ste. Croix, belongs partly to the transition style. This church was erected in the latter half of the tenth century, and was consecrated by the celebrated Bishop Notger, October 23rd, A. D. 979 [a]. It was afterwards rebuilt, but the tower and apsis, at the head of the naves, are undoubtedly of the first period [b]. The tower erected over the apsis is octagonal, with an elliptical roof, and is pierced on each of its sides by twin semicircular openings, inclosed in a larger blank arch. The apsis is pentagonal, ornamented with a row of narrow lancets, partly blank, surmounted by a gallery of columns supporting semicircular arches [c]. The body of the Church of Ste. Croix is a fine specimen of the secondary pointed style, and seems to date from the fourteenth century. One very remarkable peculiarity is observed in this church, which is, that the vault of the aisles is much higher than that of the great nave, from which they are separated by very tall and slender cylindrical columns. The ends of the transepts contain two large windows, the ogive of which is ornamented with a fine rose. The chancel, which has no aisles, is lighted with long and elegant lancet windows filled with stained glass [d].

CHURCH OF ST. PIERRE AT TOURNAY.

Tournay possesses more buildings of the transition period than any city in Belgium; most of its ten parish churches belong to this style. We do not know the date of the construction of these buildings, but none of them appear to have been erected later than the eleventh or twelfth century, and many of them might even be

[a] "Anselmi "Gesta Pontif. Traject. et Leod.," cap. 52.; apud Chateauville, vol. i. p. 204; "Chronicon Episcop.," etc., ibid. in fine volum. ad ann. 979.

[b] The external facing, of blue stone, of part of the apsis, which is built of calcareous ferruginous stone, appears to be nevertheless of a little more recent date.

[c] The apsis and tower of Ste. Croix, are engraved in the second volume of "Hope's History of Architecture." This drawing, like nearly all in this work relating to the buildings in Belgium, wants fidelity.

[d] There is a view of the exterior of the Church of Ste. Croix in the "Délices du Pays de Liège."

attributed, at least in part, to the tenth century; such is the Church of St. Piat, and such was not long since the Church of St. Pierre, which was considered the most ancient church in the city[a]. It was entirely of Roman architecture, but the four internal faces of the tower contained each three blank lancet-pointed arches slightly rounded, the centre arch being higher than those on each side of it[b].

CHURCH OF ST. PIAT AT TOURNAY.

The Church of St. Piat appears to be of a very early date. Large cylindrical columns, with very plain capitals supporting pointed arches, divide the body of the church into three parts. The windows of the great nave are semicircular. The chancel and aisles of the nave are of a much later construction than the rest of the building. The square tower, terminated by a four-sided pyramid, is of the Roman style, but in the arches of the several tiers of small windows, as well as in the towers of the cathedral, the ogive is already apparent, although traced in a feeble manner, and, as it were, by accident. The porch is of the pure Roman style, but the door and windows have been filled up in the fourteenth or fifteenth century, and replaced by a door and large window in the pointed style.

CHURCH OF ST. BRICE AT TOURNAY.

The Church of St. Brice is a building of nearly the same extent as the Church of St. Piat, and, similarly to that church, is divided into nave and aisles by arches partly pointed and partly semicircular. This church has a lofty square tower in the pointed style.

CHURCH OF ST. JACQUES AT TOURNAY.

The Church of St. Jacques is ornamented with a square tower in the transition style, crowned with a wooden spire[c]. In this church we find blank semicircular arches, and also a large blank, pointed, trefoiled arch, the lower cusps of which spring from small engaged columns. The pointed arches of the nave, which spring from large cylindrical columns, are surmounted by a gallery formed of small isolated cylindrical columns, alternating with coupled columns, and supporting pointed arches. Above this gallery runs a second, composed of lancet arches on square pilasters.

[a] According to Cousin, however, it was destroyed by Foulques, Bishop of Tournay and Noyon, in 954: (Cousin, "Histoire de la Ville de Tournay," vol. ii. p. 26.) Therefore, if the demolition of the church was complete, it could not have been rebuilt till the latter half of the tenth century.

[b] The great age of the Church of St. Pierre necessitated its demolition a few years ago. M. Renard, entrusted with this work, has made a correct plan of it, and drawn the principal parts of the building.

[c] This spire has been recently destroyed.

These two galleries surround the principal nave, without being interrupted by the transepts[a]. The chancel, rebuilt in 1365, is in the secondary pointed style.

CHURCH OF ST. JEAN AT TOURNAY.

The entrance of the Church of St. Jean is pierced by three connected lancet windows, surmounted by a large blank bull's-eye opening. The principal nave, separated from the aisles by pointed arches and cylindrical columns, is lighted by a row of small lancet windows, covered on the outside of the church by pointed arches springing from square pilasters. The tower belongs to the transition style.

CHURCH DE LA MADELEINE AT TOURNAY.

The chancel of the Church de la Madeleine, terminated by a flat wall, is lighted by eight twin lancet windows, the archivolts of which rest on engaged columns. The windows of the great nave have elliptical arches. The two extremities of the transepts are each pierced by three lancet windows, inclosed in a semicircular arch, the centre one being surmounted by a bull's-eye opening.

The interior of the church, divided into nave and aisles by cylindrical columns and pointed arches, has been altered by modern restorations.

CHURCH OF ST. QUENTIN AT TOURNAY.

Of all the ancient churches of Tournay, the most interesting, next to the cathedral, is that of St. Quentin, opposite *la Grande Place*. This church, and that of Pamela at Audenaerde, which we describe further on, merit the serious attention of archæologists, as presenting the most perfect model of religious edifices constructed in the transition style[b]. We possess no more authentic account of the date of the construction of the Church of St. Quentin than of the other churches of Tournay of which we have just spoken. We only know that it existed before the tenth century, and that it was destroyed, with the Church of St. Pierre, by Foulques, Bishop of Noyon and Tournay, in 954. It would appear, therefore, that the present church must be subsequent to the first part of the tenth century; it would even date only from the latter half of the following century, if, in 1054, it shared the fate of the city of Tournay, which was then sacked and reduced to ruins by the Emperor Otho III.

[a] Cousin, "Histoire de Tournay," vol. ii. p. 158.

[b] The importance of the Church of St. Quentin, in a monumental history of Belgium, does not seem to have been appreciated by any of our artists or writers; at least there does not exist up to this time any engraving or description of it. It is the same with all the other churches of Tournay, with the exception of the cathedral.

However this may be, the Church of St. Quentin, in the state in which it exists at the present time, is of the ordinary form of a Latin cross, and is of moderate size. The porch, terminated by a triangular gable[a], is flanked by two turrets, which run up the whole height, and are terminated pyramidally. The Roman porch, with moulded archivolts springing from columns, is surmounted by three lancet arches, of which the centre is higher than the side arches. On each side of the latter we find an arched niche without any mouldings. These arches are surmounted by three other arches exactly similar; their decoration is precisely the same as that of the door, having channelled and moulded archivolts springing from cylindrical columns. The interior of the church contains a nave only, which is terminated at the transepts by pointed arches springing from round columns. The left side of the nave is pierced by two rows of semicircular windows, covered on the outside of the church by very bold semicircular arches. The right side has no openings, but large blank semicircular arches, without any kind of ornament. The flat walls which form the extremity of the transepts are each ornamented with a bull's-eye opening, inclosed in a flat arch supported on either side by lancet windows, with their arches springing from small columns. The chancel, terminating in a circular apsis, is supported by pointed arches resting on cylindrical columns. It is lighted by semicircular windows, and the aisles by narrow lancet windows.

ABBEY OF ST. BAVON AT GHENT.

The Abbey of St. Bavon at Ghent, founded by St. Amand about the year 608, was formerly one of the most considerable and renowned monasteries in Belgium. The abbey church, which was reconstructed on a larger and grander scale in 935, was not finished for a long time afterwards, for it was only in 1138 that the foundation of the principal tower was laid[b]. The revolutionists of the sixteenth century so completely effected its destruction that, with the exception of the door which joined the cloister to the church, no vestige whatever remains. As far as the large bird's-eye view of the city of Ghent, drawn in 1534[c], allows us to judge, it should belong

[a] This entrance or façade is the only external part of the church that can be seen; the rest of the building is concealed by private houses; one can, however, walk round part of the church, by means of a narrow passage separating it from the neighbouring houses.

[b] "Annal. St. Bavonis apud de Smet, Corpus Chron. Fland." vol. i. pp. 445 and 448.

[c] This plan was engraved for the last edition of Van Vaernewyck. ("Historie Van Belgis," vol. i.) There does not exist any other engraving of the ancient Abbey of St. Bavon; but M. van Lokeren says, in his notes to the History of Jean de Thielrode, that M. Delbecq, tutor at Ghent, possesses a drawing of this monastery by Arnould van Wynendaele, who died in 1592: ("Chron. de. St. Bavon," by Jean de Thielrode, p. 161.)

partly, at any rate, to the transition style, and consists of a Latin cross with a chancel and small transepts. The great tower which was in front of the nave was of a square form, and crowned by a spire of wood, with a balustrade at its base, and a turret at each of its four angles. Three other towers with pointed spires, but of a less height and earlier style, were placed one at the centre of the transepts, and one on each side of the chancel. The cloister of the abbey, of Roman architecture, of which some very curious remains still exist, was erected, according to M. Van Lokeren, in the first half of the ninth century (between the years 813 and 834[a]). We believe it to be of more modern date, by a century at least, for according to the "Annales de St. Bavon," published by De Smet, the prebendary, the Abbey of St. Bavon was destroyed by the Normans in 851, and rebuilt in 937 and 946[b]. The octagonal chapel of St. Macaire, in the centre of the cloister, is also Roman, although its consecration did not take place until the year 1179[c]. The large refectory of the abbey, pierced with pointed windows, dates only from the fifteenth century; it was converted into a church in 1835.

CHURCH OF STE. GERTRUDE AT NIVELLES.

The church of the former Chapitre de Dames Nobles at Nivelles, now the first parish church of the city, was rebuilt about the end of the tenth, or the beginning of the next century, on the site of that founded by Ste. Gertrude, in 645. The solemn consecration of the new church, at which the emperor Henry IV. assisted, took place in 1047[d]. The church of Ste. Gertrude is a vast building, 320 feet in length, and of Roman architecture, except the square tower at the head of the nave. This tower, of very simple and even clumsy construction, appears to date only from the fourteenth or fifteenth century. It rises to a height of 310 feet (Nivelles measurement), comprising a wooden spire with which it is surmounted, and which was considered the highest in Brabantia before the upper part was destroyed by lightning to the extent of about eighty feet[e]. The choir, which is large but without side spaces, and the nave and

[a] Chron. by Jean de Thielrode, p. 160.

[b] "Corpus Chron. Flandr." vol. i. pp. 443 and 444.

[c] Ibid. p. 448. The entrance of the ancient château of the Counts of Flanders belongs also to the pure Roman style, although it dates only from 1181. We could cite several other edifices in Belgium, erected in the twelfth and thirteenth centuries, in which the semicircle exists without mixture of the ogive.

[d] Sigeb. Gemblac. chronogr. ad. ann. 1047.

[e] Before this disaster, which took place in 1804, the height of the tower was 400 feet. The spire, constructed in 1643, in place of another which was destroyed by a hurricane in 1641, is of octagonal form, and ornamented with five dormer windows, the gables of which are surmounted with gilt balls.

aisles, formerly supported by square pillars carrying semicircular arches, were completely modernized in 1754[a]. The great size of this beautiful church, and the height of its vaults, render its appearance very imposing. The exterior of the church, pierced with small semicircular windows with imposts resting on simple piers, has preserved its original form unchanged. On the left side of the choir the ancient cloister is still to be found, similar to that of the Church of Notre Dame at Tongres, the earliest building of its kind in Belgium. It consists of a square court or green, surrounded by a gallery of cylindrical columns of small diameter, supporting semicircular arches on three sides of the square, and pointed arches on the fourth and part of the other three sides. The construction of this cloister appears to be of the same date as the church, with the exception of the pointed part, which we believe to be of the end of the eleventh or beginning of the twelfth century[b].

CHURCH OF ST. DONAT AT BRUGES.

All that we know of the monumental history of the Church of St. Donat, the ancient cathedral of Bruges, is that Bauduin Bras-de-fer, first Count of Flanders, erected it in 865, on the site of a small chapel consecrated to the Virgin[c]. The historians of Bruges preserve the strictest silence upon the changes to which this church must afterwards have been subject. According to Custis, the Roman chancel, which existed in the last century, was no other than the identical church erected by Bauduin; but the engravings which represent the church of St. Donat, in "Flandria Illustrata," and in the "Délices des Pays Bas," do not admit of our fixing its date before the eleventh century[d]. The naves of the church, which appear never to have been finished, were of a moderate size, and of the pointed style of the fourteenth century. The transepts, of Roman architecture, were very short, and the tower raised at their intersection very low, and crowned with an obtuse four-sided roof[e]. The plan of the church, published by M. Rudd, in his "Collection des principaux Monumens d'Architecture, etc., de Bruges," gives us an idea of the internal arrangements of this

[a] It was at this time that, in order to make the chancel on a level with the nave, a great part of the crypt was destroyed, the construction of which is attributed to Ste. Gertrude.

[b] We find a view of the exterior of the church of Ste. Gertrude, in the "Théâtre sacré du Brabant," by Sanderus, edit. of 1726, and a drawing of the cloister in the "Châteaux et Monumens des Pays Bas," vol. ii. No. 158. This poor lithograph gives but a faint idea of the building.

[c] "Chron. de St. Bavon. Corpus Chronic Flandr." tom. i. p. 477. Custis, "Jaerbocken der Stadt Brugge," 1 deel. bl. 40.

[d] In the ninth century, even the largest churches were terminated by a circular or angular apsis, and not by a long chancel surrounded with aisles, and supported outside by flying buttresses, similar to those of St. Donat.

[e] The tower, which fell down in 1316, must have been of greater height. (Custis, vol. i. p. 312.)

building, very irregular, and unworthy in every respect of the title of episcopal church, which it received in the sixteenth century [a]. It is not the plan of the ancient church of St. Donat that we find in the work of M. Rudd, but that of the former church of the Jesuits, now the parish church of St. Donat.

There does not now remain the least vestige of the church of St. Donat, which was destroyed by the French government at the end of the last century, and the site is now occupied by a promenade adorned with a statue of the celebrated painter Van Eyck.

CHURCH OF ST. SERVAIS AT MAESTRICHT.

The Church of St. Servais at Maestricht, founded by Saint Monulphe, bishop of that city, in the sixth century, and rebuilt in the ninth century and subsequently, contains a circular apse, and five very remarkable Byzantine towers [b]. The interior of the church has lost in a great measure its primitive character; the arches of the great nave are indeed semicircular, but the windows are in the secondary pointed style. Of this latter period, also, is the superb cloister attached to the church, in a perfect state of preservation [c]. But the most remarkable feature of the Church of St. Servais, and which alone has induced us to mention this building, situated as it is in a city at this time beyond the limits of Belgium, (to which the question of the academy confines our attention,) is the magnificent porch in the transition style, by which the south side of the church is entered. As the fine engraving which represents this porch in the large work of M. Goetghebuer, gives a more exact idea of it than could possibly be derived from the most minute description, we shall content ourselves with saying a few words as to the general arrangement of its plan. The porch of St. Servais, built in front of the right aisle of the church, has externally the form of a small chapel (*ædicula*) of very plain construction, the only decoration

[a] See the "Itinéraire de l'Abbé de Feller," vol. ii. p. 374.

[b] The authors of the excellent "Annuaire de la Province du Limbourg," published by the society of Friends of Science, Letters and Arts at Maestricht, attribute to Charlemagne the construction of the chancel, and of the large building surmounted by three towers in front of the nave of the church of St. Servais, and pretend that the great nave and its aisles date from the time of the episcopacy of St. Monulph, founder of this church. ("Gregor. Turon. de Gloria Martyr," c. 72.) The authors of the Annuaire are deceived, for the nave, and particularly its aisles, are evidently of much more recent construction than the other parts of the church. The crypt, under the chancel, which was for the most part destroyed in 1811, was, in all probability, the only remains of the first church, erected by St. Monulph in honour of St. Servais.

[c] This cloister is formed of three spacious galleries, with pointed and groined vaults, surrounding a square green, and lighted by numerous magnificent windows of the richest and most elegant design. It was commenced in the fifteenth century, by Léonard Rolands, cloisteral monk of the chapter, and finished at his expense.

consisting in a flat arched door and a small triangular gable. The interior is, however, very much richer in decoration. It represents a *nartex* or vestibule about thirty feet long, and fifteen wide, roofed with pointed vaults with groined mouldings. Each of the two side walls is ornamented by three blank Roman arches, the archivolts of which spring from cylindrical columns with capitals imitating the Corinthian order. A cornice, ornamented with leaves of the acanthus, separates these arches from a second row of similar arches, in which are placed three statues. These last arches are in their turn surmounted by three statues of angels. The further end of the porch consists of a magnificent and deeply recessed pointed arch, with the tympanum filled with figures in high relief. The mouldings of the arch, recessed one within another, are composed of torus mouldings, foliage, and small statues, and spring from groups of columns, against which are placed, upon plinths, eight large statues of saints.

Such is the splendid porch of St. Servais. We have sought in vain for the date of its construction; but the style of its architecture, its ornaments, and its Byzantine sculptures, lead us to fix it in the eleventh century [a].

CHURCH OF ST. PIERRE AT YPRES.

The parish church of St. Pierre at Ypres, erected in 1073, by order of Robert-le-Frison, Count of Flanders [b], has a remarkable tower and door in the transition style. The tower, square in form, and of heavy construction, is placed in front of the nave of the church. The principal door by which we enter on this side occupies the base of the tower; its semicircular archivolt is ornamented with torus mouldings, which spring on each side from three columns, with capitals of fantastic and monstrous shapes. Higher up are seen three connected semicircular windows, the imposts of which rest on columns with pseudo Corinthian capitals; they are surmounted by two

[a] "The series of seated sovereigns that adorn the pointed archivolts, supported by coupled columns, which are found on the two sides of the interior door, appear to us to represent whole dynasties of kings and emperors, all patrons of this church; perhaps were they contributors towards the erection of this porch, although no document that we are acquainted with informs us of the period." (Annuaire de Limbourg.)

The authors of the Annuaire conjecture that the first statue on the left of the entrance might represent Gerberge, daughter of the Emperor Otho the Great, and wife of Prince Sigebert, who displayed great liberality towards the church of St. Servais, and probably founded this porch.

The "Voyage Pittoresque dans le Royaume des Pays Bas," contains a view of the exterior of the Church of St. Servais, and of that of St. Jean, adjoining. The latter, now a Protestant church, is ornamented with a splendid tower of the secondary pointed style. ("Voyage Pittoresque," &c., vol. ii. No. 89.) This fine tower, which, according to the original design, should have been crowned by an open worked stone spire, was built in the early part of the fifteenth century; it was still in progress in 1450.

[b] Gramaye, Brugæ, p. 178.

rows of arches, semicircular and coupled. The four sides of the tower are each pierced by two connected semicircular openings, springing from columns, and inclosed in a blank pointed arch. The body of the church, rebuilt in the fourteenth or fifteenth century, possesses nothing in its architecture of an interesting character, which is of the secondary pointed style.

CHURCH OF ST. MARTIN AT ST. TROND.

The church of St. Martin at St. Trond, should date from the eleventh, or perhaps even from the end of the tenth century. It has a Roman tower and a porch of the transition period with a lancet door, surmounted by two blank semicircular arches springing from columns. The semicircular arches of the nave are supported by square pillars. The arch on the right of the chancel, and the windows which light the latter, are pointed; those of the nave and aisles are all semicircular.

ABBEYS OF TRONCHIENNES AND SAINT TROND.

The church of the Abbey of Tronchiennes near Ghent, and that of the Abbey of St. Trond in the province of Liège, were two very important constructions of the eleventh and twelfth centuries, but of which, from the want of proper documents, we cannot give any architectural description; we must confine ourselves, therefore, to recording what the chronicles of these monasteries teach us with respect to the erection or rebuilding of these edifices.

The Abbey of Tronchiennes, founded by St. Amand, in 606, had been destroyed by the Normans in the ninth century, and was rebuilt by Baudin-le-Chauve, Count of Flanders, in 884[a]. In 1075, Folcard, Mayor of Tronchiennes, commenced the rebuilding of the church of his monastery upon a more noble and extended plan[b]. Godezon, his successor, continued the work in 1088[c], but the consecration of the church did not take place till 1174. The Abbé Gilles built a new chancel in 1552, and in 1579 the revolutionary assembly of Ghent sold the church and all the monastic buildings, with the condition that the purchaser should completely destroy them in the space of seven weeks. There remained no vestige of these buildings, when, in the following century, the monks of Tronchiennes, who had taken refuge in Ghent during the disturbances, rebuilt their ancient monastery, which has lately been converted into a Jesuit convent.

[a] "Descriptio de origine Conventus postea Abbatiæ Trunchinensis." (De Smet, Corpus Chronic. Flandr., vol. i. pp. 592 and 593.)

[b] Ibid. p. 597.

[c] Ibid. p. 599.

According to the ancient chronicle of the Abbey of St. Trond, written in the thirteenth century by Rodolphe, abbot of this monastery, the church and part of the abbey buildings were rebuilt with the greatest splendour, by the Abbot Adelard the second, in the latter half of the eleventh century[a]; the chronicle gives no description of these buildings, which were entirely destroyed by fire in 1085[b]. Scarcely a twelvemonth had elapsed after this disaster, when the army of Henry, Bishop of Liège, reduced to ashes the whole city of St. Trond, with the few abbey buildings that the former fire had spared, and those that the Abbé Lanzon had begun to erect[c]. The Abbé Thiérri, elected in 1099, undertook the restoration of the cloisters, the crypt and the chancel of the church, which were consecrated in 1102. Rodolphe, his successor, and author of the Chronicles from which we have collected these remarks, continued the works; he nearly completed the erection of the church, which was consecrated on the 28th September, 1117[d]. At this point the information ceases that the Chronicle of St. Trond furnishes concerning the history of this abbey. We have searched without success in many other writings for documents relating to the restoration or reconstruction of the church or monastic buildings undertaken in the middle ages. The latter were rebuilt in the modern style in 1752. The church, which had preserved its ancient form, was also for the most part modernized about 1779. After the suppression of the abbey in 1796, the church was rased to its foundations, with the exception of the square tower, a building of very plain construction, crowned with a wooden spire, which was restored in 1779[e].

PARISH CHURCH OF NOTRE DAME AT BRUGES.

Tradition ascribes the origin of the Church of Notre Dame at Bruges to a small chapel founded by St. Boniface, about the year 745[f]. In 1091 this chapel was raised to a collegiate church, and it was then, or a few years after, that the foundations

[a] "Chron. Abbatiæ Trudon," lib. 2. apud d'Achery, Spicileg. vol. ii. p. 663.

[b] "Anno tertio prælationis ejus (Lanzonis) super nostros, septimo idus Martii, combustum corruit mirificum illud et pulcherrimum opus monasterium nostrum, quod incomparabilibus in hac nostra terra columnis et tectura irrecuperabili bene consummaverat pia sollicitudo abbatis Addelardi II. . . . Cecidit igitur tandem, cecidit illud monasterium, cujus simile amplius nostrum non habebit cœnobium, illæque mirabiles columnæ super quibus labor, expensæ, studium, opus, pulchritudo, magnitudo referri digne vix potest, ita funditus igne resolutæ corruerunt, ut de duodecim reformari non posset una similis prædictarum. Ibid. p. 666.

[c] Chron. Trud. Ibid. p. 668.

[d] Chron. Trud. Ibid. pp. 696 and 704.

[e] The tower, which existed in the latter part of the eleventh century, was remarkable for its height and the solidity of its construction.

[f] Dalpierre, "Guide dans Bruges," 2nd edit. p. 66.

were laid of a much larger church, the chancel of which was finished, by order of Charles-le-bon, count of Flanders, in 1119[a]. This church, or at least the nave and aisles, was rebuilt, in a great measure as it now exists, in the year 1180, by Gertrude, widow of Rodolphe, lord of Gruthuse, governor and viscount of Bruges, and by Jean de Gruthuse his son. The consecration of this church took place in 1185[b].

The Church of Notre Dame at Bruges is eighty metres long and sixty wide, and is divided into five avenues or naves by four rows of columns, composed of long thin cylindrical clustered columns, with pseudo-Corinthian capitals[c]. In the chancel the clustered columns alternate with large massive round columns. The *triforium*, which runs above the pointed arches, both of the principal nave and the chancel, is formed of elliptical arches springing from square pillars. The exterior of the church possesses nothing of a remarkable character, except a handsome porch in the secondary pointed style, placed at the left transept, and also a high tower at the head of the naves. The square part of this tower, begun in 1230 and finished in 1297, belongs to the transition style. Its heavy and massive spire, constructed of brick like the rest of the church, was not built till 1522. The four turrets which flank the base of this tower were destroyed in 1760. The total height of the tower was 432 or 442 feet, (Bruges measurement,) but of late years the top of the spire has been removed[d].

CHURCH OF ST. SAUVEUR AT BRUGES.

The Church of St. Sauveur, the present cathedral of Bruges, is supposed to have been founded by St. Eloi, bishop of Noyon, about the year 652. Reduced to ashes in the beginning of the twelfth century, the Church of St. Sauveur was rebuilt immediately afterwards, and consecrated April 27th, 1127. A second fire ravaged this church April 13th, 1358[e], but the damage caused by this disaster seems to have been confined to the destruction of the vaults and the combustible materials of the building, the church at present existing of the Roman and pointed styles being evidently

[a] Custis, "Jaerbock. van Brugge," 1ste deel. bl. 118.

[b] Beaucourt de Noortvelde, "Description de l'Eglise de Notre Dame à Bruges," p. 18. De Reiffenberg, "Essai sur la Statistique Ancienne de la Belgique," part 2, p. 113.

[c] In the second left avenue are to be seen several horse-shoe arches and cylindrical semi-columns with capitals, surmounted with crocketed volutes. The second right avenue is formed of similar columns and lancet arches. These constructions, more ancient than the other parts of the church, are, in all probability, a remnant of the church which was rebuilt about the close of the eleventh or the beginning of the twelfth century.

[d] Views of the Church of Notre Dame at Bruges, in "Flandria Illustrata," vol. ii.; and at the head of the "Description de l'Eglise de Notre Dame," by Beaucourt de Noortvelde.

[e] Gramaye, "Brugæ." Delpierre, "Guide dans Bruges," p. 43. Sanderus, "Flandria Illustr." vol. ii. p. 87.

of a date prior to the fourteenth century, with the exception of the chapels which border the chancel, and some other parts of a much more recent period.

The Church of St. Sauveur, constructed entirely of brick, is a large and beautiful church of the form of a Latin cross, 100 metres long and 50 wide, the nave and aisles of which, however, are not in proportion to the large size of the chancel. The great nave and the chancel are separated from the aisles by pillars, round which are clustered cylindrical half columns. The gallery or triforium is composed of extended arcades of lancet and trefoiled arches, with the archivolts springing from square pilasters in the nave, and round columns in the chancel. The chapels of the flamboyant pointed style, which border the chancel, appear to be an addition made about the end of the fifteenth or beginning of the sixteenth century. The vaults, as well in the chancel as the naves, are pointed with groined mouldings. Flying buttresses support the large nave externally, the roofs of which are surrounded by a cornice supported by a row of little false arches, part of which are pointed and part semicircular, resting on consoles. In front of the church rises a square tower of moderate height and of the Roman style. The two doors of the church, at the ends of the transepts, are inclosed also in a semicircular arch with torus mouldings. Two blank coupled lancet arches are inscribed in the tympanum of the arch which covers the door of the northern transept. We observe also two large beautiful windows of the secondary style, of peculiar design, situated in the transepts above these doors. The other external parts of the church do not merit attention[a].

CHURCH OF THE ABBEY OF AFFLIGHEM.

The vast and beautiful church of the Abbey of Afflighem, near Alost, was built between the years 1122 and 1144[b]. According to the engraving representing this abbey in the "Brabantia Sacra" of Sanderus, the entrance, flanked by two square towers, appertained to the transition style, and the naves and transepts to the lancet period. Outside the church there are slightly projecting buttresses between the windows of the nave and side aisles. The cornice which runs along the latter and around the transepts, as well as those which ornament the fronts of the towers, rest on saw-toothed mouldings. The chancel, which nearly equals in extent the rest of the church, had been built in 1204, and appears of a more modern style. The interior of the church was completely modernized in 1762, by the architect Dewez,

[a] An engraving of the Church of St. Sauveur, in "Flandria Illustrata," by Sanderus, vol. ii. p. 82. A view of the interior of the church in the "Plans, Coupes, etc., des Monumens de Bruxelles," by M. Rudd.

[b] "Abbas Franco locum multis decoravit ædificiis et singulariter basilica insigni ac magnifico opere." (Continuatio Chron. Afflig. apud d'Achery Spicileg. vol. ii.)

who also furnished the plan of the abbey buildings, reconstructed in 1770 with a magnificence truly royal; those which were before in existence dated partly from the twelfth and partly from the thirteenth century[a]. Since the suppression of monasteries, in 1796, the Abbey of Afflighem has been almost entirely pulled down by the rapacious speculator into whose hands it fell.

CHURCHES OF ST. NICHOLAS AND ST. JACQUES AT GHENT.

The parish churches of St. Nicholas and St. Jacques at Ghent, founded, the first in 1040, and the second about the year 1100, both became prey to the flames in 1120, and were rebuilt a short time after on a much larger scale; they are now reckoned among the finest and most remarkable churches of this the second city of Belgium[b].

The Church of St. Nicholas, as rebuilt in the twelfth century, was constructed in the transition style; there still remain the principal entrance and the walls of the nave of this period. The entrance consists of a large semicircular door, with torus mouldings in the archivolts, surmounted by a long pointed window, and terminated by a triangular gable. The angles are concealed by two round turrets, ornamented with several tiers of small arcades springing from columns, of which some are semicircular and others trefoiled pointed. The large nave was formerly lighted by a row of narrow Roman windows, which are now filled up. The side entrances of the two transepts are constructed on a somewhat similar plan to the principal entrance, but in the pointed style. The other parts of the church were restored for the most part in 1427, by Liévin Boene and Jean Colins, two architects of Ghent[c]. The interior of the body of the Church of St. Nicholas is of considerable size, divided into nave and aisles by two rows of clustered columns. The arches of the choir spring from cylindrical columns. The tower, which rises at the intersection of the chancel and transepts, was built in 1406, from the plans of the architect Thierri de Steenhoukefelde[d]. It is square in plan, flanked at the angles by long and slender round turrets, and pierced on each of its four sides by four twin pointed windows, placed over each other. This tower, covered at present with a pyramidal roof, was formerly crowned by a lofty wooden spire[e].

[a] View of the Abbey of Afflighem in the first edition of "Brabantia Sacra," by Sanderus.

[b] Ghent still possesses more than forty churches and chapels; it is one of the cities of Belgium the least injured by revolutionary excesses.

[c] Diericx, "Mémoires sur la Ville de Gand," vol. i. chap. 4. Steyaerte, "Beschryv. der stad Gand." bl. 86.

[d] De Reiffenberg, "Essai sur la Statistique Ancienne de la Belgique," part 2, p. 116.

[e] See the engraving of the Church of St. Nicholas in "Flandria Illustrata," and the drawings of it, as it now exists, in the "Voyage Pittoresque dans le Royaume des Pays Bas," vol. ii. No. 83, and the "Guide de la Ville de Gand," by M. Voisin. There is also a fine engraving of this church by M. Goetghebuer.

The Church of St. Jacques belonged originally, like that of St. Nicholas, to the transition style; but, with the exception of the tower and some remains of the entrance, the exterior of this building has totally lost its primitive form. At the angles of the porch we still find two Roman turrets, one of which is covered with a square roof, and the other by a small pyramidal spire bordered by crockets. The tower of the church, placed at the point of intersection of the transepts, is octagonal, pierced with two rows of lancet windows of the rounded ogive, and surmounted by a lofty spire of wood. The interior of the Church of St. Jacques, which has also been a prey to the mutilations of the restoring architects of the seventeenth century, is large, and divided into five naves or avenues by four rows of cylindrical columns, of which those of the central nave are short and of considerable thickness; those which support the side arcades are lighter, and seem to be of more recent construction. The chancel is evidently the most modern part of the church, and does not appear to have been built before the end of the fifteenth century. Its vaults are carried higher than those of the naves, and above the side arcades runs a gallery composed of empanelled trefoils with rounded cusps [a].

CHURCH OF NOTRE DAME DE LA CHAPELLE AT BRUSSELS.

About the year 1130, Godefroid-le-Barbu, Duke of Brabant, built a chapel outside the walls of Brussels, which he dedicated to the Virgin [b], of which, in 1134, he conferred the patronage on the Abbey of St. Sépulchre, at Cambray [c]. This chapel having been raised to a parish church in 1210, under the name of Notre Dame de la Chapelle, the front part was afterwards constructed on a grander scale. The length of this church is seventy metres, and the width fifty-five metres in the transepts, and thirty-three metres in the naves. The chancel and transepts were left in their original form, and are to this day among the number of the scarce buildings of the transition style which we find in the cities of Brabant. The transepts, ornamented with blank semicircular arches, and a cornice resting on little arches in demi-relief, present no traces of the pointed style with the exception of the door, which is of entirely recent construction, and the two windows, which were probably added when the naves of the church were rebuilt. The chancel, which terminates in a pentagonal apsis, has semicircular windows with torus moulded archivolts springing from engaged columns; two of these windows, now filled up, inclose twin lancets. It is probable that similar lancets, surmounted by a rose corresponding to that which now exists in

[a] View of the Church of St. Jacques. in Sanderus, "Flandr. Illustr."

[b] This chapel formerly bore the name of Capella beatæ Mariæ Virginis extra muros.

[c] Miræi diplom., lib. 1, chap. 54; Vangestel, "Descript. Episcop. Mech." vol. i. p. 26.

one of the blank windows, were inclosed in all the windows of the chancel. The cornice which runs along the roof of the latter is ornamented with leaf mouldings and consoles in the form of grotesque heads. This cornice is divided into regular lengths by stone gargoyles. The interior of the chancel is of small size, and without side aisles; the vaulting, composed of pointed arches with groined ribs, springs from columns with pseudo Corinthian capitals placed between the windows. The fine naves of this church, of the pointed style, were rebuilt between the years 1421 and 1483. They are composed of two rows of cylindrical columns with capitals, ornamented with leaves of the colewort, and lighted by large and beautiful rayonnant and flamboyant windows, all of different designs. The windows of the aisles are in the rayonnant, and those of the large nave in the flamboyant style. Below those which light the principal nave are galleries in the form of balustrades ornamented with flamboyant openings. The tympana of the gables which surmount the chapels of the aisles on the outside, have triple blank lancet arches, those in the centre being higher than those at the sides. The principal façade of the church contains a pointed door, the archivolt of which is decorated with a garland of flowers, surmounted by a large blank window subdivided with flamboyant tracery. Two other smaller windows flank the door on either side. The lofty square tower rising from the centre of this entrance remains unfinished.

CHURCH OF ST. JEAN AU MARAIS, AT BRUSSELS.

The city of Brussels possesses another church in the transition style, the ancient church of St. Jean au Marais, attached to the hospital of that name, and converted into an infirmary about the close of the last century. This church was consecrated in 1131, by Pope Innocent II., who was obliged to quit Italy during the schism of the anti-Pope Pierre Léon, called Anaclet II.[a] The church of St. Jean, built in the form of a Latin cross, had only one nave of inconsiderable size; it was of very plain construction, and lighted on each side by a row of small arched windows. The chancel and cross aisle have pointed openings. The interior of the church, and the front below the gable, the tympanum of which is ornamented with some semicircular blank arches, have been modernized in the taste which prevailed at the end of the seventeenth century. At the junction of the nave and chancel rises a square tower of moderate height, pierced with narrow twin lancets. In place of the modern spire which crowns it there must have been originally a flat square roof.

[a] L'Abbé Mann, Histoire de Bruxelles, vol. i. p. 21.

BELFRY AT GHENT.

One of the prerogatives of those cities which enjoyed the rights of the commune in the middle ages, was the power of erecting a tower called a belfry, and suspending therein a bell or tocsin, which was sounded in case of fire, or to call the citizens to arms when the commune was threatened by any danger[a]. Originally most of these towers were constructed of wood; the first belfries in Belgium built of stone, were, to the best of our knowledge, those of Ghent and Tournay[b]; these are at the same time the most ancient of our known public edifices of the pointed style destined for secular purposes which merit particular attention. The first stone of the belfry of Ghent was laid on the 28th of April, 1183, by Siger, chaplain of the city. The works, which were often interrupted, were not finished until 1333, or rather until 1339. This monument, more remarkable for its antiquity and for its historical reminiscences than for the beauty of its architecture, is a square tower, lofty and narrow, built of freestone, and with three of its sides pierced each with ten lancet windows, divided into five rows or stages, one over the other; four of these windows inclose each two narrower lancets, separated by mullions in the form of columns, and supporting a small quatrefoiled rose. The other windows are in the form of plain lancets, and are for the most part filled up. The belfry of Ghent, however, in its present state, is only about two thirds of the height it must have been according to the plan deposited in the archives of the city[c]. By this plan the part of the belfry which remains unfinished, and for which is substituted the wretched ill-shaped construction of wood, the roof of which has been recently destroyed, differed from the rest of the tower in the richness of its ornament. "If this design," says M. Van Lokeren, "had been fully carried out, the belfry of Ghent would have been, from its arrangement and elegance of proportions, one of the most remarkable edifices of its kind in Europe; its beautiful turrets surrounded with light open work galleries, give it an appearance

[a] On one of the bells in the belfry at Ghent, bearing the name of Roland, which was cast in 1314, the following distich was formerly to be seen:

"Mynen naem is Roelant, als ick clippe dan is't brandt,
Als ick luyde, dan is't storm in Vlaenderlandt."

[b] All the cities of the commune have not possessed belfries; but in that case the tower of the principal church, or that of the Hôtel de Ville, served as one; it is doubtless for this reason that the tower of the church of Notre Dame at Antwerp, that of St. Pierre at Louvain, and many others, were constructed partly at the expense of the cities in which they served as belfries.

[c] This plan, which appears to have been completed in the fourteenth century, when the belfry had already been a long time in progress, is engraved in the "Recueil d'Antiquités Gauloises," by the canon De Bast. An engraving, representing the belfry as it now exists, and as it ought to have been constructed, accompanies the excellent notice that M. Van Lokeren has devoted to this building in the "Messager des Sciences Historiques de la Belgique," for 1839.

altogether aerial. The large trefoiled window is of unusual richness of composition, and the grotesque animals which must have adorned its sides[a], would have concurred in increasing the lightness of its appearance."[b]

BELFRY AT TOURNAY.

We are ignorant of the exact date of the construction of the Belfry at Tournay, as it is not mentioned by any of the historians of that city, nor by any other writer. Meyer, in speaking of this edifice, contents himself with saying that it was burnt down in 1491; to which Poutrain adds that it was rebuilt immediately afterwards upon its ancient foundations and original plan, "with this difference," says he, "that the upper part, which was a flat roof covered with lead, with a sentry-box at one corner, was raised higher, with a winged dragon for a weathercock, six feet in diameter."[c] However, the object for which the belfry of Tournay was erected, shows that the period of its construction could not have been anterior to the end of the twelfth century. In fact, it was in 1187 that the city obtained of Philip Augustus a charter of the commune, by the articles 39 and 40 of which the king granted to the citizens of Tournay the right of erecting a belfry[d]; an evident proof that it did not exist before. It is then at the end of the twelfth, or the beginning of the thirteenth century, that we must fix the date of the construction of this building, with which the style of its architecture perfectly agrees. The belfry of Tournay, like that of Ghent, consists of a lofty square tower, flanked at the angles by four circular buttresses. The side which faces *la Grande Place* of the city, is pierced with a pointed door, surmounted by two twin lancets, above which is a third pointed window, but larger, the summit of which terminates under an arch, also pointed, which occupies the whole width of the tower, and springs from two buttresses placed against the angles of the belfry. This arch appears to be an addition to the original building, made after the fire of 1391.

Belfries are not the only remains the construction of which is due to the establishment of communes: our cities are equally indebted to this celebrated political institution for their municipal halls and markets. The earliest of these edifices now existing, are the ancient Hôtel de Ville at Alost, and the Market Hall, which is now the Hôtel de Ville at Ypres.

[a] M. Van Lokeren means the gargoyles which appear on the plan of the belfry, and adorn the roof of this building.

[b] "Messager des Sciences Historiques de la Belgique," 3rd series, vol. i. p. 236.

[c] Poutrain, "Histoire de la Ville de Tournai," pp. 86 and 265.

[d] "Præterea eisdem hominibus Tornacensibus concessimus ut campanam habeant in civitate in loco idoneo ad pulsandum ad voluntatem eorum pro negotiis villæ."

ANCIENT HOTEL DE VILLE AT ALOST.

The date 1200, inscribed on the tower of the ancient Hôtel de Ville at Alost[a], is not the date of the construction of this tower, which was not erected till 1487, but may have been that of the body of the building, and particularly of its side and rear fronts. The ancient Hôtel de Ville at Alost, is a square building of moderate size, and perfectly isolated. The right side is ornamented by two rows of blank windows, forming trefoiled lancets, which formerly sprung from columns, of which nothing now exists but some of the capitals. The left and rear fronts are pierced by square windows, divided across by mullions. The principal façade, of very plain construction, is crowned by a beautiful balustrade composed of pointed arched openings, surmounted by battlements. At the right of the façade is a projecting building, upon which is a terrace with a balcony or tribune, from which the law was formerly proclaimed. This pavilion, probably constructed in the beginning of the sixteenth century, is richly ornamented in the flamboyant style. The tower, placed at the opposite angle of the façade, is of a square form, and is finished with a platform, surrounded by a balustrade composed of panelled quatrefoils alternating with trefoils. Above this platform rises a fine octagonal turret, pierced with eight pointed openings. On the front of the tower two niches flanked with pinnacles are seen, of which the archivolts are ornamented with crockets and a finial. They contain two statues of warriors, in the costume of the fifteenth century. Below these niches we find the motto "*Nec spe nec metu*," and the date 1200.

MARKET HALL, OR HOTEL DE VILLE, AT YPRES.

The first stone of the Market Hall, now forming the Hôtel de Ville at Ypres, was laid on the 1st of March, 1201, (new style,) by Bauduin of Constantinople, Count of Flanders; by the Countess de Champagne his wife; and by Erlebalde, or Herlibalde, grand bailiff of Ypres. The building was in progress for more than a century, and was not finished till 1304[b]. From its size, its regularity, its isolated position, and the beauty of its proportions, this superb monument of the early pointed style, an

[a] This building is now disused, but in a good state of preservation. The new Hôtel de Ville, a short distance from the old one, has a very fine façade, constructed a few years since from the designs of M. Roeland.

[b] According to M. Lambin, the belfry, which stands at the centre of the façade, is the oldest part of the market. The left wing of the building, known by the name of the Old Market, was finished in 1230; the right wing, called the New Market, was commenced in 1285, and finished in 1304. The right side of the hinder façade, called the Keeper's Lodge, was not built till 1342. (Lambin, "Memoire sur la Halle aux Draps d'Ypres," in the "Memoires de la Société des Antiquaires de Morinie," vol. i.)

undoubted evidence of the immense prosperity enjoyed by the commune of Ypres in the thirteenth and fourteenth centuries, produces the most noble and imposing effect. It is in form an irregular trapezium of 133 metres, 10 centimetres, or 484 feet of the ancient measure of Ypres, in its greatest length. The principal façade, which faces La Grande Place of the city, is composed of a ground floor, possessing formerly a covered gallery supported by columns [a], and two stories pierced by two rows of windows, models of elegance, remarkable for the correctness of their profiles. They are composed of a pointed arch, inclosing two lancets separated by a column, and surmounted by a small quatrefoil rose. In the windows of the second story these quatrefoils alternate with trefoils. Battlements, supported by consoles, on which were sculptured the heads of children, before the last restoration of the hall in 1822, run along the roof, and are terminated by octagonal turrets, ornamented with crockets and corbelled out at the angles of the façade. Between the windows of the first floor were placed in 1513, on each side of the double flight of steps [b] by which the Hôtel de Ville is entered, twelve stone statues of the natural size, of the Counts and Countesses of Flanders who reigned during the two preceding centuries. These statues were thrown down and destroyed when the French general O'Moreau took possession of the city of Ypres, December 13th, 1792. The belfry or square tower which occupies the centre of the façade, is pierced with three rows of windows similar to those of the latter façade, and surmounted by an obtuse pyramidal roof of four sides, and a turret carrying a bronze dragon. The four angles of the tower are flanked by four turrets of the same form as those which decorate the façade. The ridge of the roof is ornamented with a festoon of trefoil leaves of ragstone. The arrangement of the left side and a part of the back front of the hall, is conformable to that of the façade; and it is the same with the walls running round the interior court of the edifice. The modern building, which is a little to the rear of the hall, was not erected until the seventeenth century. The interior of the Hôtel de Ville at Ypres contains nothing remarkable but an immense hall of square form, the longest side measuring 50 metres, and the opposite 30 metres [c].

[a] "The ground floor was formerly open, pierced with arcades formed by the arches of the vaults; this must have presented a splendid *coup d'œil*, as the whole Market Hall would have appeared to be resting upon columns." (Lambin, "Memoire sur la Halle," p. 79.)

[b] This flight of steps, which is in the centre of the façade, is modern, and was rebuilt in 1822.

[c] There are numerous engravings of the Hôtel de Ville at Ypres; the finest is that in the work of M. Goetghebuer, ("Monumens des Pays Bas.") We also find views of this edifice in "Flandria Illustrata," in the "Délices des Pays Bas," and in the "Voyage de Paquet Syphorien." The lower part of the façade of the Butchers' Market at Ypres, is built in the same style as the Hôtel de Ville, which it faces. The upper story is of brick in the tertiary pointed style. We also observe in the street called *Zuyd Straet*, two antique

ABBEY OF VILLERS.

The first buildings of this celebrated monastery, founded by Saint Bernard, in 1147, in the centre of a thick forest[a], three-fourths of a league from Genappe, were nothing but poor mud cottages, with the exception of a stone oratory, built, it is said, by the founder saint himself. It was not until 1197 that the abbot Charles undertook to replace these misshapen constructions by more solid buildings[b]. We have nowhere found any indication of the period when the foundations of the church were laid; but to judge from the style of its architecture, it must have been commenced in the latter end of the twelfth or the beginning of the following century. Its consecration took place under Arnould de Ghistelles, who restored the dignity of the abbey, between 1271 and 1276. His successor, the abbot Jean, built the new chancel and the gate of the monastery. The construction of the new dormitory and infirmary, and the rebuilding of the cloisters are ascribed to the abbot Robert, about the year 1287. In the early part of the eighteenth century the abbot Jacques Hache considerably enriched and embellished his monastery by the construction of a new abbot's house, the building for the accommodation of strangers, and several other edifices. Sold for a paltry price, at the time of the suppression of all the religious orders, the abbey of Villers was completely dismantled and ruined by its new possessor. The vast remains of this splendid monastery present to this day the most imposing and picturesque aspect, which is further increased by the wild solitude in which it stands.

Four constructions of the middle ages are remarkable among the ruins of the abbey of Villers; the building formerly the brewhouse, the church, the great refectory, and the cloister.

The ancient brewhouse, probably the earliest of all the buildings now existing, seems to have been erected before the end of the twelfth century. This building, of the Roman style, is in form a long square, divided inside into two parts by a row of heavy cylindrical columns, with very plain capitals, from which spring semicircular vaults. The sides of the building are pierced each with two tiers of semicircular

houses, with façades of freestone, in the early pointed style, and even richer in decoration than the Hôtel de Ville. According to an old tradition, these houses, the construction of which may be attributed to the thirteenth century at least, were built by the Templars; however this may be, they are probably the most ancient private houses of pointed architecture now existing in Belgium. (Vide the article of M. Lambin entitled "Les Templiers d'Ypres, Messager des Sciences et des Arts," second series, vol. ii. p. 197.

[a] The wood where the Abbey of Villers was built extended, at that time, even to the gates of Nivelles. ("Hist. Monast. Villar.," Book I. chap. i. apud Martene et Durand.—"Thesaur. Anecdot.")

[b] "Hist. Monast. Villar." Lib. I. cap. iii. apud Martene et Durand.—"Thesaur. Anecdot."

windows over each other. The front terminates in a gable, and has one door and several rows of windows, also semicircular[a].

The church is a very remarkable specimen, less for the beauty and elegance of its architecture than as a model and true type of the primary pointed or lancet style. It is in the form of a Latin cross, about 250 feet long (and not 400 feet, as Gramaye, Sanderus, and other authors have asserted). The nave and aisles are supported by cylindrical columns, with round bases, and crowned with capitals in the form of long plain drums, widened at the top, and without foliage. The triforium is replaced by a row of blank twin lancets, their archivolts springing from engaged columns. As is the case in all the churches of the early pointed style, the aisles were not originally bordered by chapels, but in the fourteenth and fifteenth centuries a row of very shallow chapels was added to the left aisle. The transepts, of the same width as the front part of the church, are also divided into three parts by cylindrical columns. The flat wall which terminates the extremity of each transept, is pierced in the south transept by a large pointed window, inclosing six bulls'-eyes, or roses without tracery, placed in three tiers over each other[b], and in the opposite transept by a similar window surmounting two long twin lancets. The chancel having no side aisles, is lighted by plain lancets, and by others inclosing each four bulls'-eyes. A row of narrow lancet windows runs along the principal nave and the sides of the transepts. The exterior walls of the church are strengthened by very heavy flying buttresses. The cornice along the roof rests on a toothed moulding. The porch, prior to its reconstruction in the last century, belonged to the transition style, and was as devoid of ornament as the rest of the building[c]. There is no vestige left of the octagonal wooden belfry, which rose from the intersection of the four arms of the cross. The covering and framing of the roof of the church have also been removed, which has occasioned the fall of part of the vaulting of the grand nave, the chancel, and the transepts. With the exception of the fine modern porch, from which the casing of blue stone has been removed, the rest of the church, thanks to the solidity of its construction, is in a tolerably perfect state of preservation, and will still brave the inclemency of the weather, notwithstanding the complete neglect to which this religious relic is at present condemned.

The great refectory has the form of a trapezium of considerable size, pierced on

[a] Inter alia spectabile opus columnis fultum et vetustatem referens, coctioni cerevisiariæ deputatum. Gramaye, "Genappia," p. 25.

[b] The only windows of this kind that we know of in Belgium, are those of the abbeys of Villers and of Floreffe.

[c] Vide the engraving of the Abbey of Villers, in the first edition of the "Brabantia Sacra" of Sanderus.

three of its sides by long twin lancets, surmounted by a bull's-eye, the whole inclosed in a semicircular arch. The pointed vaulting, with its moulded ribs, has totally disappeared. The period of the construction of this building appears to be about the latter end of the thirteenth century [a].

The cloister, of which considerable remains still exist, was composed of a row of pointed arches, surrounding three sides of a green. It was of the secondary pointed style, and must have belonged to the latter half of the fifteenth century; perhaps even it was not rebuilt till the beginning of the sixteenth century, under the abbot Denis de Beverdonck, who executed some considerable works of restoration in the monastery.

The buildings that we have just described were constructed for the most part of a stone which is found in a quarry on the domains of the abbey. The other buildings, of which the ruins are seen, were all of a modern style of architecture [b].

ABBEY OF FLOREFFE.

The church of the Abbey of Floreffe, near Namur, built in 1165, and burnt down in 1188, with the greater part of the cloister buildings, by Bauduin, the fourth Count of Hainaut, was rebuilt a few years after, and consecrated in 1250 [c]. This church, 310 feet long, and 71½ wide, is built in the form of a Latin cross, and divided into nave and aisles by fourteen cylindrical columns. It is, or rather was, constructed in the transition style, for since the works of restoration or of modernization, executed in 1770, from the plans of the architect Dewez, the interior of the church has almost entirely lost its primitive character. The naves and chancel, supported by counterforts of slight projection, are lighted by two rows of windows. The lower windows are twin lancets, surmounted by a bull's-eye, and inclosed in a semicircular arch. The windows in the upper row are narrower single lancets. The extremity of the transepts is pierced by six small bulls'-eyes, covered by a trefoiled arch. In the abbey buildings, now occupied by the small school of the diocese of

[a] There exists, in the proximity of this refectory, another building which appears still more ancient, supposed to have been the winter refectory; it is also a long square, but not so large as the principal refectory. The very low pointed vault of this edifice rests on engaged cylindrical half columns.

[b] The engraving of the Abbey of Villers, in the first edition of "Brabantia Sacra," gives a sufficiently correct idea of this monastery, as it was in the beginning of the seventeenth century; but this drawing is the reverse way, so that the buildings on the right of the spectator ought to be on the left. The engraving in the "Trésor Sacré de Brabant" presents a view of the abbey after the works of addition and embellishment which were executed in the last century.

[c] Gailliot, "Histoire de la Ville et Province de Namur," tom. iv. p. 261 et 253. "Délices du Pays de Liège," tom. 1er.

Namur, the square cloister with pointed arches is observed, and the ancient hall, said to be of the counts of Namur, ornamented with their armorial bearings, and divided into two parts by six heavy stunted cylindrical columns[a].

CHURCH OF ST. LAMBERT AT LIÈGE.

The Church of St. Lambert, the ancient cathedral of Liège, was originally nothing but a small chapel, built by St. Monulphe, bishop of Maestricht, about the year 580, when the ground now occupied by the city of Liège was still a desert spot covered with wood. This chapel, enriched by St. Lambert in 709, was transformed by Bishop Notger into a large and beautiful church, begun in 1007, and consecrated by Bishop Baldéric in 1015. A fire totally destroyed this church in 1183, with the choice paintings and all the treasures it contained, with the exception of the grand altar and the shrine of St. Lambert[b]. Immediately afterwards, the foundations of a vast and magnificent church were laid, which remained till the conquest of Belgium by the French in 1794. The construction of this building occupied sixty-seven years. The Church of St. Lambert, 300 feet long in the clear, would have been still larger if the whole plan drawn in the twelfth century had been carried out, but the projected chancel was never built; that which existed was scarcely proportional to the naves. The side entrance to the left of the church is under a deep semicircular porch. The principal entrance has a porch similar to the last, only pointed, with the archivolts covered with a multitude of figures in alto and bas relief. The side walls are decorated with large statues of saints. The whole of these works of sculpture were executed by an artist native of Liège, by name Lambert Zuchman. The exterior walls of the great nave were supported by flying buttresses of a heavy and ungraceful construction. It was lighted by triple lancets, under a semicircular arch, and crowned at the level of the roof with a balustrade of curves resting on a cornice ornamented with small figured arches springing from consoles. On each side of the principal entrance was a square tower, the upper part of which, finished by a platform, was surrounded with a balustrade ornamented with panelled quatrefoils. On the right of the chancel was a third tower, higher than the two first, and surmounted by an octagonal wooden spire flanked by four turrets. This tower, of the secondary pointed style, must have been of more recent date than the rest of the church. Such was the general arrangement of the outside of the church of St. Lambert. As there

[a] A view of the Abbey of Floreffe is to be found in the "Châteaux et Monumens des Pays Bas," vol. i. No. 100.

[b] Chapeauville, "Gesta pontif. Leod," tom. 2, p. 123. De Reiffenberg, "Essai sur la Statistique Ancienne de la Belgique," 2e partie, p. 153.

do not exist, to our knowledge, any engravings or works representing the interior of the church, we shall abstain from describing this portion of the building[a]. Totally destroyed by the Liège and French revolutionists in 1794, the Cathedral of St. Lambert became a mere heap of ruins, which were cleared away in 1808; the spot on which it stood is now a public square.

CHURCH OF STE. CROIX NEAR HUY.

According to the author of the "Délices du Pays de Liège," the church of the Abbey of Ste. Croix, founded near Huy in 1211, was a splendid gothic building of three naves or avenues, 130 feet long and 95 wide. The vaulting, 90 feet high, was considered a very bold piece of construction. We have nowhere found any thing to determine the date of its erection. The tower, 200 feet in height, and surmounted by a cupola, was rebuilt in the beginning of the eighteenth century, at the same time as the right aisle. This church has been totally destroyed since the suppression of the monasteries.

ABBAYE DES DUNES.

The church and cloister of the Abbey des Dunes, founded in 1107, between Nieuport and Dunkirk, were counted among the number of the most remarkable edifices in Flanders. They had been rebuilt in the thirteenth century, from plans furnished by several abbots and monks, who are the earliest Belgian architects now known. We here quote what is said on this subject in "La Vie des Architectes," by Felibien: "Among the monks who devoted themselves to building in different countries, there were none better versed in architecture than certain abbots who were occupied in Flanders in rebuilding the church and monastery of Notre Dame des Dunes. The first who turned his hand to this work was named Pierre, and was the seventh abbot of the place; he had only intended at first to repair the old buildings, and to form certain aqueducts and canals necessary for the accommodation of the establishment; but perceiving that these repairs and additions were not sufficient to put the monastery into good order, he resolved to commence its entire reconstruction, and having laid the new foundations, died the same year. Amelius, his successor, continued the same design until 1221, when he quitted the office of abbot to pass the rest of his days in solitude. Gilles de Steene, who succeeded him, employed five years in the construction of the church, and retired in the same way as his predecessor, leaving the care of continuing the work to Salomon of Ghent, the tenth abbot, who occupied

[a] The "Délices du Pays de Liège" and the "Délices des Pays Bas," contain each an engraving of the interior of the church; a lithograph, executed on a larger scale, has just been published at Liège.

himself therein with much zeal for five more years. After this time, Salomon was succeeded by Nicholas de Belle, who surpassed all his predecessors by the love and talent he displayed for architecture, and by the grandeur of the buildings that he erected during the twenty-one years he remained abbot. Lambert de Keule, his successor, continued the works that had been commenced for five years, and then left them to Theodoric, in favour of whom he retired from his abbey. This Theodoric finished the church, which was consecrated in the year 1262, and completed all the other buildings which remained unfinished."

The Abbey des Dunes was destroyed and rased to its foundations by the Calvinists in 1578[a].

Meyer asserts that this church was the finest of all the churches of Flanders. In fact, the drawing that Sanderus has preserved to us of the Abbey des Dunes is evidence of the magnificence of this monastery. The church and cloisters, which surrounded a square court, were very lofty, and supported in every part by large flying buttresses, a proof that the interior of these buildings (of which we possess no other records) must have been of unusual beauty and boldness.

CHURCH OF ST. MARTIN AT YPRES.

The Church of St. Martin, the first parish church of the city of Ypres, is an admirable specimen of the pointed style, its height, extent, and the architectural beauty of its interior rendering it comparable to the most imposing religious edifices of France and Germany. The construction of this church in its present form dates from the thirteenth century, with the exception of the tower, which was not erected until the fifteenth century[b]. The chancel, which is the most ancient portion of the church, was commenced in 1221 by Hugues, Provost of St. Martin, as we learn from the epitaph on his tomb found in the chancel[c]. The Countess Marguerite of Constantinople and the Provost of St. Martin laid the first stone of the naves in 1254, which were finished twelve years afterwards[d]. The solemn consecration of the church took place in 1270.

The chancel of the church of St. Martin is the finest building of the transition

[a] The monks subsequently retired to Bruges, where they built a vast and beautiful monastery, which has recently become an episcopal seminary.

[b] The first church was founded in 1083, by Robert le Frison, Count of Flanders.

[c] "In piam memoriam Hugonis, hujus sacræ ædis et canonicorum regulariam præpositi, chori extructoris," &c. This epitaph replaced, in 1659, that which had been put there after the death of Hugues, and of which Sanderus has preserved a copy. It ran thus: "Hic jacet Hugo, præpositus, fundator hujus chori, anno 1221, qui obiit d. Scholasticæ, anno 1232." (Flandr. Illustr. vol. i. p. 357.)

[d] The front part of the church, built by Robert le Frison, was burnt down on the 5th of January, 1240.

style now existing in the whole kingdom. It is large and very lofty, but without side aisles. The light enters by two rows of narrow twin-lancet windows, flanked with columns, and of triple lancets without columns, inclosed in a large semicircular arch. Between these two tiers of windows runs a gallery composed of light cylindrical columns and semicircular arches.

The naves and transepts belong to the early pointed style. The great nave is separated from the side aisles by cylindrical columns, furnished with capitals of crocketed volutes. They support pointed arches, above which runs around the nave and cross aisles a gallery similar to that of the chancel, but with trefoiled pointed arches; the arches of the gallery in the transepts are moreover coupled and decorated with quatrefoils in the space between the two heads of the windows. The columns of the nave return in the two arms of the cross, and their capitals are surmounted by half-length figures of very remarkable execution for the time in which they were sculptured. The aisles of the nave have no other chapel than that of St. Sacrement, built in 1623. This chapel is large, and lighted by pointed windows, but has nothing remarkable but the wooden semicircular vaulted roof, which is divided into compartments, and painted in different patterns and colours, producing an effect more fanciful than agreeable. The pointed and groined vaults of the church present, at the intersection of the transepts, figures of the four evangelists, painted in the Byzantine style, and restored not long since[a]. The windows of the nave and aisles are composed of an ogive inclosing twin-trefoiled lancets, surmounted by quatrefoils. The external walls of the church are supported by numerous flying buttresses, and crowned by balustrades of panelled quatrefoils. The side entrance in the south transept is under a very beautiful pointed porch, surmounted by a magnificent rose, which, for its dimensions and richness of design, has not its equal in all Belgium. The large entrance in the front of the nave and at the base of the tower, is also composed of a very elegant porch, but there the sculpture is less abundant than in that of the transept. This porch and the tower were built in 1434, from the plans and under the direction of the architect Martin Utenhove, of Malines, upon the foundations of the former tower, destroyed by fire in the preceding year. Victor de Lichtervelde, burgomaster, and Anastasie d'Oulne, Viscountess of Ypres, laid the first stone. The tower remains unfinished, though it was twenty years building, but such as it is it

[a] The organ-case at the extremity of the north transept was built a few years ago, in a style conformably with the rest of the church. The organ was previously placed on a fine pointed stone gallery, which the trustees have had the bad taste to remove.

may still pass for one of the finest towers in Belgium. It is of a square form, built of brick [a], and fifty-seven metres fifty-seven centimetres high [b].

CHURCH OF STE. GUDULE AND ST. MICHEL, AT BRUSSELS.

The period of the foundation of the beautiful church of Ste. Gudule and St. Michel at Brussels, can be traced back to the eleventh century. Constructed by order of Lambert, second Count of Louvain, and consecrated in 1047 [c], it was rebuilt by Henry, first Duke of Brabant, about 1226, in the manner in which it now exists [d]. Many passages in the records of the ancient chapter-house of Ste. Gudule prove that the new church was only finished in the course of the fifteenth century [e], and not in 1273, as all the historians of Brussels have asserted. The chancel is evidently the most ancient part of the church. It belongs partly to the Roman style, and partly to the early Gothic. The rest of the church is in the secondary style, with the exception of the chapel of St. Sacrement, and some external ornaments of the nave, which appertain to the flamboyant or tertiary style. The isolated position of the church of Ste. Gudule, surrounded as it is with spacious streets, allows us to view the whole of this vast and beautiful building at once, of which, unfortunately, the regularity has been destroyed by the addition at the back of the chapels of St. Sacrement and la Vierge. A flight of thirty-six steps, with double landings [f], leads to the principal door of the church, flanked by two magnificent square towers in the finest style of secondary pointed architecture [g]. Of the four doors by which the front part

[a] The remainder of the church is constructed of freestone.

[b] "Flandria Illustrata" contains a view of the exterior of the church of St. Martin; that existing in the "Délices des Pays Bas" is scarcely correct.

[c] "Miræi Diplom." tom. i. p. 57.

[d] Rombaut, "Bruxelles illustrée," tom. ii.

[e] In that part of the archives of Ste. Gudule preserved in the depôt of the general archives of the kingdom, are to be found many bulls and briefs of the fourteenth century, granting plenary indulgences to persons who contributed funds towards the completion of the splendid restoration of the church (*sumptuoso opere fabricata.*) The most ancient of these acts is a brief of the apostolic nuncio Ambaldus, dated in the month of September, 1352. By another of these archives we learn that the right aisle of the church was in course of construction in 1398.

[f] This flight of steps is modern; it was constructed in the beginning of this century, with the remains of another flight, which itself was not constructed until 1706. That which previously existed was very irregular, and placed slanting.

[g] Foppens and Chrystyn, authors of the "Délices des Pays Bas," are mistaken in advancing that the towers of Ste. Gudule were commenced in 1518; they certainly date from the thirteenth, or the first part of

of the nave is entered, two are placed by themselves underneath each of the towers in a large blank pointed arch surmounted with a sharp pointed gable. The two other doors are joined together in the centre of the porch, and have the same decoration as the two former. They are surmounted by a large and beautiful window, with rayonnant tracery, above which the porch is finished by a gable ornamented with a balustrade or gallery formed of trefoiled tracery, blank arches, and crocketed pinnacles. Flying buttresses, also ornamented with crockets and pinnacles, rest against the sides of the chancel and the nave, which latter is surrounded at the top by a flamboyant balustrade. The gables of the chapels placed along the aisles are ornamented externally with crockets, and their tympana with denticulated festoons. The decoration of the right walls, forming the extremities of the transepts, consists of a large pointed window and a gable with crockets and blank arches. All the windows of the transepts and naves are enriched with roses, trefoils, quatrefoils, and other ornaments, belonging to the rayonnant style. Many of the windows in the chancel are in the flamboyant style, and must have been restored at the end of the fifteenth or in the sixteenth century. The windows of the chancel are composed of a pointed arch, inclosing triple lancets, surmounted by quatrefoils. Those of the aisles behind the chancel are semicircular, and flanked on the inside of the church with double columns placed one over the other. At the centre of the cross rises a wooden spire on an octagonal base, pierced with eight pointed openings[a]. The beautiful little porch placed in front of the south transept appears to be of the end of the fifteenth or beginning of the sixteenth century; its whole height is occupied by three blank arches, with the ogive rounded, separated by buttresses ornamented with panels, and supporting a flat roof, surrounded by a balustrade of quatrefoils, crowned with four crocketed pinnacles and a small statue of the archangel Michael.

The church of Ste. Gudule is 110 metres long, and 55 metres wide in the transepts and in the chancel, including the chapels of St. Sacrement and La Vierge, and 33 metres wide in the naves; the interior forms a space about 300 feet long, divided into three parts by two rows of round columns, the capitals ornamented with small bunches of foliage, joined together with cords[b]. Above the arches of the nave, and

the fourteenth century. The towers of the grand entrance were not built at that time, but the wooden belfry at the intersection of the transepts. Nor do we agree with the Abbé Mann, who considers that, according to the original plan, these towers ought to have been crowned with two stone spires, instead of the embattled flat roof which now terminates them. The imposts in the two inner side walls of the towers give room to conjecture only that these must have been united by a large flat arch of extreme boldness.

[a] This belfry has just been restored in the same style.

[b] We do not recollect having seen any capitals elsewhere similarly decorated.

along the two external walls of the cross aisle, runs a gallery, formed of small lancet arches springing from square pilasters. The gallery which runs around the chancel and along the sides of the transepts crossing it, is composed of pointed arches inclosing coupled twin lancets resting on heavy cylindrical columns, and surmounted by a small bull's-eye. The arches springing from the columns of the chancel differ also from those of the nave, which are much narrower and more pointed. The extremity of the separating walls of the chapels on the right side of the nave, is flanked by half round columns, from which the vaulting springs, but those on the left side have mouldings or members bound in clusters and without capitals. Originally the aisles of the chancel, like those of the nave, were bordered with chapels, separated from the aisles by pointed arches springing from clustered columns with crocketed capitals; but in 1534 the chapels in the left aisle were removed and replaced by the new chapel of St. Sacrement des Miracles, which was finished in 1539, and consecrated in 1542[a]. This chapel, which is very large, and occupies nearly the whole length of the chancel, is built in the tertiary pointed style. Its flat elliptical vaulted roof, which is very lofty, is covered with numerous angular moulded ribs, and is not supported by any columns. The side walls and clustered columns which separate the chapel from the aisle of the chancel, are loaded with niches, with the plinths and canopies covered with a profusion of flamboyant and twisted ornaments. The five large flamboyant windows which light the chapel, are filled with magnificent painted glass, executed from 1546 to 1549[b]. The exterior of the chapel, which is strengthened by buttresses ornamented with panels, is of very simple design. In order to make the plan of the chancel uniform, in 1649 the chapel of La Vierge was erected on the right side, of the same dimensions and form as that of St. Sacrement, but less ornamented inside than the latter, and covered with a semicircular vault with groined ribs. The chapel of la Madelaine, behind the apse of the church, was not built till 1679, on the site of the ancient chapel of St. Sacrement des Miracles. Its modern architecture contrasts very strongly with that of the rest of the church[c].

CHURCH DES DOMINICAINS AT LOUVAIN.

The church des ci-devant Dominicains de Louvain, commenced about 1230, and

[a] L'Abbé Mann, "Hist. de Bruxelles," tom. i. p. 103.

[b] Vide the excellent "Essai sur l'Histoire de la Peinture sur Verre en Belgique," by M. de Reiffenberg.

[c] Engravings representing the interior of the church of Ste. Gudule are tolerably numerous; one of the best is that in the "Bruxella Septenaria" of Puteanus. The view in "Bruxelles illustré," by Rombaut, is worth absolutely nothing.

only finished in 1376[a], is one of the good and fine constructions of the second order, executed in Belgium in the primary pointed style. Built in the form of a trapezium, without transepts, and of very plain decoration, this church is distinguished by the judgment displayed in its arrangement, and by the beauty of its proportions. It is about 200 feet long, by 50 wide. The principal nave, large and lofty, is supported by two rows of cylindrical columns, modernized in the last century, supporting pointed arches, above which rises to the height of the vaulting a wall pierced with narrow lancet openings. The aisles are lighted by large windows, consisting of an ogive inclosing triple lancets. Long and beautiful lancet windows extend from the base as high as the vault of the chancel, which has no side aisles. The great nave is strengthened exteriorly by flying buttresses. The church has no porch, and its tower is nothing but a simple belfry or wooden spire rising at the intersection of the chancel and naves.

The cloister of the convent was in the pointed style, and inclosed a square court. Having become, at the suppression of the convents, private property, it has been for the most part destroyed and replaced by private habitations. The church was raised to a parish church[b] in 1803.

THE CHURCH OF NOTRE DAME DE PAMELE AT AUDENAERDE.

The church of Notre Dame de Pamele, at Audenaerde, is doubly remarkable, first as a perfect model of the transition style, and secondly because Arnould de Binche, who furnished the plans, is the earliest known Belgian artist who made architecture his study, not only as an amateur, like the monks of the abbey des Dunes, but also as an architect by profession. The church of Pamele is therefore an edifice of the highest interest in the monumental history of the kingdom. The first stone of this temple, built at the expense of Arnould, lord of Audenaerde, was laid on the 14th of March, 1235 (new style)[c]. It was completed four years afterwards by Alix, widow of the founder[d].

The Church of Pamele, situated on the right bank of the Escaut, has the form of a Latin cross, 155 feet (ancient measure of Ghent) long, by 100 feet wide, in the arms

[a] De Jonghe, "Belgium Dominicanum," p. 130.

[b] The "Brabantia Sacra" of Sanderus, the "Théâtre Sacré du Brabant," and the "Belgium Dominicanum" of Father de Jonghe, contain views of the church and convent of the Dominicans at Louvain.

[c] We find the following inscription on the external walls of the church, "Anno Dni. MCCXXXIV. id. Martis incepta fuit eccla. ista a magro. Arnulpho de Bincho."

[d] "Notice sur l'Eglise Paroissiale de Pamele," by D. J. Vander Mersch, "Messager des Sciences et des Arts," 1st series, vol. iii. p. 424.

of the cross, 56 feet in the naves, and 56 feet high to the keystone of the vaulting. The octagonal tower, which rises at the centre of the cross, is pierced with eight obtuse lancets, flanked by columns, and covered with a low pyramidal roof. The porch contains a pointed door, with the moulded archivolts springing from clustered columns. It is surmounted by a long lancet window, on each side of which are two very narrow coupled lancets. The nave of the church is lighted by triple lancets, inclosed externally by a semicircular arch. The left aisle has single lancet windows of larger dimension. The chancel receives its light from triple lancets[a], with the points slightly rounded, and by single lancets flanked by columns both externally and internally. Turrets, ornamented with little blank pointed arches, occupy the angles of the transepts, the gables of which contain each two long twin lancets surmounted with a bull's-eye. The naves of the church are formed of two rows of cylindrical columns, carrying pointed arches; the chancel is separated from its aisles by square pillars, supporting semicircular arches. This part of the church has been disfigured by modern works of reparation. Above the arches, as well of the nave as the chancel, runs a gallery composed of small columns and lancet arches; there are no chapels in either of the aisles. The aisle on the left side has no vaulting; but the opposite aisle has vaulting, and is much larger and in the secondary pointed style, which appears to prove that it was proposed in the fourteenth or fifteenth century to rebuild the church on a new plan, which project, if it had been carried out, would have deprived the country of one of the rarest and most valued of its ancient monuments[b].

CHURCH OF STE. WALBURGE AT AUDENAERDE.

Our endeavours to discover the date of the erection of the Church of Ste. Walburge, the chief parish of Audenaerde, have not found a successful result. The chancel appears to have been built about the same time as the church we have just described, if not still earlier. It has lancet windows, and is terminated by a straight wall surmounted by a triangular gable. The extremity of each of its aisles, which are lighted by semicircular windows, and do not go round the high altar, is also finished with a gable. These gables have been pierced in the fourteenth or fifteenth century with five windows of the rayonnant style; their angles are flanked by round

[a] It is unnecessary to repeat, that in tripled lancets, or lancets joined three together, the centre one is higher than the other two.

[b] In the "Voyage Pittoresque dans le Royaume des Pays Bas," there is a view of the Church of Pamele, but it is very incorrect.

turrets, the decoration of which consists of two rows of small columns; those of the lower row being connected by blank semicircular arches. The transepts of the church, the nave and aisles, and the lofty and beautiful square tower in front of the latter, are in the best manner of the secondary style, and were probably rebuilt towards the close of the fourteenth or in the course of the fifteenth century. The transepts being left incomplete are not half the size intended by the proposed plan; they would have formed each two divisions, separated by cylindrical columns, similar to those of the principal nave of the church[a].

CHURCH OF ST. LÉONARD AT LÉAU.

The Church of St. Léonard at Léau, is another remarkable edifice of the thirteenth century. It seems to have been erected after the year 1237, for prior to that date, the Church of St. Leonard was merely a small chapel, which then replaced, as the parish church of Léau, that of St. Sulpice, situated outside the walls of that little city[b]. The entrance and the two square towers inclosing it appertain to the transition style; the chancel, of the early pointed period, is separated from its aisles by cylindrical columns, the pointed arches on which are surmounted by a blank gallery formed of engaged columns and lancet arches. A similar gallery, but open and formed of cylindrical columns, carrying trefoiled arches, runs round the exterior of the chancel. This kind of decoration is very uncommon in this part of the churches of the pointed style; that of St. Leonard is the only church in Belgium in which we have noticed it[c]. The transepts of the Church of St. Léonard, and the nave with its aisles bordered with chapels, of which several contain very curious gothic altars, appear to date from the fourteenth or fifteenth century.

CHURCH OF NOTRE DAME AT TONGRES.

Belgium does not possess a more beautiful or more interesting religious edifice in every respect than the ancient collegiate Church of Notre Dame at Tongres. This vast and imposing structure, the first origin of which is attributed to the fourth century, was rebuilt in its present style in 1240[d]. Two rows of cylindrical columns

[a] View of the Church of Ste. Walburge, in the "Châteaux et Monumens du Royaume des Pays Bas."

[b] Gramaye. Thenæ, p. 29. "Van Ghestel, Descrip. Archiep. Mechlin," vol. i. p. 242.

[c] The exterior of the apsis of the Church of Ste. Croix at Liège is also decorated with a gallery, but this apsis belongs to the transition style.

[d] In digging the foundations of the new church an entire church was found forty feet under ground. (Droixhe. "Essai Hist. et Crit. sur Tongres, Messager des Sciences et des Arts," series 1, vol. vi. p. 270.)

The style of the different parts of the Church of Notre Dame cause us to decide that its reconstruction lasted at least a century and a half.

with capitals ornamented with volutes of twisted leaves, or crockets, separate the central nave from its aisles, which have no chapels. The wall, which is carried by pointed arches springing from these columns, is decorated with a gallery formed of small pointed arches upon columns; in the right transept, and around the chancel, this gallery has trefoiled arches, and in the left transept the columns are replaced by mullions [a]. The chancel, without aisles, is piereed with splendid lancet windows throughout its whole height, the ogive of which receives on each side the springing of the vault. The windows of the principal nave consist of triple lancets inclosed in a pointed arch; those of the aisles are of the secondary pointed style. All the vaulting of the church is pointed and has groined ribs. The exterior of the church of Notre Dame scarcely yields in point of beauty to the interior of this splendid building, and is distinguished by the regularity and elegance of its proportions, not less than by the richness of its decoration; the aisles of the nave and the tower, but especially the left transept, are singularly remarkable in this latter respect. The principal decoration of the left transept was a gothic porch (now filled up) crowned by a triangular gable, flanked with two turrets crocketed. The archivolts of the arch were enriched with a profusion of sculpture, and along the side walls were placed stone statues covered with open worked canopies. A similar porch, now disused also, decorated the base of the tower in front of the nave, and served as the principal entrance to the church. The church is now entered by an elegant vestibule or *nartex*, richly ornamented in the style of the fifteenth century, and attached to the south aisle of the nave. The flying buttresses supporting the nave and the roof of the aisles are partly concealed by a balustrade of panelled quatrefoils. The chancel is furnished only with plain counterforts. The tower of the church is an enormous square mass of great height, and is crowned with a four-sided spire, surmounted by an octagonal turret. The four faces of the tower are pierced with windows in which the traeery branches into rayonnant and flamboyant figures; the angles are covered by four tiers of pinnacles or turrets retreating one over another. The first stone of this tower was laid on the 5th May, 1441

The cloister of the ancient chapter of Notre Dame, built behind the apsis of the chancel, should date from the tenth or eleventh century; it is, as we remarked when speaking of the church of Ste. Gertrude at Nivelles, the most ancient and curious structure of its kind in Belgium. This cloister consists of a square green, round three sides of which runs a gallery of light round columns alternately single and

[a] This part of the cross, and the first two spaces of the nave, of a different design to the others, cannot be of earlier date than the fourteenth or fifteenth century.

coupled. They support Roman semicircular arches ornamented with foliage and arabesques of various designs[a].

CHURCH DES DOMINICAINS AT GHENT.

This church, erected in 1250[b], is a building of a somewhat peculiar style of pointed architecture. It is in the form of a long square without transepts, and composed of only one nave, of which the wooden vaulting, remarkable for the boldness of its construction, forms a curve of sixty feet radius. The side walls of the church are pierced with two rows of lancet windows, surmounted externally by gables without decoration, and inclosed on the inside of the church in a row of pointed arches running round two sides of the nave in the form of narrow chapels. The porch contains a pointed door with torus moulded archivolts, and three large blank lancets, the centre one being higher than the other two. The tower, of a modern style of architecture, and the large elliptical window in the flat wall at the end of the chancel, were constructed in the seventeenth century, from the designs of the celebrated François Romain, monk of this convent, and architect of the Pont Royal, at Paris[c].

CONVENT DES CORDELIERS AT BRUGES.

The Convent des Cordeliers at Bruges, built in 1258, with the produce of the alms and gifts made chiefly by foreign merchants, who at that time flocked to this city from all parts of the globe, was, according to Sanderus, erected in a style of such magnificence, that it was called by no other name than "the Palace of the Minor Friars."[d] This monastery having been totally destroyed by the Calvinists in 1579, there has not existed the slightest vestige of it for a long time. The plan of Bruges, in ten plates, engraved in 1562 by Marc Gérard, painter and sculptor, indicates however, although in a confused manner, the general form of the buildings of the convent and of its church.

[a] There is no engraving representing this cloister in existence; but we find a view of the Church of Notre Dame in the "Délices des Pays Bas."

[b] Gramaye, "Gandavum," p. 21; De Jonghe, "Belgium Domin." p. 30.

[c] Steyaerte, "Beschryv. der stad Gend," p. 222.

We find a view of the Church of the Dominicans at Ghent, in "Flandria Illustrata," and in "Belgium Dominicanum."

[d] "Qui quidem conventus in tantum nominis et perfectionis splendorem pervenit, ut ei in ædificiis, structuris et hortis vix similis fuerit, adeo ut palatium fratrum minorum diceretur."—Sanderus, "Flandria Illust." vol. ii. p. 115.

ABBAYE DE BONNE-ESPERANCE.

The Abbey de Bonne-Espérance, near Binche, possessed in the sixteenth century a large and beautiful church, built in 1266, on the site of the first church of the monastery, which was consecrated in 1131, and appears to have been nothing more than a simple oratory[a]. The tower, of which the foundations were laid in 1212, fell down in 1277[b]. The new church was not entirely finished till 1291[c]. The greater part of the cloister buildings had been rebuilt in the beginning of the sixteenth century by Jean Cornu, the thirty-eighth abbot of Bonne-Espérance. When, in 1568, the confederates attacked Hainault, the army of the Prince of Orange, having pillaged the abbey of Bonne-Espérance, set fire to the cloisters and the church, which became a prey to the flames. The tower, which still remains, alone escaped this disaster. The abbey was rebuilt in the beginning of the following century, and again about the middle of the last century from the plans of the architect Dewez. The buildings, in a modern style of architecture, are in the possession of the small school of the diocese of Tournay. The tower, the only remains of the buildings prior to the sixteenth century, is of a square form, constructed of freestone, and entirely devoid of ornament.

CHURCH DES DOMINICAINS AT BRUGES.

The Church des Dominicains at Bruges, was a vast and beautiful edifice of the secondary pointed style. The chancel, commenced in 1284, was consecrated in 1311 by Olaus, bishop of Rosschild, in Denmark. The naves were not constructed until 1320[d]. Having been sold in 1798 as national property, this church was totally demolished by the builder who made the purchase.

CHURCHES OF POPERINGUE.

In the thirteenth century, the city of Poperingue, in Western Flanders, was composed of one parish only. The rapid increase of the population of this city, at

[a] J. de Guyse, "Annales Hannoniæ," lib. 17. cap. 27.

[b] Ibid.

[c] Brasseur, "Origines omnium Hann. cœnobiorum," p. 179.

[d] "Illa nunc permagnifica est trium navium fornicibus lapideis obtectarum structura."—De Jongh, "Belgium Dominic." p. 163.

Father de Jongh particularly admires the Gothic stalls in the chancel: "Chori sedilia artificiocissime sculpta et elaborata vix sibi similia habent in Belgio." "Belgium domin." contains a view of the convent and church.

that time one of the most industrious and flourishing communes in Belgium, compelled the erection of two new parish churches, the Church of La Vierge and that of St. Jean, which were built in 1290[a]. These three churches are still in existence; they are large, and have three naves or divisions, but modern restorations have totally altered the interiors; the exteriors having suffered less from these changes. We enter two of the churches of Poperingue by beautiful Gothic porches, of which the archivolts are ornamented with garlands of flowers and fruits. The third has a fine spire constructed of brick, the materials of which the churches of Poperingue, as well as most of the large edifices of Western Flanders, are composed.

BELFRY AND HALLE AUX DRAPS AT BRUGES.

The Belfry of Bruges, like the earliest buildings of this kind, was originally only a wooden tower, which was destroyed by fire in 1280. It was replaced in 1291 by a fine brick tower, of 108 metres in height, crowned by a wooden spire, which was burned down in 1741[b]. A simple roof was then substituted, which disappeared in its turn in 1822. This belfry is divided into three stories built diminishing one over the other. The lower story, pierced with a large pointed door, is crowned with a gallery formed of arched openings, terminated by battlements, and flanked at the angles by turrets corbelled out and finished also with battlements. Turrets similar to these, only covered pyramidally, decorate the angles of the second story, which is surmounted by a gallery of semicircular arches, and has two lancet windows in the front. The third story is octagonal in form, and pierced with eight lancet openings, with the ogives rounded. This story, which is the top of the belfry, is now finished by a flat roof, surrounded by a fine balustrade ornamented with panelled quatrefoils, above which are placed eight pinnacles loaded with crockets.

In 1364, the foundations of the front and sides of the Halle aux Draps were laid, of which the belfry occupies the centre of the façade, looking towards the *Grande Place* of the city. The back part dates only from the sixteenth century. This vast building, entirely constructed of brick, is of a quadrilateral form. The front is fifty metres wide, and the sides sixty-five metres, each of very regular plan. The principal façade is ornamented with three lines of windows over each other; the windows of the two first stories are pointed; those of the third story are of square form. A row of little blank trefoiled arches supports the battlements along the top. The arrangement of the sides consists of a row of pointed arches, now filled up, sur-

[a] Meyer, "Annal. Fland." anno. 1290. Sanderus, "Fland. Illus." vol. iii. p. 353.

[b] Delpierre, "Annal. de Bruges," p. 23. "Guide des étrangers dans Bruges," by the same, p. 27.

mounted by a row of square windows similar to those in the front. The buildings round the interior court of the market-place present no remarkable features, and are of very simple construction, and less regular than the exterior portions of the edifice [a].

CHURCH OF LA VIERGE AT AERDENBOURG.

The Church of La Vierge at Rodenbourg, or Aerdenbourg, (Western Flanders,) built in 1296, was, according to Marchant, Guicciardin, and Sanderus, a superb edifice, and indeed the finest church in all Flanders [b]. All the particulars that we possess of this building are comprised in these few words, that the terrible inundation of 1488, which ruined the little city of Aerdenbourg, totally destroyed it, and that the stones afterwards served to pave the streets of Flessingue.

CHURCH OF STE. WALBURGE AT FURNES.

According to Meyer, Gramaye, Sanderus, and other historians and annalists of Flanders, Bauduin de Lille, Count of Flanders, laid the foundations of this church in 1030. There is no mention by any of these writers of a subsequent reconstruction, nevertheless the existing church, to judge from the style of its architecture, does not appear to be prior to the close of the thirteenth century. Nothing remains of this church but the chancel. If the other parts of this building had been erected on the same plan, and of corresponding dimensions, the church of Ste. Walburge would have been one of the largest and most remarkable Gothic temples of Belgium. This chancel, of the primary pointed style, is very large, and of noble proportions: it is separated from the aisles, which are bordered with chapels, by cylindrical columns, of which the capitals are ornamented with crocketed volutes. The gallery above the pointed arches springing from these columns, is composed of round columns supporting trefoiled pointed arches. The exterior of the choir of Ste. Walburge is strengthened by numerous flying buttresses of very bold projection. The church has neither tower nor porch; it is entered by a little side door in the nave, which is of small dimensions, and consists only of an ill-shapen and crazy mass of stone [c].

[a] The engravings and lithographs of the Halle aux Draps of Bruges are very numerous. We shall mention only the elevation of the façade of this building in the work of M. Rudd.

[b] "Superbo opere exædificatum . . . . templum Flandriæ, totius pulcherrimum." (Sanderus. "Fland. Illus." v. 2. p. 208.)

[c] The Church of St. Nicholas, the second parish of Furnes, is a large church in the secondary pointed style; it has nothing remarkable but a square tower, surmounted by a large brick spire.

CHURCH OF NOTRE DAME AT DINANT.

The parish church of Notre Dame at Dinant, although among the number of our ancient religious edifices the most worthy of attention, is nevertheless one of those of whose history we possess the least information; all that we have been able to collect on the subject amounts to a very uncertain tradition, that this church was founded by St. Materne, first Bishop of Tongres. The architectural style of the church now existing clearly shows that it must have been built in the latter half of the thirteenth century with the exception of the windows of the naves, which were restored at the close of the fifteenth, or the beginning of the following century. Several remains of a Roman or semicircular construction, of a date evidently prior to that of the erection of the present church, render it probable also that the latter was raised on the ruins of another church, built in all likelihood in the tenth century, and which either was not finished or was destroyed by some accident unknown to us.

The Church of La Vierge at Dinant, built in the usual form of a Latin cross, is divided into three naves without chapels, which are remarkable for the grandeur and beauty of their proportions, and for the height of their vaults, which, in the central nave, are more than 100 feet high; they are supported by two rows of large round columns with very plain square capitals, and pointed arches surmounted by a gallery of columns with square capitals, from which spring the archivolts of lancet arches. The chancel, which is of moderate extent, and which was prevented, by the enormous rock which slopes from the church on this side, from being of greater dimensions, is surrounded with very narrow aisles, from which it is separated by very slender round columns with capitals of crocketed volutes. The triforium is composed of columns with similar capitals and trefoiled arches. Behind the high altar, the apsis of the chancel is ornamented with a large blank arch, with the archivolts composed of deeply sunk torus mouldings or rolls. The windows lighting the naves are of the flamboyant style; those in the flat walls at the end of the transepts are triple lancets, and those of the chancel single lancets. In the right aisle of the nave a small door admits to the baptistery chapel, a square oratory covered by an elliptical vault. The wall against which the altar is placed is decorated with a large Roman arch, the archivolts of which are loaded with ornaments and figures in bas-relief. The construction of this chapel, and the execution of the stone baptismal fonts which occupy the centre, can be ascribed to the tenth or eleventh century, as also the ancient door, now blocked up, which is observed outside the left aisle of the church; this semicir-

cular door, the archivolts of which are covered with very curious and barbarously executed bas-reliefs, forms, with the two Gothic porches, one in front of the nave, and the other on the right of the church, the only external parts of this church deserving of particular mention; these two porches, of the primary pointed style, are very richly and tastefully decorated. The archivolts of their arches are covered with figures, among which we believe to have remarked, on the side porch, personifications of the liberal arts, and before the French revolution large stone statues were placed along their walls. The heavy square tower (there are properly two towers, but they only form one mass) which rises above the principal porch in front of the church, is built of freestone, pierced with small pointed openings, and devoid of all ornament. It is 110 feet in height, and is crowned by an octagonal spire of a much more recent date than the rest of the tower.

CHURCH OF ST. PAUL AT LIÈGE.

The monumental history of the Church of Saint Paul, which became the cathedral of Liège after the destruction of the Church of St. Lambert, is no less obscure than that of Notre Dame of Dinant, all the historians of Liège having confined themselves to the simple mention of the name of the founder, Bishop Eracle, about the year 968.

The architecture of this splendid church, belonging for the most part to the primary pointed style, induces us to fix the date of its reconstruction at the same period as that of the Church of Dinant, in the latter end of the thirteenth century, with the exception of the windows, the chapels in the aisles of the nave, the tower, and some other details which belong to a more recent period[a]. The church of St. Paul is not only the largest of all the churches of Liège, but at the same time the most beautiful next to that of St. Jacques. The interior of this magnificent church, constructed in the purest pointed style, produces an admirable effect by its size and the beauty of its proportions. The central nave, 222 feet long, (Liège measure,) is divided from the aisles by two rows of cylindrical columns, with round bases and crocketed capitals. Above the pointed arches in the great nave runs an elegant gallery formed of round columns supporting trefoiled arches. The walls of the numerous chapels which flank the aisles of the nave are covered with panels, and the transepts, which project very little from the church, are lighted by large pointed windows of very rich design, and filled with splendid painted glass. The chancel,

[a] These parts of the church were probably restored at the same time as the vaulting, in 1528 and 1529. (Henaux. Descrip. de Liège, p. 79.)

which has no aisles, and is eighty-four feet in length, is decorated below its lancet windows with a triforium composed of blank arches, also lancet-shaped and round columns. The vaults of the church are pointed, with groined ribs, and are painted with arabesques in the style of the *renaissance*. A balustrade[a] with trefoil arched openings finishes externally the walls of the central nave, which is supported by large flying buttresses; the aisles and chancel have only slightly projecting counterforts. The church of St. Paul has no principal entrance; admittance is gained only by two side doors of the plainest construction; one of these leads from the ancient cloister, which consists of three large covered galleries pierced with flamboyant windows and surrounding a square green. The groining, with its angular compartments, indicates that the erection of this cloister dates only from the end of the fifteenth or the beginning of the sixteenth century. The tower in front of the naves was left unfinished; it was covered in 1813 with a lofty wooden spire constructed on the model of the principal tower of the ancient church of St. Lambert[b].

CHURCH DU GRAND BEGUINAGE AT LOUVAIN.

The construction of the Church du Grand Beguinage at Louvain, was commenced in the year 1305[c], but we are ignorant of the date of its completion. This building, which is in the form of a trapezium 200 feet long, and 73 wide, is remarkable only for the great width of its three naves, in which the very flat-pointed arches spring from round columns of extremely small diameter. The flat arched vault of the great nave was not constructed until the seventeenth century. Its great extent and the feebleness of its supports have occasioned the necessity of strengthening it with iron bars, which run horizontally across the central nave. The flat wall at the end of the chancel is pierced with a large pointed arch inclosing two lancets, the imposts springing from thick clustered columns. The body of the church is lighted by narrow lancets; it is without counterforts or flying buttresses on the outside.

CHURCH DU BEGUINAGE AT DIEST.

After the church we have just described, that of the Beguinage at Diest seems to us the only one of the churches in the pointed style belonging to the congregations of the Beguins, in Belgium, which merits particular attention. We are ignorant of the

[a] This is an error of Mons. Schayes: I have recently visited Liège, and found it to be a cornice instead of a balustrade.—J. W.

[b] View of the exterior of the Church of St. Paul, vol. i. of the "Délices du Pays de Liège."

[c] We read on a stone placed at the side of the principal entrance of the church: "Anno Dni. MCCCV., hæc ecclesia inccpit."

date of its construction, but we do not believe that it differs many years from that of the Church of the Beguins at Louvain, which the church at Diest resembles in many respects, as well in its dimensions as in its plan and style of architecture. Like it, also, it is in the form of a long square, divided into three large naves by cylindrical columns, carrying pointed arches of great width. These churches are likewise equally devoid of decoration.

CHURCH OF NOTRE DAME AT HUY.

The parish church of La Vierge in the city of Huy, like a multitude of other churches in the ancient bishopric of Liège, claims for its real or supposed founder, St. Materne, first bishop of Tongres. At any rate, there existed in the eleventh century at Huy, a small church or chapel dedicated to the Virgin, on the site of which Théoduin, Holy Bishop of Liège, in 1048, erected a new church, much larger and more beautiful, which was consecrated in the year 1066 [a]. Of the church built by Theoduin no vestige now remains, except in all probability the isolated porch which is still seen on the side of the apsis of the chancel of the present church. This porch, of the earliest date of the primary pointed style, is composed of an ogival arch, with torus-moulded archivolts, of which the tympanum, subdivided by two segments of blank pointed arches, is decorated with figures in high relief, representing the birth of Christ, the adoration of the shepherds, and the offerings of the magi. Three large stone statues are placed against the piers and the shaft in the centre of this doorway. The foundations of the church now existing, and which justly passes for one of the finest monuments of pointed architecture that Belgium possesses, were laid on the 15th March, 1311 [b]. We are not aware of the date of the completion and dedication of this splendid building; we learn only from the date inscribed on the vault of the great nave, that this vault, that of the chancel and the transepts, and probably also the vaults of the aisles, were restored in 1536.

The Church of Notre Dame at Huy, of the most noble and correct proportions of the secondary pointed style, is of the form of a Latin cross with very short arms, and

[a] "Hic (Theoduinus) . . . . ecclesiam, (Beatæ Mariæ in Hoyo,) à fundamentis usque ad laquearia consummavit octavo kalendas Septembris, indictione quarta, presidente apostolicæ sedi Alexandro, imperante Henrico, etc. . . . nam antea illic parva ecclesiola à beato Materno primo Tungrensium episcopo construeta erat in honorem Sanctæ Mariæ. (Ægidii Aureæ Vallis monachi Gesta Pontif.") Leod. cap. i. apud Chapeauville, vol. ii. p. 3.

Gilles d'Orval, who flourished in the thirteenth century, restored the charter by which the bishop Theoduin doubled the number of the canons of the College of Notre Dame. We there read: "Præfatam siquidem ecclesiam à fundamentis ad laquearia et ultra reædificavi, quam etiam in auro et argento et gemmis et prædiis pro modulo meo ditavi et de Agar Saram esse feci."

[b] Delvaux, "Dictionn. Geogr. et Statist. de la Prov. de Liège," p. 123.

is 70 metres long inside, and $23\frac{1}{2}$ metres wide[a]. Two rows of large cylindrical columns, with round bases, and capitals adorned with twisted leaves, divide it into three naves, and separate the chancel from the aisles, which stop short at the end of the straight sides. Similar half columns project from the walls of the aisles between the chapels with which they are lined. The triforium, above the pointed arches of the principal nave, is formed of mullions trefoiled and surmounted by a balustrade of panelled quatrefoils. The vast chancel, built on a level with the rest of the church[b], is lighted by long lancet windows, subdivided by rayonnant tracery. The right walls terminating the transepts are covered with panels of the richest and most elegant design, and are pierced in the north transept by a magnificent half rose, continued by a large rayonnant window, and in the south transept by a similar window, which extends to the springing of the vaulting, the tracery of which forms the most varied and graceful figures. The walls of the small naves and of their chapels are also ornamented with panels, but of a more simple design than those of the transepts. The windows of the large nave and of the aisles belong to the flamboyant style, and were probably rebuilt at the same time as the vaulting of the church, which is pointed, with groined ribs in the aisles alternating with square ribs, ornamented with pendants in the principal nave, the chancel and the transepts. They are painted with arabesques like those of the Church of St. Paul at Liège.

The exterior of the parish church of Huy is not in accordance with the richness of decoration of the interior, except the right wall of the north transept, where the panels reappear with the same elegance as the interior of this part of the church. Externally, the Church of Nôtre Dame has neither flying buttresses, balustrades, nor porch[c]. The entrance is by one little side door only, of the plainest construction. In front of the three naves rises a square tower, 140 feet in height, (Liège measure,) formerly surmounted by a wooden spire, which gave to the tower a total height of 222 feet[d]. The front of this tower is ornamented with a large and beautiful rose window in the rayonnant style, which, viewed from the interior of the church, produces a truly magical effect[e]. Two other square towers, but less considerable than

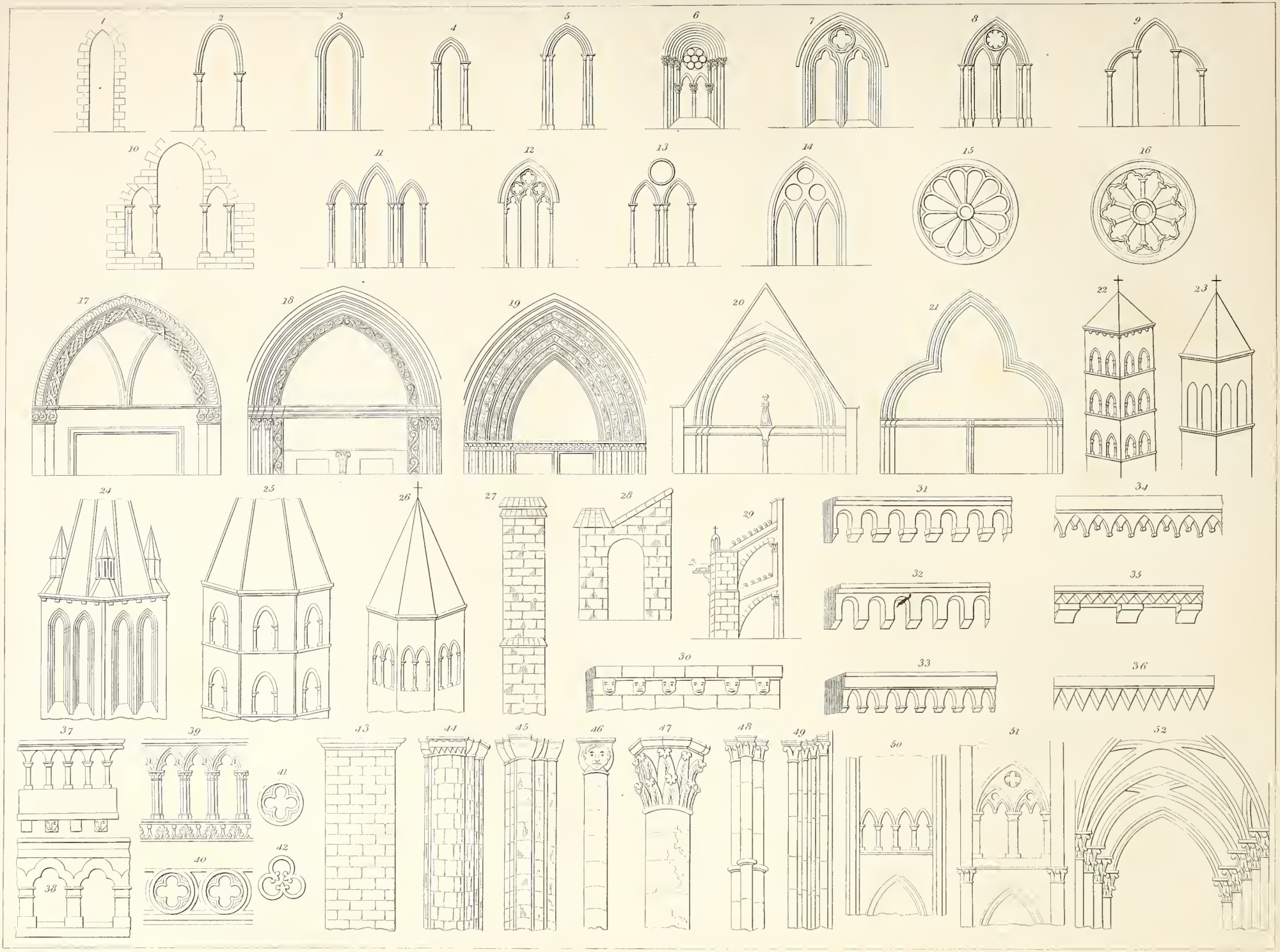
[a] The author of the "Délices du Pays de Liège" fixes the interior length of the Church of Notre Dame at 240 feet, ancient Liège measure; the width and height at 80 feet.

[b] The "Délices du Pays de Liège" gives to it a length of 80 feet.

[c] It appears, however, that before the rebuilding of the vaults in the sixteenth century, the roofs were decorated with a row of gables and crocketed pinnacles.

[d] This spire was destroyed by fire in the last century; it is represented, however, in the engraving of the Church of Huy in the "Délices du Pays de Liège," vol. i.

[e] We find a tolerably correct drawing of it in the second volume of Hope's "History of Architecture."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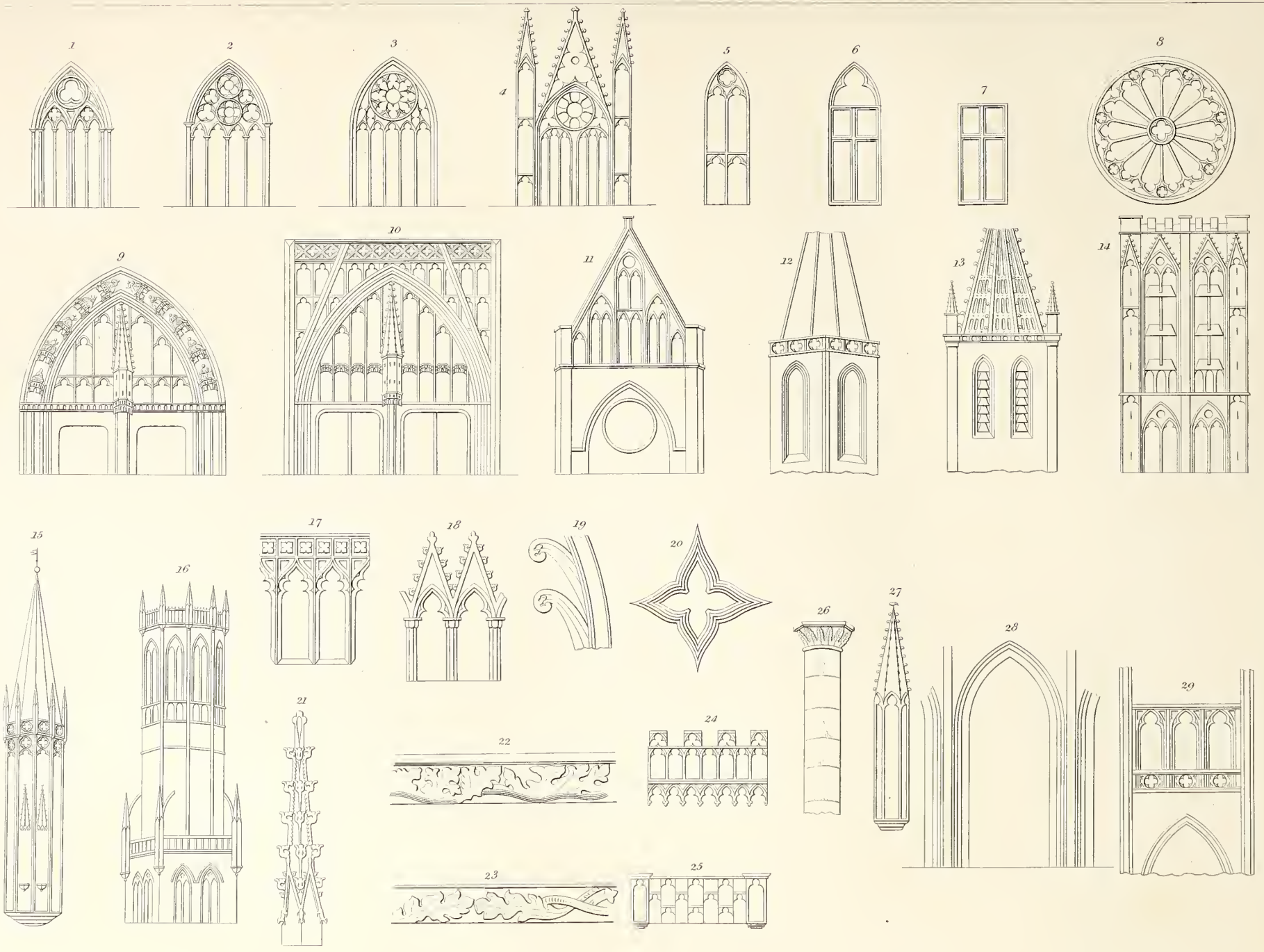
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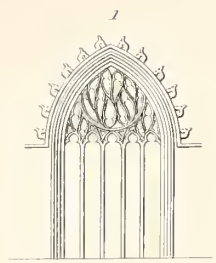
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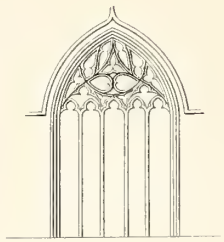
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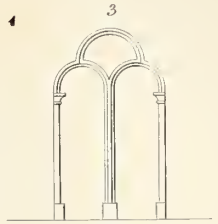
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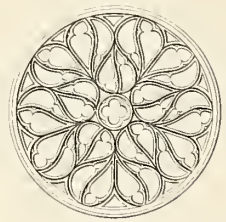
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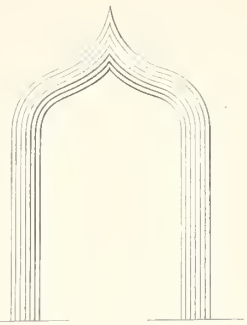
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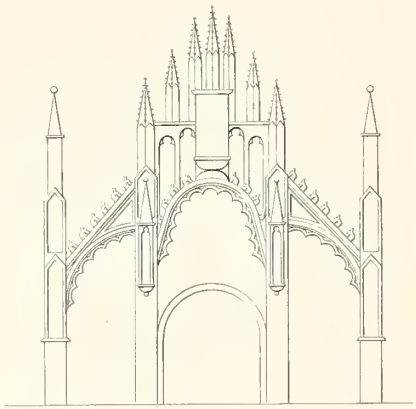
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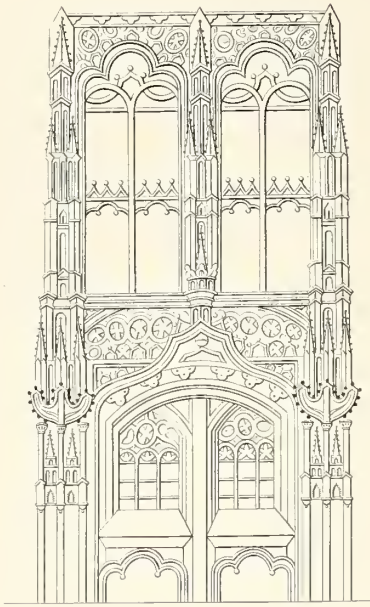
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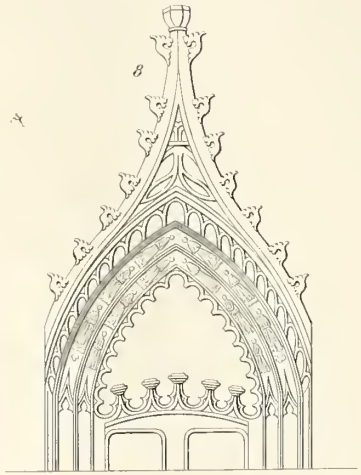
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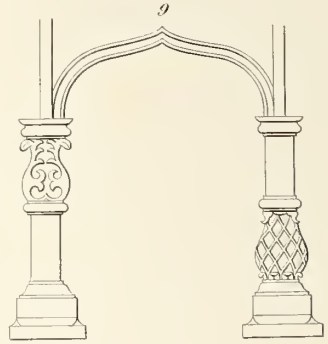
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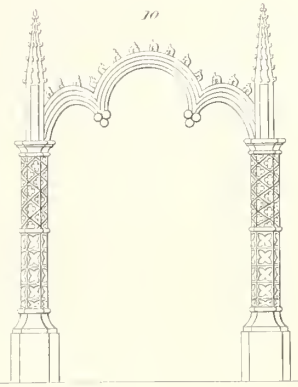
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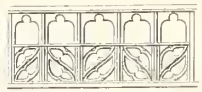
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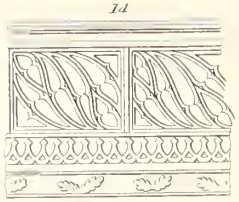
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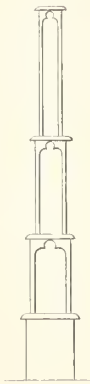
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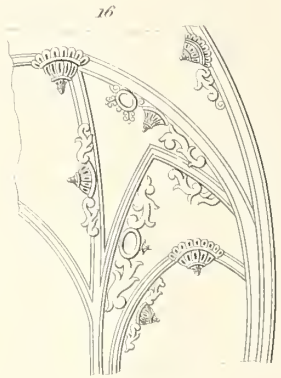
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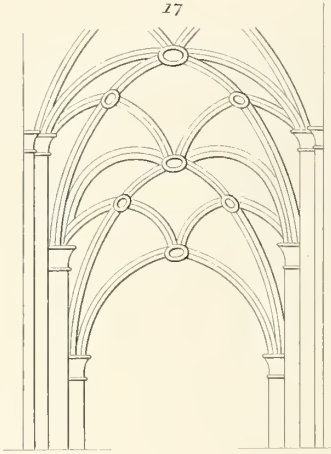
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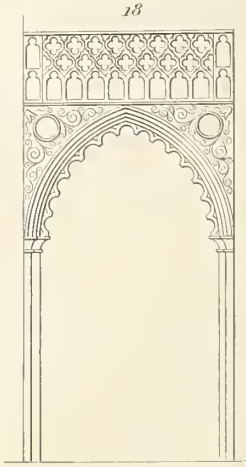

18

THE ART

OF

PAINTING ON GLASS,

OR

GLASS STAINING.

COMPRISING

FULL AND COMPLETE DIRECTIONS

FOR PREPARING THE NECESSARY PIGMENTS AND FLUXES; FOR LAYING THEM UPON THE GLASS; AND FOR THE PROCESS OF FIRING, OR BURNING THE COLOURS IN.

WITH

DESCRIPTIONS OF THE FURNACES AND APPARATUS REQUIRED FOR THE VARIOUS OPERATIONS.

By Dr. M. A. GESSERT,

AUTHOR OF THE "HISTORY OF GLASS PAINTING."

TRANSLATED FROM THE GERMAN,

By WILLIAM POLE,

Assoc.Inst.C.E.

PART II.—ARCH. II.

No apology is needed for classifying the art of glass painting among those subjects which peculiarly interest the architect, and are intimately connected with his profession. It has therefore been thought advisable to place this little work among "Papers on Architecture," in the hope that it may not only tend to make more generally known the nature of the operations by which the beautiful effects of the art are obtained, but may also serve to show their simplicity, and thus to place them within the reach of many cultivators of the fine arts who may have hitherto considered the practice of painting on glass as requiring far too complex manipulation, and too expensive apparatus, to be ranked among those branches of art attainable by the amateur.

Great care has been bestowed upon the translation of the chemical part of the work; and the opinion of an eminent professional man has been taken upon some few points which appeared somewhat obscure in the original. The German terms for most of the principal ingredients are added as foot notes.

In general, it has been the object to give rather the sense than the literal meaning: to translate, in fact, rather the ideas than the words.—Tr.

INTRODUCTION.

1. The beautiful art of glass painting is not only restored, in our day, to the perfect fulness of its ancient splendour, but also has acquired, through the giant strides of the science of chemistry, and the great progress latterly made in the arts of design, an amount of technical and æsthetical power, far exceeding whatever could formerly be called to its aid.

Notwithstanding this advantage, however, the art has not yet reached that wide state of diffusion which, from the exquisite effects it is capable of producing, it deserves, and which it attained in the olden time, even with its then more limited capabilities.

2. This circumscribed use of glass painting can scarcely be accounted for by a comparison of the religious circumstances of our age with those of the past, or on the supposition that this art, confining itself exclusively to exhibition in sacred edifices, had therefore been lost among the frivolous tastes which at present prevail. On the contrary, the works of the finest masters of the art have shewn that the wonderful effects of glass painting may be brought into use for other purposes than the service of the church, and may be made to satisfy not less the worldly demands of our generation, than the more devotional feelings of the middle ages.

The obstacles which, on the revival of the art, have interposed to check its farther extension, and therefore to diminish also the general demand for its productions, are much rather to be attributed to those in whose hands it rests, than to any thing properly belonging to itself; they originate, in fact, less in the art than with the artists.

3. One of the principal causes of the earlier decay of glass painting was, that its rules being based so entirely upon empirical principles, those who practised it were accustomed to consider the knowledge they had acquired in the thorny path of tedious and long continued experiment, as their most valuable personal property, forming at once the means of their subsistence, and the foundation of their future artistical fame. They therefore not only kept the information they had gained profoundly secret during

their lives, but even carried it with them to their graves, in preference to leaving it behind them to be made use of by their scholars.

This easily intelligible, but not on that account the less reprehensible egotism,—this avarice for artistical monopoly, also operates in some measure to damp the speculative ardour of the present day, and constitutes, in fact, the primitive cause of the evil of which we complain.

On the other hand, the most conducive element towards the full and free developement of power generally, and particularly of artistical talent, is competition. It multiplies production, invites public judgment and comparison, and calls forth a laudable emulation, tending in return, not only to promote the excellence of the works produced, but, by aiming at popularity, also to create an ever new demand for their increase and multiplication.

4. The directions which form the principal part of the following pages, have already been published at different times, in earlier communications of the same author scattered through German scientific periodicals, but have now been collected, enlarged, improved, and remodelled into the present form, in the hope that their more general circulation may put into the possession of the many that information which was formerly jealously guarded by the initiated few, and thereby such a general interest may be promoted as cannot fail to be beneficial to the art.

The recipes have been carefully selected, and their correctness and efficacy proved by many years' practice; and it has been endeavoured to make them so easy of comprehension, that neither those unacquainted with chemistry shall fail in their preparation, nor those unpractised in the art go astray in their application.

5. In the classification of the pigments into Fused and Mixed Colours, (understanding by the first all those which are fused into a glaze together with the flux before laid on, and by the second all colouring bodies burnt into the glass without such previous process, whether requiring the help of a flux or not,) the theory given by the Author in his late work on the History of Glass Painting, has been adhered to. This division has the advantage of avoiding those errors which had their origin in the early homonymic of *flux*, for the oxide previously melted with the flux, and for the fluxing medium itself.

It is hoped that these few pages may be the means of prompting, not only artists by profession, but also amateurs, to such an increased and successful exercise of the art, as may tend to show forth its beauties and capabilities to the world, in a more general and extended manner than heretofore.

CHAPTER I.

OF THE PIGMENTS AND FLUXES; AND THE METHODS OF PREPARING THEM.

6. Glass painting or staining [a] may be defined to mean, the art of painting on transparent glass, (either colourless or already coloured in the process of its manufacture,) with vitrescible metallic colours [b], which are afterwards burnt into the surface of the glass on which they are laid, leaving it more or less transparent.

7. All colours used in glass painting are oxides of metals, or other metallic combinations.

They may be divided into two principal classes :

1. Those whose colouring base, or the oxide, is laid upon the glass simply in its original combination with an earthy vehicle.
2. Those whose colouring base, or the oxide, must be made to adhere by the help of a glassy body, namely the flux [c].

8. The colours which require a flux may be divided again into :

1. Those in which the oxide unchanged, but only *mixed* with the flux, is attached to the glass.
2. Those in which the oxide requires to be vitrified, by previous *fusion* with the flux, before it is laid on the glass.

The last may be called *Fused Colours* [d]; all others *Mixed Colours* [e].

9. The classification above given may be made clearer by the following explanatory remarks.

Glass painting is distinguished especially from other illuminating processes, in that the colours and the foundation on which they are laid, must, in this art, be fused together in the kiln.

[a] The words "painting" and "staining" seem to be used in English synonymously with reference to this art. The former of these has been adhered to throughout this work, not only because it is more in accordance with the German expression, but because it appears more calculated to secure to this species of decoration a place (which it decidedly deserves) among the fine arts; whereas the word *staining* might simply mean the *colouring* of glass, without any reference to design.—Tr.

[b] Verglasbaren Metallfarben. [c] Flussmittel. [d] Flüsse. Glassmalerflüsse.

[e] Farben. Glassmalerfarben.

Now some few colours combine with the surface of the glass, at the temperature of fusion, without further previous preparation than the simple laying on; wherefore these give to the glass only a colouring cementation[a] or stain.

Others, on the contrary, in consequence of their peculiar nature, can only be made to combine with the glass, by fusing them, upon its surface, into another thin sheet or layer of coloured glass.

This is done by means of the *flux*, a vitreous compound, which fuses more easily (i. e. at a lower temperature) than the foundation, the glass plate.

10. The flux may be used in two ways. With some colours it may be simply mixed before they are laid on, so as to combine, at the temperature of fusion, with their oxides, and to unite these again with the surface of the glass; but in other cases, the flux must, before painting, have entered into a chemical combination with the oxides, i. e. must have been fused together with them into what may be called a *Fused Colour*, which latter, after being pulverized, serves as a pigment.

This process is rendered necessary in consequence of the difficulty of fusion of certain oxides, which, in order to combine with the flux, and to acquire the intended shades of colour, require a greater degree of heat than could be made use of in burning the colours upon the glass, without endangering the success of the operation.

From this description of the nature of the colours and the manner of their combination with the glass, we will now pass on to the practical directions for their preparation and use; in assurance that the foregoing will not only prevent erroneous notions being formed of the nature of the different elements entering into the operations, but may tend to the perfect understanding and successful practice of the directions given.

Those for white and black pigments are given first, the others follow in order.

I. WHITE.

FUSED COLOUR.

11. Two parts of bone glass[b], with one part minium[c], or red lead, are to be mixed together and melted in a covered Hessian crucible placed in a wind furnace. The mixture is then to be poured out into a flat vessel containing pure cold water, and when cooled, is to be ground with a glass muller on a table of thick sheet glass.

[a] Cementirung.

[b] *Beinglas*, made by fluxing together eight to ten parts of calcined bones, (bone ash,) eight of red lead, with about 80 of white glass.

[c] Mennige.

MIXED COLOURS.

12. One part of bones calcined to whiteness[a], with two parts of flux, ground together on a glass plate.

Flux. Glass of lead (flint glass)[b].

13. One part white oxide of tin[c], with two parts of flux, ground as before.

Flux. Lead glass.

14. *Preparation of the oxide of tin.*—Melt in a covered Hessian crucible one part of pure tin cuttings[d]. When in fusion, add two parts of nitre and stir well the mixture with an iron rod. The crucible is then to be again covered, placed in burning charcoal[e], and the mixture occasionally stirred as before from time to time, until it begins to get white on the top. Continue the stirring a little longer, then pour the mass out of the crucible into an agate mortar and let it cool. It is then to be pulverized, boiled in water, and afterwards dried.

II. BLACK.

MIXED COLOURS.

15. Two parts oxide of copper (prepared by heating nitrate of copper[f] to redness) and one part flux.

Flux. Equal parts of crystallized borax, minium, and pounded glass, are to be mixed and melted in a Hessian crucible for about an hour or an hour and a half, in a wind furnace, then to be poured in a vessel of water, afterwards dried, and powdered on a glass plate.

16. Some oxide of iron[g], or of manganese[h], added to the former, gives that brownish tone of colour which was so peculiar to the ancient glass paintings.

17. One part black protoxide of iron[i], (prepared by mixing red oxide of iron with olive oil[k] to a moist powder, and afterwards heating the mixture in a crucible till the oil is evaporated,) one part of protoxide of copper[l], (prepared by submitting green carbonate of copper[m] to a red heat, and washing it in water,) and two and a quarter parts flux.

[a] Weissgebrannte Knochen.

[b] *Bleiglas.* This, however, contains more lead than exists in our English flint glass: a recipe for it, in one of the German Encyclopædias, is 15 parts dross of lead, and 12 parts common glass frit. The ordinary flint glass may be made to serve by adding minium to it, and trials will shew the best proportions. See Art. 88.

[c] Weisses Zinnoxyd. [d] Zinnspäne. [e] Glühenden Kohlen. [f] Salpetersauern Kupfers.

[g] Eisenoxyd. [h] Braunstein. [i] Eisenoxydul. [k] Baumöl. [l] Kupferoxydul.

[m] Kohlensauern Kupferoxyds.

Flux. Two parts lead glass, ground to a proper degree of fineness on a copper plate, or colour stone, with water, and one fourth of a part gum arabic. The latter to be added after the pigment is mixed with the glass. All are then to be ground as delicately as possible together.

18. One part oxide of cobalt [a], one part oxide of manganese, one part copper ashes [b], and one part iron scale from a smith's forge [c]; mixed together and heated, at first gently, but afterwards with a very strong heat, until the mixture runs freely. It is then to be poured into water, and when cold, pulverized, mixed with twelve parts of flux, and ground fine.

Flux. One part pure white sand, and three parts litharge [d], are to be melted together till they flow freely, and then poured out on to a warm marble plate, or into an iron mortar; when cold to be pounded fine and washed out with water, in order to remove any reduced lead which may be present.

19. Two parts black protoxide of iron, with two and a quarter parts of the flux described in Art. 17, and treated in the same manner.

20. One part iron smithy scales, three parts oxide of copper, and four parts calcined antimony [e], treated as in No. 18, and ground with three parts of flux.

Flux. One part of sand, and three parts litharge, treated as in No. 18, and ground fine with one third borax. The borax must be prepared in the following manner: a crucible is to be half filled with it, and put in burning charcoal until the borax becomes spongy, or is calcined. It is then to be thrown into another crucible and melted in a strong fire to a clear flowing mass, which is to be poured into cold water, and when cold, ground fine.

21. One part of purple, (see its preparation farther on,) three parts oxide of cobalt [f], three parts iron smithy scales, six parts calcined antimony, and three parts copper smalt [g], treated as in No. 18, and mixed with three parts of flux.

Flux. One part sand, and two and three quarter parts litharge, are to be treated as in No. 18, and ground fine with three eighths of a part of borax prepared as above described.

22. Treat three parts oxide of cobalt, three parts oxide of copper, three parts iron smithy scales, and four parts antimony, with three parts of flux, as described in Nos. 18, 20, and 21.

[a] Kobaltoxyd.

[b] *Kupferasche*, an oxide or dross of copper of a coarse kind, known to the smelters.

[c] Hammerschlag. [d] Bleiglätte. [e] Calcinirtes Antimonium. [f] Kobaltoxyd.

[g] *Kupfersmalte*, copper oxide fused with glass and ground.

Flux. One part sand, two parts litharge, and one fourth part borax, treated as deseribed in No. 20.

23. Two parts blaek oxide of copper, with two and a quarter parts of the flux deseribed in No. 17, and used in the same manner.

24. A beautiful blue-black may be obtained by adding a small part of oxide of cobalt to the pigments in either Nos. 17, 19, or 23.

25. A blaek inclining to brown [a] is produeed by a similar addition of oxide of manganese [b].

26. Dull or dead blaek, for distances [c], is proeured from one part of eopper smalt and one part erude antimony [d] caleined, (but not so far as to lose its blackness,) ground together. Or,

27. One part copper smalt, and one part uncaleined oxide of manganese, treated as before. Or,

28. One part purple, one part oxide of eobalt, and one part oxide of manganese, ground fine together.

III. RED.

FUSED COLOURS.

29. One part oxide of iron, (obtained by heating elean iron nails red hot, dissolving them in nitrie acid, evaporating the solution slowly by a gentle fire, and roasting the residuum,) three parts flux, (eonsisting of one part sand, one part litharge [e], and one fourth part borax glass [f],) well fused together, until a glass rod, with whieh the mass is to be stirred, draws fine and elear threads from it; then the crucible, with its contents in it, is to be thrown into water, and when cool, the pigment may be separated, pulverized in an agate mortar, and ground fine on a glass plate.

[a] Ein ins Bräunliehe spielendes Schwarz. [b] Manganoxyd.

[c] Mattsehwarz oder Ferne. [d] *Spiessglanz*, the common ore of antimony; the sulphuret.

[e] *Note.*—It may be understood here, once for all, that where sand and litharge are used as flux, as directed in Arts. 32, 36, 40, and 73, both these ingredients must be pounded together, melted in a Hessian crucible by a strong fire, poured into an iron mortar, pounded fine when cold, and finally washed out with water, before they are added to the pigment.

But where sand, litharge, and *borax glass*, are indicated for flux, as in Nos. 42, 69, 78, and 84, the sand and litharge are, as above directed, to be melted and pulverized by themselves, but the borax glass is only to be ground with this latter powder, *and not again melted with it.*

This remark will save the trouble of repeating the same directions in the above mentioned articles.

[f] *Boraxglas*, fused borax.

30. One part oxide of manganese with eight parts of flux, (one drachm of sand and three drachms litharge,) melted together and treated as above.

MIXED COLOURS.

31. One part sulphate of iron, free from copper, or oxide of iron precipitated from the sulphate[a], more or less heated, with two to three parts flux ground together, give all shades from a light red to a blueish violet.

Flux. Six parts white silicious sand washed and calcined, four to five parts yellow oxide of lead, and two to three parts sub-oxide of bismuth[b] (made from the nitrate) finely powdered, and intimately mixed in a porcelain mortar: the mass may then be thrown into a covered Hessian crucible previously brought to a red heat, and stirred frequently with a steel rod until it flows freely. It is afterwards to be poured into water, then dried, powdered, and passed through a fine sieve.

32. Common red is given by one part of sulphate of iron heated by a strong fire, washed four or six times in hot water, dried, and finely ground on a glass plate, with three parts of flux.

Flux. One drachm of sand and three drachms of litharge.

33. In order to give a fixedness to the colcothar, or crocus martis[c], which otherwise is very fugitive, it is proper to calcine it with fine white sea-salt[d], previously brought to a half glowing heat in a covered crucible; equal parts of each are then to be ground well together in an agate or glass mortar; a crucible is to be filled with the composition, and kept for two hours in an increasing fire till it is surrounded with burning coals on all sides; it may then be removed, the mass cooled, pounded perfectly fine, and washed three or four times with hot water, stirring it carefully each time with a glass tube, in order to wash the salt entirely away. When the water no longer takes a red tinge it is to be poured carefully off, the mixture again washed with cold water, dried, and ground with one part of the before mentioned flux for use. For greater certainty the sea-salt may, previous to using, be dissolved, filtered, and recovered by evaporation of the water. Lastly, it is particularly to be advised to employ in the whole process, crucibles which have not previously been used.

34. Equal parts of yellow oxide of iron, (iron ochre[e],) yellow oxide of lead or lead

[a] Kupferfreier Eisenvitriol, oder basisches, schwefelsaures Eisenoxyd.

[b] Basisch salpetersaures Wismuthoxyd.

[c] *Eisensafran*, yellow or reddish oxide of iron.

[d] Meersalz.

[e] Gelbes Eisenoxyd, Eisenocher.

glass[a], glass of antimony[b], sulphuret of copper[c], and sulphuret of silver[d], ground fine together with water, and laid on the glass without the addition of any flux.

35. One part of silver which contains copper, (as for example, that of which the German small coin is made,) with two parts of raw antimony (sulphuret of antimony, the common ore[e]) melted together, reduced to powder, and mixed with red oxide of iron or colcothar. This pigment also is used without flux, and is (as is the former) to be laid on in a tolerably thick layer, which will stain the surface of the glass red at the proper temperature of fusion. What remains on the surface afterwards may be removed with a spatula.

36. One part silver, two parts red antimony[f], and one part sulphur, melted till clear; and mixed, for use, with two parts flux.

Flux. One drachm sand, and two drachms litharge.

37. Two parts red oxide of iron, one part litharge, one part gum[g], one part lead glass, and six parts of best red chalk[h].

The lead glass is first to be ground as fine as possible on a glass table, then the litharge, the gum, and the oxide of iron are to be added; and after these are all properly mixed together, the pounded red chalk. The whole must now be gently ground and mixed in a tall glass, with as much water as will make it the consistence of thin syrup; say four or five ounces. If the operation takes place in summer, the glass is to be put in the sun; if in winter, in the warmth of a stove, and the fluid must be most carefully preserved from all dust, yet without preventing evaporation by close covering. This is best done by inverting a glass bell over it, on whose sides the moisture will collect and flow away. The fluid must remain still three days; all the thick matter will sink and adhere to the bottom of the glass, while the liquid shews itself above on the sides in transparent rings of a beautiful red colour. It is now to be carefully poured off, more water added, as before, and the operation repeated as long as any colour can be obtained from the sediment. The colour is then to be dried in a glass colour-dish[i], by the help of a gentle heat, (best by placing it in the sun,) and carefully preserved. While it is yet in a fluid state or moist, it always appears more lively and clear than when quite dry. In the latter state it is to be used like gamboge, but without grinding[k], which would destroy its transparency and beauty. If properly prepared and used, however, this colour excels in both these qualities the most beautiful red of the ancients.

[a] Gelbes Bleioxyd oder Bleiglas.
[b] Spiessglanzglas.
[c] Schwefelkupfer.
[d] Schwefelsilber.
[e] Rohem Spiessglanz, Schwefelantimon.
[f] Rothes Spiessglanz.
[g] Gummi.
[h] Rother Röthelstein.
[i] Einem gläsernen Farbenschälchen.
[k] Reiben.

38. Brick red is given by one part oxide of iron, and twelve parts ochre yellow[a], (prepared from one part oxide of iron, produced from the sulphate, and one part oxide of zinc,) mixed with five parts flux.

Flux. One part sand, three parts minium, and one eighth part calcined borax[b], finely ground, mixed, melted and thrown into water, dried and pounded, as described in No. 31.

39. Flesh-red is obtained by melting sulphate of iron and alum, in a coarsely powdered state, and increasing the heat till the appearance of the desired colour. The residuum is to be washed with hot water, and one to two parts of flux added thereto.

Flux. Six parts white sand, washed and heated to redness, four parts yellow oxide of lead, one part borax glass, and one part saltpetre, treated as in Art. 31.

40. For dull or dark red[c], one part of prepared blood stone[d] is to be pounded and ground on a glass plate, with three parts of flux.

Flux. One drachm sand, and two drachms litharge.

41. Purple, gold-purple, purple of Cassius, is obtained by precipitation from a solution of chloride of gold[e], by means of a solution of proto-muriate of tin[f]. It receives, according to the greater or less quantity of tin in the mixture, and the lower or higher degree of oxidation of the solution, either a beautiful red colour of various shades, as scarlet, carmine red, rose colour, flesh colour, &c., or a violet or brown.

It is to be mixed for use with four parts of flux.

Flux. One part of silica in powder, (made by calcining the purest flint three or four times in a crucible, washing it every time in pure water, then powdering it in a porcelain mortar, and sifting it through a fine sieve,) one and a quarter part borax glass, and five eighths of a part minium, melted together, and finely powdered.

42. Dissolve one part of thin-beaten gold in nitro-muriatic acid, or aqua regia, pour the solution into a glass, and dilute it with fifteen parts rain-water. Throw in one and a half part of pure tin cuttings, which have been dissolved in muriatic acid, and allowed to get cool[g]. While this is being added to the gold solution, the liquor must be continually stirred. After the mixture has stood quietly a quarter of an

[a] Ochergelb.
[b] Gebrannter Borax.
[c] Dunkelroth.
[d] *Blutstein.* Hematite. The kidney iron ore of Cumberland.
[e] Goldchlorid-Lösung.
[f] Zinnchlorür-Lösung.
[g] Literally from the original; probably it is this quantity of the muriate thus formed, which is to be poured into the gold liquor.

hour, half a part of clean urine is to be added, and all well stirred together. In about two hours the supernatant fluid is to be poured from the purple pigment, which will be found precipitated, and which is to be well washed out. When perfectly dried, put it in a flat porcelain vessel, lay a piece of paper upon it, and place it on burning charcoal till the paper is charred.

The purple pigment must be used with twelve parts of flux.

Flux. One part sand, two parts litharge, and three fourths of a part borax glass.

43. Dissolve gold[a] in aqua regia. If the gold has been alloyed with silver, the solution must be poured off from the chloride of silver, which separates itself. The precipitate must be washed with some distilled water, and this latter added to the solution, which must then, unfiltered, be evaporated by a moderate heat until a thick crystalline saline skin[b] is formed, under which, by inclining the vessel to one side, only a little of the red solution will be found liquid. The mass is now allowed to get cool, whereby it becomes thoroughly hard; it must be dissolved without delay in ten times its weight of water, and filtered, by which a small quantity of reduced gold is left behind. In order to cleanse the filter, a small quantity of water must be reserved out of the prescribed weight, and afterwards this must be added to the solution.

For the preparation of the tin liquor, the crystallized salt of tin[c] will answer very well; if it is moist, it must be dried by pressing it between unsized paper[d]. One part of the salt is to be dissolved in four parts of distilled water, the solution filtered, and used immediately after its preparation, as after a time it would become turbid by attracting oxygen from the atmosphere, and would deposit oxide of tin in a white powder.

Further, dissolve one part of gum arabic in three parts of hot distilled water, and filter it through gray blotting paper, which must be of a loose texture, or the gummy fluid will not pass through it freely.

Having now prepared the three fluids in the above mentioned manner, mix three ounces of distilled water with twenty-eight grains of the gum solution, stir it carefully, and introduce fourteen grains of the tin solution. Rinse out the vessel in which the latter was weighed with a little water; weigh twenty-three grains of the gold solution and add it to the previous mixture, rinsing out the vessel again, but this time, instead of clear water, a portion of the compounded mixture is to be used for the purpose. The colour which arises during the mixing of the fluids is a fiery red brown, but changes when burnt in upon the glass into the most beautiful purple red.

[a] *Dukatengold.* The German gold coins are alloyed with silver. [b] Salzhaut.

[c] *Zinnsalz*, the muriate. [d] *Druckpapier*, printing paper, which in Germany is unsized.

The colour may possibly be somewhat altered by the action of the acid liberated by the formation of the purple precipitate in the fluid; but this is obviated by diluting it with twice its weight of water, dissolving ten grains of bi-carbonate of potash[a] in the same, and then first mixing it with the above mentioned mixture of the gum and tin solutions.

In order to separate the purple, whose precipitation is at present hindered by the gum, spirit of wine is to be added to the mixture until it appears very turbid: for this purpose, about double its weight of 75 per cent. spirit is necessary, if the bi-carbonate of potash has been added, otherwise three times the weight. In the course of an hour, if the mixture has been occasionally stirred during the time, the purple falls down in red-brown flakes, and the fluid remains clear, or at least very little coloured. This must then be decanted, some more spirit of wine poured over the precipitate, and the whole dropped into a filter. It must afterwards be gently pressed out between blotting paper, the precipitate removed, and ground in a rubbing dish or saucer, with weak 50 per cent. spirit of wine, to a thin pulp, which is to be heated[b] three minutes in a suitable vessel, and then poured into a cylindrical glass. This operation is to be repeated, and the gum will then be all removed except a little harmless remnant, which is essential to be done. Should the purple fall slowly from the last solution, and exhibit an inclination to re-dissolve, or form a clear red sheet tight upon the bottom, a little more strong spirit of wine must be added after the water is poured off, so that the purple may be made to coagulate to a thicker consistency, and the last portion of fluid afterwards filtered away. The precipitate must, as before, along with the filter, be pressed between blotting paper, taken off with a blunt knife, and dried in a porcelain dish, whereby it becomes much reduced in size, and takes a perfectly dull colour.

For use, the purple is to be levigated on a stone with water, until a clear deep coloured thickish fluid is obtained. Two to six[c] parts of flux are then to be added, the levigation continued, and afterwards the whole dried in a porcelain dish. It may then be made fit for the pencil with thickened oil of turpentine, like other glass painting colours.

Flux. Eight parts white silicious sand[d], washed and calcined; four parts borax glass; one part saltpetre, and one part white chalk[e]; treat as in Art. 31.

[a] Doppelkohlensaures Kali.

[b] *Kochen*, literally boiled or cooked.

[c] For the reason of the indefinite proportions given here and in some other places, see Art. 88.

[d] Quarzsand.

[e] Weisse Kreide.

IV. BLUE.

FUSED COLOURS.

44. Three parts oxide of cobalt, prepared in the following manner. Clean, roasted cobalt ore[a] (zaffre) is to be dissolved in pure diluted nitric acid, at a gentle heat, until the solution is saturated; add water, precipitate the oxide with carbonate of soda, and wash the precipitate with hot water. It is then to be dried, mixed with three times its weight of pure dry nitre, placed in a crucible, and ignited with live coals. When the slight decrepitation is over, the oxide of cobalt is to be heated to redness, washed out, and dried. Three parts of this must now be melted with two to five parts of flux (composed of[b] eight parts washed silicious sand; four to six parts borax glass; one to two parts nitre, and one part white chalk), melted in a strong fire for an hour and a half, and ground fine for use.

45. If the cobalt ore can only be obtained raw, and it becomes necessary to roast it, the best Spanish or Swedish must be chosen, which may be tried by solution in nitric acid, diluted with two thirds of water. The ore which gives the finest red colour in the solution is the best for the purpose, and should be chosen for the preparation of the colour. In order to free it from arsenic, it must be laid on and surrounded with charcoal on all sides, and burnt until the arsenic is deposited in white crystals on the walls and stones around, and the cobalt has attained a more metallic state and lustre. This operation, however, it must be remarked, requires the greatest care and precaution, on account of the dangerous vapours which arise; and if a place is not properly set apart for it, it should be performed in the open air.

46. Another blue fused colour is given by one part oxide of cobalt, and four parts borax glass, melted by a strong fire for four hours. The difficulty of fusion of the cobalt requires that this colour should be ground, for use, with two parts of flux, obtained by melting together one part rock crystal[c], and one part borax glass, throwing them in water and grinding them fine.

47. For dark blue[d], mix intimately four parts king's smalt[e], and about two and a half parts minium, in a porcelain mortar; set the mixture in a glazed crucible in a very strong fire, until perfectly clear glassy threads of a beautiful azure blue can be drawn from the mass. It must then be taken out of the crucible with a hook, dropped into cold water, and afterwards dried and finely powdered for use.

[a] Reines geröstetes Kobalterz.

[b] A misprint in the original of *und* for *aus* alters the meaning of this passage; but the sense given in the text is evidently the true one.

[c] Bergkrystall. [d] Dunkelblau. [e] Königssmalte.

The proportion of minium must be varied according to the variable fusibility of the smalt which is used.

48. One part black oxide of cobalt, six parts powdered white glass, and two parts minium; then two parts nitre; treated as the foregoing.

49. One part king's blue[a] is to be melted with three parts borax glass, pounded, and then ground with two parts of flux of the same kind, and treated in the same manner, as No. 46.

50. Light blue[b] is given by equal parts of best king's smalt, white glass, (pounded in a bright iron or porcelain mortar and sifted,) and minium, mixed and melted, as in No. 47.

51. Two parts zaffre[c], eight parts finely powdered white glass, six parts nitre, and six parts minium, mixed, melted, and ground, as the preceding.

MIXED COLOURS.

52. Let roasted cobalt (ore) stand quietly for two or three days in nitric acid, diluted with two thirds of water, placing it from time to time in hot ashes. When the mixture has gradually become a clear and fine red colour, pour it very carefully off so as to avoid letting any of the sediment go over with it. To the latter may be added water and more nitric acid, to extract any more red colour which can be obtained from it. The several solutions are to be mixed together in a porcelain vessel.

To six parts of this red solution add two parts of the whitest sea salt, purified as previously described, and when the latter is dissolved, pour the fluid from the sediment (which is useless) into a porcelain vessel, and set it in hot ashes. Let it evaporate some hours, and as often as new sediment is formed, pour the fluid carefully away. Continue the heating of the latter, and stir it well, especially when it begins to thicken, with a glass rod, until at last it changes into a granulous salt of the most beautiful blue colour. This salt also is to be left an hour or two on the hot ashes, and is then to be put in the open air for a few days until it becomes crimson red. It is then to be replaced in the ashes, when it becomes blue, and again in the air, when it becomes red again, and this process is to be repeated until no more nitrous gas[d] is evolved when the salt is heated, and until a sample of it, placed in a small glass with a little water poured over it, becomes red in half an hour, without imparting its colour to the water. When this point is arrived at, wash the salt carefully out, dry the now deep red coloured pigment in a porcelain dish, in hot ashes, and bring it once more over glowing charcoal, where it changes into a beautiful constant blue.

[a] Königsblau.
[b] Helleres Blau.
[c] Zaffer.
[d] *Salpeterdünste*, nitrous vapour.

One part of this is to be mixed for use with two and a half parts of flux.

Flux. One part rock crystal, and one part well fused borax glass, pounded together, melted, thrown into water, powdered in an iron mortar, and ground fine on a glass plate.

V. YELLOW.

FUSED COLOURS.

53. Jonquil yellow is obtained by melting together one part antimonic acid[a]; two parts of a calcined mixture of equal parts tin and lead; one part carbonate of soda[b]; and twenty-four parts of flux, composed of one part white silicious sand, washed and calcined, and three parts minium.

54. For citron yellow, mix and melt together two parts sand and six parts litharge; pour the mass into an iron mortar, and afterwards pound it fine. Then mix with it one part oxide of silver, and one fourth part antimony ore[c], (antimony of commerce,) and grind the whole well together; melt by a strong fire in a Hessian crucible; pour in cold water, and grind for use.

MIXED COLOURS.

55. Mix fine powdered antimony[d] with one and a half times its weight of saltpetre, decrepitate the mass in a glowing crucible, and heat it to redness for a quarter of an hour; powder it when cold, and wash it with boiling water. The remaining white powder, which consists of the bi-antimoniate and bi-antimonite of potash, must be moderately heated in a crucible for an hour, with an equal, or from that to a double weight of minium, and mixed with equal parts of flux for use.

Flux. One part white silicious sand, washed and calcined, and three parts minium, ground together and melted as in Art. 31.

56. Uranium ore[e] must be broken to pieces and roasted, afterwards dissolved in nitric acid, the solution filtered, and the lead which may be present precipitated by dropping in sulphuric acid. The clear green solution must then be evaporated to dryness, and kept at a red heat until it is changed into a yellow saline mass. One part of the preparation so obtained is to be ground with three parts of flux.

Flux. Four parts minium, and one part flint powder[f], melted together and pulverized.

[a] Antimonsäure. [b] Kohlensaures Natron. [c] Spiessglanz. [d] Antimon.
[e] Uranerz. [f] Kieselpulver.

57. Cut one part of pure thin-beaten silver in pieces, and break one part raw antimony[a] and one part of lump sulphur to powder. Cover the bottom of a crucible with these two last mentioned substances, lay upon them a piece of the silver leaf, and repeat the operation till all is laid in. Place now the crucible in red-hot charcoal, and cover it with one piece of the same. As soon as the sulphur begins to burn, the mass is in fusion. It must then be thrown into clear water, dried, mixed with three parts of dark-burnt ochre[b], and pounded perfectly fine.

The pigment may be used without the addition of flux or gum, and laid, to the thickness of the back of a knife, on the reverse side of the glass. The superfluous quantity may be brushed off after burning.

58. For a light yellow, proceed as in the former case, only using one part of ochre instead of three.

The portion of the yellow colour described in the last Article, which may remain after the burning, may be used again for colouring matter.

59. The peculiar yellow[c] of the ancient artists is obtained by the following process:

Melt two parts of good sulphuret of antimony[d], with one part of silver tolerably free from copper; stir the mass together and pour it in a metallic mortar, pulverize the resulting sulphuret of antimony and silver[e], when cold, in the same mortar, and preserve it in a stopped phial. From this one part is to be taken, levigated with water on a copper table to the finest consistence, and mixed with four to seven parts of yellow ochre, twice heated to redness and washed in water, according to the proposed lighter or darker shade of the colour. Lay on as in No. 57.

60. Chloride of silver[f], and three times its weight of burnt ferruginous clay[g] (burnt clay out of a baking oven, previously pulverized and sifted,) are to be levigated with water, and laid on as Art. 57.

61. One part sulphuret of silver, one part glass of antimony[h], and one part burnt ochre, ground as fine as possible and treated in the foregoing manner.

62. For orange, dissolve pure silver in pure nitric acid, and precipitate it by hanging a piece of polished tin or copper plate in the solution. The flocculent precipitate is to be gathered together, washed in warm water, and ground fine.

One part of this to be mixed with one to two parts of the red colour No. 37.

63. One part of silver in powder[i], precipitated from the solution of nitrate by a

[a] Rohes Spiessglanz.
[b] Dunkelgebranntem Ocher.
[c] Das eigentliche sogenannte Kunstgelb.
[d] Schwefelantimon.
[e] Schwefelspiessglanzsilber.
[f] Chlorsilber.
[g] Eisenhaltigem Thon.
[h] Spiessglanzglas.
[i] Silberpulver.

piece of thin copper, must be washed in warm water, ground with one part red and one part yellow oxide of iron, and laid on as in No. 57.

VI. GREEN.

FUSED COLOURS.

64. One part green carbonate of copper, prepared by precipitating it from a solution of copper in nitric acid with carbonate of potash, and afterwards properly washing and drying the precipitate; four parts powdered white glass, and two parts minium, must be well mixed in a porcelain mortar, and exposed to a very strong fire in a glazed crucible, until threads drawn out appear perfectly clear. It must then be taken out of the crucible with a hook, thrown into water, dried and pulverized.

65. Four parts oxide of copper, one part of antimonic acid, or antimoniate of potash, and six parts flux, (composed of six parts sand, four parts yellow oxide of lead, one part borax glass, and one part nitre,) to be melted together and fine ground.

66. One part copper precipitate, (obtained by dissolving sulphate of copper in eight times its weight of boiling water, and precipitating the copper by keeping a piece of polished iron in the solution for 24 hours, washing the precipitate with hot water and drying it,) four parts pulverized white glass, and two parts minium, treated as in No. 64.

67. One part oxide of copper, ten parts antimoniate of potash, melted with thirty parts flux (viz. one part sand and three parts minium).

68. One part borate of copper, (obtained by dissolving pure sulphate of copper in water, and precipitating it with a solution of borate of soda, washing and drying the precipitate,) three parts white powdered glass, and one part minium, mixed and treated as in No. 64.

MIXED COLOURS.

69. Dissolve three parts pure oxide of cobalt in nitric acid, and two parts tin chippings in muriatic acid; both solutions are then to be thrown together into one glass, and precipitated with carbonate of potash. The precipitate must be collected on blotting paper, washed, dried, put in a muffle on a porcelain pot, and exposed for about eight hours to a yellow heat, being frequently stirred in the mean time. When cold, one part of this green is to be mixed with four parts flux.

Flux. One part sand, two parts litharge, and one part borax glass.

70. Equal parts of chromate of potash[a], and sulphur, are to be mixed and melted together in a covered crucible. As soon as the mass flows quietly, it is to be poured off and freed from the liver of sulphur[b] which will have formed, by well washing with boiling water, when the oxide remains as a beautiful green pigment. This is to be collected on a filter, dried and ground fine. One part of it may be mixed for use with three parts flux, laid on and burnt in[c].

Flux. Four parts minium and one part flint powder, melted together to a perfectly transparent glass.

71. One part of pure yellow chromate of potash[d] ground together with three parts fine powdered quartz, laid on and burnt in.

72. One part black oxide of manganese, and two parts cobalt or king's blue, mixed together and ground fine.

73. Two parts pure oxide of cobalt, ground with one part flux.

Flux. One drachm white sand and two drachms litharge.

Nos. 72 and 73 serve for green distances.

VII. VIOLET.

FUSED COLOURS.

74. Calcine best oxide of manganese in a potter's kiln with an equal quantity of saltpetre; take one part of this, six parts white glass in powder, and two parts minium; mix and treat in the manner already explained, with the strongest melting fire.

75. One part calcined oxide of manganese, one part zaffre, ten parts white glass powder, and four parts minium, treated as before.

MIXED COLOURS.

76. Gold purple[e] mixed with chloride of silver, in varying proportions as practice will direct. The latter must previously have been melted with ten times its weight of flux, prepared from three parts white quartz, washed and calcined, five parts calcined borax, and one part minium. The gold purple is to be mixed with this and the whole ground together.

The gold purple may be precipitated in combination with the chloride of silver by the following process. Drop into a large quantity of water, first some solution of tin, then a little nitrate of silver, and last the gold solution, constantly stirring the

[a] Chromsaures Kali. [b] Schwefelleber.

[c] There is a misplacement of words in the original here which creates some confusion.

[d] Chromkali. [e] Goldpurpur.

mixture. The proper proportionate quantities of the three solutions must be ascertained by experiment. The precipitate must be mixed with about an equal quantity, or rather more, of the flux.

Flux. Eight parts sand, four parts borax glass, one part nitre, and one part white chalk, treated as No. 31.

77. Gold purple ground together with three parts blue colour, and oxide of cobalt or king's smalt. This mixture gives the most beautiful violet colour, which may be made to assume different shades according to the greater or less quantity of purple, and the lighter or darker blue used.

78. One part purple, and six parts flux, ground together, give dark violet.

Flux. One part sand, two parts litharge, and one fourth of a part borax glass.

79. Mix pure gold purple after precipitation and washing, but without previously drying it, with some flux.

Flux. One part silicious sand, washed and calcined, and three parts minium, treated as No. 31.

VIII. BROWN.

FUSED COLOURS.

80. One part oxide of manganese, and eight parts flux, (from one drachm of sand, and three drachms of litharge melted together,) pounded and ground fine.

81. One part oxide of manganese, one fourth part blue of No. 52, and eight parts of the foregoing flux, used in the same way.

82. Two parts gold yellow of No. 57, one part antimony[a], and three parts flux, (prepared from one part sand, two parts lead, and one-fourth part borax, melted together,) powdered and ground fine.

MIXED COLOURS.

83. Red oxide of iron, prepared by precipitation with carbonate of potash from pure sulphate of iron, and afterwards heating the precipitate to redness until it becomes a lively red colour.

Flux. A quantity of lead glass equal to that of the oxide, and some gum water, ground on a glass table.

84. Two parts oxide of iron, three parts oxide of manganese, and three parts gold yellow of No. 57, melted together, poured into water, and when cold, mixed with three parts flux.

Flux. One part sand, two parts litharge, and one fourth part borax glass.

[a] Antimonium.

85. Red oxide of iron, (hematite, red chalk, or natural iron rust,) with oxide of manganese, or a small portion of sulphuret of antimony and silver, or some oxide of silver, treated as in No. 83, serve the same purpose.

86. Or, the sediment left in the preparation of the red colour, may be laid on the glass without further preparation.

87. Lastly, seven parts gold yellow of No. 57, ground with one part oxide of manganese, without melting or adding any flux.

(No. 81, gives sepia; 82, a yellow-brown.)

GENERAL REMARKS UPON THE PREPARATION OF THE PIGMENTS AND FLUXES.

88. As an essential addition to the foregoing, we may here give some few general directions respecting the preparation and combination of the pigments and fluxes, which could not well be inserted in the recipes themselves.

It is impossible to give any absolute and positive instructions for the proportionate quantities of the ingredients used in the pigments or fluxes. The determination of these must, in a great measure, be left to the trials and experience of the artist.

The same will apply also to the proportionate quantity of the flux to be used with the pigment, and to the quality of the flux also.

89. The materials of the colours, as well as of the fluxes, must be as good and as free from foreign ingredients as they can be obtained; otherwise disadvantageous consequences for the beauty and durability of the painting are to be feared.

90. When pigments, or fluxes, or both, are to be melted together, this must be done in strong Hessian crucibles, which are to be protected from the action of the melting mass, by covering them internally with a mixture of chalk in water. Or they may be glazed, which especially prevents the penetration of fused colours containing oxide of lead. To effect this latter object, the crucible is to be rinsed out with water, then covered on the inside with pulverized white glass, placed in the fire, and heated until the glaze adheres perfectly to its sides.

91. For the operation of fusion in Hessian crucibles, it is necessary to use an ordinary wind or air furnace[a], furnished with a dome or cover having a draught-pipe. The inside is to be covered everywhere with fire clay[b], to a thickness of three inches, and in the cover must be a door, or at least an opening, filled up with a clay stopper, by which the interior may be accessible, in order to lift off the cover of the crucible

[a] Windofen. [b] Thon.

and to stir its contents with a polished glass rod. Upon the grate of this furnace must be laid a pot of clay, and upon this the crucible, which must be covered with an earthenware lid[a]. It may then be surrounded with wood charcoal[b].

92. The ingredients of the pigments which are to be fused, must previously, unless particularly directed otherwise, be ground to the finest powder on a thick glass plate with a glass muller, or, where specially indicated, upon a copper table with a steel muller, and not generally upon marble, porcelain, or substances containing lime, for these, by the process of rubbing, are liable to give off a portion of their material. The ingredients must be intimately mixed: the crucible is first (unless otherwise specified) to be brought to a red heat gradually, and the mixture then placed in it, butn ever in greater quantity than will three fourths fill it.

In like manner must the ingredients of the flux be treated, and also those of the pigments and fluxes which have to be melted together to form a fused colour, provided that nothing appear in the recipes to render another mode of treatment necessary for the particular case.

The crucible must then, as a general rule, be kept some time at a moderate red heat, which is afterwards to be increased till the mass is perfectly melted and runs freely, and till threads drawn from it with a polished steel rod appear pure and clear. It must then be poured into a dish of cold pure water, afterwards dried, pulverized, and treated according to the special directions.

93. The pigments and fluxes thus prepared are to be tested in the following manner. Place a spacious crucible in a furnace in an inclined position, and put in this strips of the same kind of glass which it is proposed to paint on, streaked with the colours which are to be used. These are to be exposed to a lively red heat in the crucible until they become weak and begin to bend, when they must be laid to cool on the top of the furnace or in the ash-pit, and afterwards examined.

Should the edges of the painted parts appear as if the colours had overrun their bounds, this is a sign of the super-saturation of the pigment with flux, and the latter must accordingly be reduced in quantity till the appearance is removed; otherwise the whole sueeess of a glass painting might be destroyed, for sueh easily fusible eolours are apt to blend together when laid near each other.

On the other hand, the dull[c] appearance and rough feel of the colours betray a deficiency of flux, which must therefore be added in greater quantity.

94. The various shades and transitions of the prineipal colours may be obtained, not only by the directions as to the materials and treatment given in the speeial recipes, but in more frequent eases and much more comprehensively, by certain ma-

[a] Thonscherben, literally a pot of clay. [b] Holzkohlen. [c] Matt.

nipulations which will be hereafter mentioned in the description of the manner of laying the pigments on the glass.

95. Independently of the fluxes named in the foregoing recipes for each special pigment, there are others which may serve for every colour, or at the most require a trifling variation in the peculiar proportions of the quantities of their ingredients. These proportions depend principally upon the greater or less fusibility of the pigment, and will be easily discovered by the practised artist. Such a flux, for example, is four parts minium and one part powdered silica; the latter obtained from the purest flint, free from calcareous specks, by heating it to redness three or four times in a crucible, throwing it every time into water, and afterwards pounding it in a mortar[a] and sifting it through a fine sieve. This powder is to be mixed as intimately as possible with the minium, melted in a covered crucible, stirring the mass frequently with a glass rod, until it is transformed into a perfectly transparent yellow glass, the silica being entirely dissolved, and threads, drawn by way of test from the mass, being perfectly clear. It is then to be pressed out in water, dried and powdered, sifted through a fine sieve, and kept in closed bottles.

Or one part rock crystal[b] is to be pounded and melted by a strong fire with one part of well fused borax glass, and treated, when it shows the before named signs of perfect fusion, in the foregoing manner.

Or one part powdered white glass and two parts minium may be prepared in the same way.

96. Besides the implements already named, the following are necessary for the manipulation of the processes for preparing the pigments and fluxes; namely, coal-shovels, fire hooks[c], crucible tongs, hooks of polished iron for drawing the melted masses out of the crucibles, mortars of iron and porcelain, colour dishes, &c. of the same material or glass, spatulæ of iron and wood, and other things which can always be obtained without much trouble or expense, or indeed may be supplied from common household utensils.

In the absence of a proper wind furnace, a common round stove, like those used for warming the German apartments[d], may easily be adapted to the purpose.

97. All vessels which come into immediate contact with the pigments or fluxes, especially those used for their preservation, mixing, fusion, &c., must be kept as clean as possible, and carefully freed from all refuse after every time of using, lest by an accidental mixing of heterogeneous ingredients the fruit of the labour should be lost. Great caution is especially necessary in employing crucibles which have been used before.

[a] A porcelain mortar is mentioned, but this must be an oversight. See Art. 92.

[b] Bergkrystall. [c] Feuerhacken. [d] Kanonofen.

CHAPTER II.

OF THE PROCESS OF LAYING THE COLOURS ON THE GLASS.

98. The manipulation of the process of laying the colours on the glass, varies, in some measure, according to the different kinds of glass painting, which therefore call for the first explanation.

Either the colours may be laid upon a single sheet of glass, upon which the whole figure with all its principal colours and intermediate tints are burned in. (Peinture en apprêt.) Or,

The figure may be composed of various pieces of *pot metal*[a], (glass already coloured in its manufacture,) and only the outlines and shadows painted on, the glass pieces giving the colours for the peculiar places where they are inserted. (Mosaic glass painting[b].) Or,

Both these methods may be combined in one and the same picture, by composing it partly of pieces of coloured *pot metal* and partly of white and painted glass, fixed together.

PEINTURE EN APPRÊT.

99. For painting on a single sheet of glass, the following rules must be observed.

A pure white glass must be chosen for the purpose, free from air specks or bubbles, and especially difficult of fusion, as the whole labour would be lost if it were attempted to burn in the colours upon a ground which fused as easily as themselves. It is practicable, as the examples of the ancients shew, to paint on what would appear the commonest[c] glass with a good result, provided that it does not contain too much lead, and thereby become too easily fusible.

Before the operation of painting, the glass plate must be rubbed to a sufficient extent with pure lime, slaked by exposure to the air, in order to clean it perfectly.

100. The ground or foundation must then be laid over the whole surface of the plate, which may be done in two different ways. Some artists simply dip a piece of clean linen cloth or a flat camel hair pencil in oil of turpentine, and brush the pane of glass with it equally over its surface; while others give to the whole a thin clear

[a] Hüttenglasstücken. [b] Musivische Glasmalerei. [c] Unreinste und gemeinste.

ground of black[a] glass painting colour, in such manner as not to destroy its transparency, but at most to give it the appearance of a dead ground glass. Both methods answer the purpose of covering the glass with a viscous surface, which takes the design and the colours better than a polished ground; the latter prepares the glass at the same time for the painting effects which are to be obtained upon it.

In both cases the ground which has been laid on must be most carefully levelled over and brought to as thin a coat as possible with a large hair pencil, and must be dried quickly, taking great care to preserve it from dust, &c.

101. Painting on one sheet requires only one pattern drawing[b] or cartoon, which, however, may be used in two ways.

Either the glass sheet, grounded and dried as above directed, may be laid upon the drawing, and the outlines, as seen through the glass, traced lightly with a fine pencil, and with black or other glass colour corresponding[c] to the ground.

Or the drawing may be placed reversed on the sheet, and all the outlines marked over with a steel or ivory style. If this latter method is used upon a ground of simple turpentine, the back of the drawing must previously be rubbed over with black lead, so that the traced lines may appear dark on the light ground.

In both cases, the drawing, whether it is placed upon or under the glass, must, for the sake of convenience, be fastened to it with pieces of wax at the four corners.

102. For properly carrying out the process of laying on the colours, a desk or easel is necessary, which should be capable of being placed in an inclined position by means of props, and should be formed by fixing a glass plate in a wooden frame, so that the light may pass through the painting. Sometimes during the progress of the work, the glass which is being painted may be removed from the easel and laid upon a sheet of white paper, in order better to shew the effect of certain colours.

103. The vehicle with which the pigments are laid on is generally oil. Some artists use exclusively water, but this alone is an insufficient medium for binding the metallic bodies to the glass, particularly if, as in the case of fused colours, they are somewhat coarse in their nature, and require to be laid on in thick layers. They then easily loosen from the plate before the firing, and render the process of laying on much more difficult. It is an important advantage, that with oil the edges are more sharply defined, and the parts already painted may be again touched over when dry without danger of loosening the ground.

It must be understood that when it is wished to make use of water, the plate

[a] Hellen schwarzen. [b] Karton. [c] Geeigneten.

must either not be grounded at all, or only with a glass painting colour worked up with water.

The most suitable kind of oil for the purpose is rectified oil of turpentine, somewhat thickened by standing, and to which a little oil of lavender is added. This preparation gives the mass the necessary degree of viscosity, and also prevents the colour on the palette from drying up and thickening too quickly.

The palette should be of thick sheet glass, ground rough by rubbing with a glass muller and fine sand.

104. Preparatory to mixing with oil for laying on, those colours which require a flux must (unless a different process is specially indicated) be ground fine in water with the flux, and again dried. But the fused colours, i. e. those in which the oxide has already been vitrified with the flux into the state of a transparent glass, should, for the purpose of laying on, only be coarsely granulated[a]; for the finer these are ground, the more likely is their transparency and perfection to be impaired when burnt in.

Those pigments which are laid on in their simple combination with an earthy vehicle, and without flux, as, for example, the yellow and red colours prepared from silver, form an absolute exception to the use of oil, and must, for laying on, be stirred up with water to the consistence of a thick cream.

The first of these three kinds of pigments should, as a general rule, be laid on in a thin, the two latter in a pasty, state. The depth of tone of the colour depends, with all three, upon the degree of thickness in which the pigments are laid upon the glass.

The laying on of the fused colours is accompanied with more difficulty than that of the other kinds. The latter are simply laid on with the pencil, in the same manner as with other kinds of painting, and the only care necessary is that the coat may be perfectly equal and regular, wherefore for large surfaces, a wide smooth pencil or driver is usually employed. The colours prepared from silver must be treated differently, and laid on the glass at least to the thickness of the back of a knife.

But the fused colours must be brought upon the surfaces to be covered in the state of a thick flowing mass, moist enough to run, but consistent enough to lie upon the glass. For this purpose, small portions must be laid on and spread out with a pencil or small spoon, and made to flow to the circumscribing outlines, by inclining the sheet in the proper directions. If any part of the surface thus covered is required to take a darker tone of colour, the plate must be kept for some time at an inclination in the

[a] Grob gekörnt.

corresponding direction, so that the colour may thus accumulate thicker on that part. By this process many gradations of tone may be obtained from one and the same pigment.

105. The remaining rules for the laying on of the pigments are those which principally result from the different methods of painting on one sheet, of which there are principally three.

Either the whole picture may be brought out in its outlines and shadows, on one side of the sheet, with black, brown, or gray colour, and illumined with the proper colours in the proper places on the other side.

Or simply the manner of ordinary oil painting may be adopted with the glass colours, and the picture treated as by an artist in oil.

Or, as is now most customary, both methods may be united, the artist making use of each in certain places, according to the requirements of the object he has in view.

For these three methods the following common rules will serve.

106. The shadows and dark coloured outlines, and that which is called in oil under-painting[a], should be drawn on the front side of the glass, or that which is turned towards the spectator.

The illuminating colours, especially the principal ones, should be laid on the back or reversed side.

Intermediate tints, and gradations by shading[b], should generally be placed on the front side, but sometimes, when they alternate with each other, necessarily must lie on both; as they cannot be put in contact on one and the same side without danger of running into each other and making a false colour.

The silver yellow and red colours, before alluded to, must always be placed on the back or reverse side.

In some particular cases colours may be laid on corresponding places on both sides of the glass, in order to produce certain effects by the light falling through the two together. Thus, purple on one side and gold yellow on the other, give a magnificent fiery scarlet; blue and yellow, according to their respective intensities, give different shades of green; the latter, again, with blue on the opposite side, serve for excellent distance colours. And finally, by the mixture of several colours, the most diversified intermediate tints may be obtained, so that glass painting in its present state, may be brought to assimilate with oil painting, in its power of producing varied effects.

107. In order to put a new tone of colour on a surface already marked with out-

[a] Untermalungen. [b] Abstufungen, Uebergänge.

lines, &c., it must first be dried by a gentle and equal heat, (to avoid the warping of the glass,) and again painted immediately after it has cooled. Or the black lines first laid on may be at once burnt in, and where possible, with these any yellow shades also which may be required, after which the painting, then fixed, may be further worked upon without danger of damage. The residuum of the unfluxed yellow colour may be removed after burning, and again used. This colour must never be put over any other, nor over dark shadows, unless these are previously burnt in, but always requires a carefully cleaned surface of glass to lie upon; otherwise it would combine with the flux of the under colour, whereby the earthy residuum would be fixed, and the transparency and beauty of the whole destroyed.

108. All pigments must be laid on somewhat darker than in other kinds of painting, as they lose in depth by burning.

When a pigment has overrun its outline, the superfluous quantity must be removed, when dry, with a knife.

By taking away the ground with a style of fine grained wood, pointed in front and smooth at the back, (a tool used in etching,) the most effective lights may be obtained.

Should the colours not appear quite dull and dry, but shining and greasy, after the drying of the picture, this is caused by the misuse of the oil, which is always dangerous to the beauty of the pigments in firing.

It is neither necessary nor advisable to allow more than one day for the drying of the colours; the burning in should be proceeded with at the expiration of the time named.

Lastly, during the work, the greatest cleanliness must be observed throughout the work, the pencil and palette must be kept perfectly clean, and the painting preserved from dust, &c., for which reason it is not advisable to paint in a laboratory or melting room, where the presence of vapour, dust, and impurities of many kinds cannot be avoided.

MOSAIC GLASS PAINTING.

109. The before-mentioned rules for laying on the colours will apply also to the method of forming designs with coloured pieces of pot metal, or partly with these and partly with painted white glass. It remains to say something more in reference to the employment of the cartoons, and the cutting and arrangement of the glasses in this branch of the art, which, however, is but little practised, since the leaden bars, in a picture calculated for a near view are detrimental to the effect.

Mosaic glass painting requires two cartoons. One of these, a finished and

coloured one, is used by the artist as a pattern; and serves to determine the arrangement of the pieces of glass according to their several colours, and the manner of introducing the leaden ribs to fasten them together, according to the outlines of the figures. Each piece of glass proposed to make part of the picture, must be distinguished by a separate number.

The other cartoon, which consists only of the black outlines of the lead jointing, and whose several parts are numbered to correspond with the first, is to be cut up in pieces according to the outlines, and the size of each piece diminished all round by one half the thickness of the lead bar of the jointing, so that the pieces of glass may be exactly cut to the proper dimensions.

The cutting of the glass may either be done by the diamond, or by tracing the line of division with a red hot iron, after having made a small incision at its commencement, or by cutting with scissors under water, which, however, is not a safe process.

110. With overlaid glass[a], i. e. pot metal of two several sheets or layers laid upon each other from the frit, as for example red and white, blue and white, &c., it is possible to produce many effects of shading by removing more or less of the coloured glass sheet, according to the outline, by grinding with emery. Or the coloured sheet may be ground through to the white glass, and thus coloured ornaments may be given on white ground, especially for the representation of damasked materials. Also, the white parts thus exposed may have a colour given them at pleasure on the opposite side, in order to produce many kinds of effects, or to avoid the necessity of using many pieces when the introduction of another colour in that of the pot metal is indispensable for the effect required.

The coloured pot metal may be painted with intermediate tints of its own principal colour, or even, in order to produce certain effects, may be covered on one of its surfaces with another colour. Thus, a fiery red may be obtained by covering a red overlaid glass on its white surface with the yellow silver colour, and burning it in, or a shade of green by a similar use of the same pigment on a blue overlaid glass. In these operations the widest latitude is left to the talent and practice of the artist.

[a] Ueberfanggläsern.

CHAPTER III.

OF THE PROCESS OF FIRING, OR BURNING IN OF THE COLOURS; AND THE CONSTRUCTION OF THE KILN.

111. The object kept constantly in view in the foregoing explanation of the processes of glass painting, has been to bring the practice of this art into the reach of as many hands as possible; and therefore it has been especially endeavoured to point out, not only the most suitable, but also the shortest and easiest methods of operation, in order to show that the processes are much less costly and complicated than generally supposed, and to put the reader as much as possible in the position of being able to construct for himself the requisite apparatus.

This principle has been particularly adhered to in the following description of the process of firing, and the construction of the necessary kiln; for it will be shown that the operation may be performed in any common kitchen, and that an ordinary fireplace may, with the aid of some fire-bricks, tiles, and iron rods, be made to suffice for the construction of a furnace which shall answer perfectly the purpose intended.

The remaining necessary implements consist of a muffle, an iron charcoal shovel, a pair of fire tongs, tongs to extract the trial pieces, and a pot in which to dry the charcoal.

112. The muffle, if it cannot be obtained of cast iron or plumbago, may be made of burnt earthenware, and its size may be regulated according to circumstances. If of the latter material, it must, in order to stand fire well, be constructed of a mixture of two parts fire clay[a], and one part fine sand, and should be of an oblong four-cornered figure; for example, twelve inches long, ten inches wide, and five inches high. It must, however, be large enough to receive the largest of the sheets to be burnt, without their edges coming in contact with the sides of the muffle.

In the middle of one of the short sides there should be an opening five inches long and a quarter of an inch wide, for extracting the test pieces. The muffle is to be closed with a cover of the same material, having two round holes of about one inch and a half diameter, running out into two tubes about two inches and a half long.

113. To receive the muffle, a four-cornered kiln is to be built, whose interior di-

[a] Thon.

mensions should be four inches longer, and as much wider, than the muffle which is to be placed therein.

For this purpose fire bricks[a] are simply to be laid upon each other, but in such a manner that the wall turned towards the operator may contain an opening three inches high from the bottom and twelve inches wide, for the management of the firing. When it has reached the height of four inches all round, a perfectly horizontal bearing frame is to be formed by laying a pair of iron rods upon the long sides. Upon these the muffle is to be placed, in such manner that the test opening is turned towards the operator.

After the painted glass sheets are laid in the muffle, the walls of the kiln are to be built to such a height as to reach one inch above the tubes of the cover, in doing which, however, another opening three inches and a half wide and two inches high, corresponding to the test opening of the muffle, must again be left in the front wall, or that turned towards the operator.

Both openings of this wall of the muffle must be capable of being closed; the lower one, that of the ash-pit, with a stopper of iron plate filled with clay, the upper one, or the one corresponding to the test opening, with a stone. Each of these stoppers must fit exactly, and be of the same thickness as the wall.

114. The painted glass intended for firing must be laid in the muffle in the following manner. Sprinkle first of all well burnt lime with water, and dry it again, when slaked, over the fire. Sift this powder through a coarse hair sieve, so as to cover the bottom of the muffle to the thickness of one inch. Carefully level over this layer, (since otherwise the glass might become crooked in burning,) and lay the sheets upon it near each other, but not so close as to come in contact either with each other or with the walls of the muffle. Then sift another thin layer of lime over them; lay a second set of the pieces of painted glass on the lime, and continue in this manner up to the middle of the muffle, where the opening is made for drawing out the tests. These consist of strips of glass about six or seven inches long and one inch wide, streaked with patterns of the colours which are to be burnt in. They are to be laid in the muffle like the sheets of painted glass, upon a layer of lime, and covered with it in the same manner; and they must be so placed that one end may reach to the middle of the muffle, while the other end projects half an inch out of the test opening before described, in order that they may be laid hold of with the tongs, and drawn out for examination.

After these are placed, the sheets of the painted glass and the layers of lime are to be alternated, as before, until all the glass is placed in, or until the muffle is full. If

[a] Backsteine.

only one sheet is to be fired, the muffle must be filled with common instead of painted glass, as above directed, and the single sheet to be operated upon must form one of the middle layers. After this the muffle must be closed in.

115. In the two tubes of the cover are to be placed pieces of the same kind of glass as is used to paint upon, five or six inches long and one inch wide; these may be called *watchers*[a]; they are to be placed vertically, and in such a manner that their lower ends may stand on the sheet of lime next under the cover, and their upper ends may project about two inches out of the tubes.

After this, and after the test opening of the front wall is closed with its stopper, the firing may be commenced by strewing glowing charcoal over the hearth of the kiln, and to some little distance up the sides, then filling all the interstices between the muffle and the walls of the kiln with charcoal up to the height of the muffle, and afterwards covering the latter in such manner that the *watchers* may project in sight. The whole of the fuel will then soon catch fire.

Proceed to lay across the walls of the kiln some iron bars, and upon these some fire-tiles, so as to cover the kiln as far as an opening in the centre, not quite one foot diameter.

It is here to be remarked, that when the muffle is new, or has not been employed for some time before, it will be safer to heat it to redness previously to using, which is to be done in the above described manner, exactly as if it contained glass, increasing the fire to a white heat, and allowing the muffle to cool of itself after the fire is removed. When it is quite cold, it may be used with safety.

It is particularly necessary to take care that the heat of the kiln during the process is raised equally on all sides of the muffle; and the fire must also be retained at a uniform glow, by the continued addition of fresh fuel.

116. When the muffle reaches a dull red heat[b], when the *watchers* bend, and when the colours appear clear and perfectly fused upon the test strips, (which must have been drawn out and laid upon the top of the kiln to cool slowly,) all which customarily takes place about the sixth or seventh hour of the burning, the fire is to be removed by the hearth opening of the kiln, as quickly as possible, but yet with care not to shake or disturb the muffle; all the openings of the kiln must be stopped and luted, and the whole left to cool gradually, which will require between twenty-four and thirty-six hours.

The spare charcoal may be thrown into a pot of water and used again.

After the cooling, the glass sheets are to be taken out of the muffle, cleaned with a brush and lukewarm water, and carefully dried.

[a] Wächter. [b] Dunkelroth.

117. Should any parts require further painting, and consequently another firing, the pigments must be mixed the second time with a greater quantity of flux, in order to render them more fusible than those previously burnt in.

Also the heat of the second burning should be less than that used the first time.

CHAPTER IV.

OF THE OPERATION OF FIXING TOGETHER OR LEADING MOSAIC GLASS.

118. This process is most customarily and properly left to the glazier, who also ought to cut out the pieces of glass. In order, however, to leave nothing wanting for those amateurs who may wish to make the whole of a specimen of the art their own, the following rules may be useful.

Common window lead of the glaziers, but of very small dimensions, is to be laid round one of the middle pieces forming the glass painting, so as to hold it in the groove of one of its sides, while, in that of its other side, another piece is to be inserted. Continue this, constantly under the guidance of the cartoon, upon which the work may be laid, and working always from the centre of the picture outwards, soldering the several pieces of lead together during the process, by their ends of contact, which may be interlaid in the grooves at the corners where they join.

For this the soft or tin solder (consisting of tin having so much lead melted with it that when bent it does but slightly crackle—commonly one part lead and three or four parts tin) is required, and a common glazier's soldering iron with a copper point should be used for applying it. After this is heated in a charcoal fire, it is to be rubbed in powdered sal-ammoniac and rosin, and then on a piece of the solder, a portion of which will adhere to the copper and may be carried to the leaden bars. When the soldering is executed, it will be well to touch over the junctures with dark oil colour, or still better with dilute sulphuric acid, in order to remove the bright metallic lustre, which might otherwise damage the effect of the painting.

ACCOUNT

OF THE

PAINTED GLASS WINDOWS

OF THE

CHURCH AT GOUDA, IN HOLLAND.

The architect, antiquary, and the artist devoted to the decorative style of painted and stained glass would derive ample gratification from a trip to Gouda, which lies north-east of Rotterdam, at the distance of about twelve miles; the road is conducted along the high dyke, constructed in 1272, and passes the whole way through numerous large and small dairy farms, and is moreover a delightful drive of two hours. The visitor on his arrival at the town of Gouda will be gratified with the remarkable appearance of the old but clean decorated gabled houses, and its singular town hall. On the southern side of the Grand Place will be found the church of St. John the Baptist[a]. Our present purpose is only to draw attention to the extraordinary extent of painted glass in this church, which exists uninjured by time, or by the rude hand of the depraved, to an extent unequalled in any other ecclesiastical edifice in Christendom. From our own memorandums, and from extracts from the "Tegenwoordige Staat der Nederlanden, xv. Deel," the following is believed to be substantially correct. The first church was burnt down in 1375, and rebuilt on its site in 1458, finished by the choir being added in 1485; and that on the 12th of January, 1552, at nine o'clock at

[a] It is a majestic edifice, and surpasses in height the cathedral of Cologne; the steeple is conspicuous at a considerable distance. It had, it is stated, in the olden times, fifty-two altars; it merits also the inspection of travellers, on account of its celebrated organ, which is only exceeded in Holland by that at Haarlem. Views in Holland, &c., described by Professor Van Kampen, p. 111. 1836.

night, the tower was materially injured by a "violent tempest of hail, wind, thunder, and lightning, whereby the uppermost part of the spire of the steeple took fire, appearing to the sight just like the twinkling of a star. The citizens, alarmed by this accident, came running with links and torches, went up to the steeple, in hopes of quenching the fire, but the wind increasing, and the lead with which the spire was covered melting by the flame, and so dropping down upon them, they were fain to leave off: the fire thus continuing, when the clock struck twelve, the great bell, together with all the others, fell down on the stone vault, and broke to pieces, except one bell called Gabriel, which falling into a hole, remained whole, and so did also all the stonework of the steeple from the top to the bottom, whilst the spire and the wood in the steeple were burning. The fire had not then touched the church, and therefore the churchwardens, with the sexton and the wardens of the company halls, saved all the silver and gilded vessels, ornaments, the mass books, and other valuable books and papers, the branch candlesticks, and other utensils; but at length the wainscot near our lady choir caught fire, which first appearing like a burning torch, so increased and spread itself all over the church, that nothing more could be saved, neither stalls nor forms; also two organs were consumed by the fire; all the columns save ten or twelve fell down, and nothing of the church remained standing but the walls and the little house where the sacrament was kept:

"The churchwardens at that time were Witte Aertsze Van Hoef, Herman Michielsze, Gysbert Jansze Moel, Simon Gecnen, Jacob Dirkszesas, and Aart Gysbertsze, who made record of this unhappy accident.

"On the 7th of August, 1552, the silver image of St. John, that stood before the choir, was broke and carried to Dordrecht into the Mint; it weighed above eight pounds.

"The rubbish of the ruined church was carried away by the inhabitants of the city, without any charges to the church; this was done by turns voluntarily and merrily, the people going to work at the sound of pipes and drums, all without any pay, and the most gave gifts of 21, 16, 12, and 3 German florins, every one according to his ability.

"Not long after, from the ruins another church was raised, as a phœnix from the ashes, but far more glorious and magnificent than the former; so that because of the excellent glass work this building is renowned all over the world."

The stained glass windows, varying from the period of 1556 to 1601, were given by several eminent persons, as Philip II. King of Spain, and Queen Mary of England; Margaret of Austria, Duchess of Parma, and Governess of the Low Countries; William I. Prince of Orange, &c. The Lords States of South and

North Holland; the chief cities of Holland; some eminent colleges, lords, and ladies, both spiritual and temporal. Among those eminent men, the principal painters were the two brothers at Gouda, Dirk and Wouter Pietersz. Crabeth.

WINDOW I.

Next to the north side, was given by the noble and mighty lords, the states of South Holland, in the year 1596.

Liberty of Conscience,

Represented by a chariot, and Tyranny under its wheels. In it sits a woman, armed with a shield and sword, denoting the defence of the faith. At her right hand sits a naked woman, representing Liberty of Conscience; and the chariot is drawn by five other women, denoting Charity, Justice, Concord, Fidelity, and Constancy.

The arms also are seen of His Highness the Prince of Orange and Holland, and those of the cities and towns of South Holland, *viz.*, Dordrecht, Haarlem, Delf, Leyden, Amsterdam, Gouda, Rotterdam, Gorinchem, Schiedam, Schoonhoven, Briel, Woerden, Oudewater, Geertruydenberg, Heusden, Naarden, Weesp, Muyden Vyanen, Asperen, Worcum, Heukelom, Yselsteyn and Goereede.

The Low Countries had long wished for defence against tyranny and for liberty of conscience, since murdering, killing, rapine, burning, and setting on fire, were the continual objects. And that therefore the Lord was to be prayed that love, unity, steadfastness, justice, and faithfulness might be reared up, and tyranny kept under the chariot, in order that liberty of conscience might triumph.

Joachim Uytewaal, at Utrecht, invent.

Adriaan G. de Vrye, fig. et pinx. Goudæ.

WINDOW II.

(HAARLEM, 1596.)

The lords burgomasters of Haarlem gave this glass, representing the taking of the city of Damietta in Egypt.

Victory. Glory.
Strength. Perseverance.

Strength and perseverance have ever subdued violence, and therefore they are honoured by Victory with Glory.

Mars. Neptune.

Virtue had overcome force.

Damietta. Nilus, 1219.

Wilhelmus Tibaut, fig. et pinx. Haarlem, 1597.

A Relation of the Expedition represented in this Glass of DAMIETTA.

In the year of our Lord 1188, the Pope of Rome, Alexander the Third, and the Emperor Frederick the First, having appointed a general crusade for the retaking of the Holy City, Jerusalem, they sent into Germany and other countries to raise forces. The chief leaders of this expedition, were the aforesaid Emperor Frederick; Philip, King of France; Richard, King of England; the Duke of Bavaria and Saxony; Conrad, Duke of Austria; Frederick, Duke of Swabia; Henry, Duke of Lorraine and Brabant; Philip, Earl of Flanders; Florence, Earl of Holland; Diederick, Earl of Cleveland; Otho, Earl of Guelderland, and many other princes and lords. They met first in Calabria, where the emperor asked the Abbot Joachim, who was counted a very learned divine, and esteemed as a prophet, what would be the issue of this expedition. To which the Abbot re-

turned, that the above mentioned Christian princes were not like to succeed, since the time was not come yet that God would deliver the Promised Land from the Infidels, and that the emperor should be drowned before he returned home; and so it happened. The emperor having heard this, travelled with the said princes through Bulgaria towards the Holy Land; but not being able to take the city of Jerusalem, he besieged Damietta, a very strong place in Egypt, situated on the river Nile. But this city was well fortified with towers, especially at the entrance of the port, where the haven was shut by a strong iron chain crossing the water and reaching from one tower to the other, so that no vessel could enter; and thus the city was considered invincible. This gave occasion to William, the second son of Count Florence, to enter with those of Haarlem upon some new device. For they got a great steel saw made, which was fastened to the keel of one of their ships, and having staid for a strong gale of wind, they sailed into the haven with such a force, that the chain gave way and broke, whereby all the ships of the Christian princes entered, and so they mastered the city Damietta. The emperor considering that this eminent city was thus overcome by the valour and prudence of William, son of Count Florence, gifted and knighted him, and ordered that the princes and earls of Holland should fight and be under the protection of the emperor's banner. And to honour the valiants of Haarlem, he added to the four stars in their coat of arms, a sword, to which the patriarch Joachim joined the cross. These are still the arms of Haarlem. It is said also that they brought from thence two bells of silver, or of very fine metal, which are hanging still in the steeple of the great church, and called the Damietta bells. It is left upon record that those of Haarlem anciently had four stars for their arms, yet it is the general belief that long before that time their arms were a dry or barren tree, as is represented in several places, and also mentioned in the Chronicle.

WINDOW III.

(DORDRECHT, 1597.)

The lords burgomasters of the city of Dordrecht gave the glass of the Virgin of Dordrecht. Wherein are seen also the arms of Naerden, Leerdam, Weeps, Hoorn, Schoonhoven, Muyden, Medenblik, Grootenbroek Monnikendam, Enkhuyzen, Asperen, Heusden, Schiedam, Vlaardingen, Geertruydenberg.

The senate and people of Dordrecht had dedicated this glass to the divine friendship hitherto religiously kept, and henceforth to be so cultivated, with the senate and people of Gouda.

Adriaan G. de Vrye, fig. et pinx. Goudæ.

Here sits the Virgin of Dordrecht under a triumphal arch, she was never overcome by war, and so had kept a free seat. May this glass, as well as the city walls, together with liberty of conscience, continue throughout many ages.

WINDOW IV.

The Lords Privy Councillors of Rhineland.

Justice. Strength or Valour.

William, King of the Romans, the eighteenth Earl of Holland.

The arms of Holland within a hedge; and a single eagle also hedged about.

The Roman King William had privileged the Privy Councillors of Rhineland, in the year 1255, at Leyden, the 5th Ides of October.

The Arms of

Sir Pieter van der Does, Bailiff and Dykegrave of Rhineland.

J. V. Duyvenvoorde en Woude, Lord of Warmond, Admiral of Holland.
Sir Gerard van Poelgeest, Lord of Hoogemade.
Pieter de Kies, Burgomaster of Haarlem.
Nicolas Ruyghaver, Bailiff of Haarlem.
Sir Andrew van Bronkhorst, Lord of Vliet.
Sir Arnold van Duyvenvoorde.
Sir Nicolas van Matenes, Lord of Wibisma.
Foy van Broukhoven, Rentmaster.
Dirk van Egmond, Secretary of the Privy Councillorship of Rhineland.

Given by the Lord Privy Councillors of Rhineland, 1594.
Adriaan de Vrye, fig. et pinx. Goudæ.

There are the arms of the Rhineland Lords, instituted by King William to be Privy Councillors, and to prevent all mischief or dangers, according to the privilege given them the 5th Ides of October, in the year 1255.

WINDOW V.

This glass was given by the noble lady, Madam Gabriele van Boetzelaar, Abbess of the Nunnery, Rynsburg; whose image, placed underneath, is accompanied by that of the Angel Gabriel standing behind her as her tutelar angel. The main worth of this glass is the Queen of Sheba, who coming to see the wisdom of Solomon, presents him with many excellent gifts, as may be read in 1 Kings, x.

The Queen of Sheba comes to see the glory of Solomon.

The Arms of
Boetselaar, Mol, Van Leedburg, Langerak, Piek, Rechteren, Harler, Polane, Appeltern, Arkel, Broekhuyzen, Kuylenburg, Haften, Lindee, Brederode, Benthem, Varik.

I trust in God.
Walter Crabeth, fig. et pinx. Goudæ, 1561.

King Solomon sitting in his glory, is saluted by the Queen of Sheba, whose witty riddles he explained, so that she fell into admiration, and, ravished by his wisdom, said, Blessed are they that stand continually before thee.

WINDOW VI.

This glass was given by the noble prince, John van Baden, Duke of Aarschot, Lord of Arenberg, &c., Knight of the Golden Fleece, and the noble princess, Lady Katharine, Countess of Mark, his wife; whose images with their patrons, viz., St. John with a lamb, &c., St. Katherine with a wheel and sword, stand underneath the history, being that of the siege of Bethulia, and the cutting off of Holofernes's head.

The Arms of
Baden, Bergen, Halewyn, Zevenbergen, Brabançon, St. Simon, Gistelle, Vianen, Abbeville, Brabant, Latrimouelle, Croy, Rely, Sarbrugge, Crequi, Femskerk, Mark, Egmont, Monfort, Bergen, Bochault, Kulenburgh, Naaldwyk, Sevenbergen, Vernenburg, Meurs, Rotselaar, St. Simon, Flanders, Ville, Raphorst, Vianen.

Dirk Crabeth, fig. et pinx. Goudæ, 1571.

The valiant Judith delivers here her native country, being exceedingly menaced by Holofernes. Whilst he lay drunk and sleeping on his couch, she severed his head from his body; whereby the Assyrian army was dismayed; for all force is in vain, when God protects the land.

WINDOW VII.[a]

This glass was given by Philip the Second, King of Spain, and Mary, Queen of England,

[a] It is our intention, in a future Part, to give a coloured fac-simile of that portion of this window which relates to English History in the persons of Philip of Spain and Mary of England kneeling at the table of our Lord.

his consort. The upper part contains the history of the consecration of Solomon's Temple at Jerusalem, and his sacrifices.

The undermost part represents Christ's Last Supper with his Apostles; and the king and queen kneeling on cushions, with the sceptre, sword, and helmet, and both their arms next to them.

I have heard thy prayer; and if thou walkest before me as thy father did, I will establish the throne of thy kingdom for ever.

Whosoever shall have prayed in this place, I have heard him.

Praise the Lord, for he is good, and his mercy endureth for ever.

Lo, here Solomon.

See here more than Solomon.

Lord, show us the Father, and it sufficeth us.

He who seeth me, seeth also the Father.

The traitor goes out of the court.

The Lord is my helper.

Truth is the daughter of Time.

I command just things.

I temper times.

The most illustrious Philip, son of the invincible Emperor Charles the Fifth, by the grace of God, King of Spain, England, France, and both the Sicilies, Archduke of Austria, Duke of Burgundy, Brabant, Guelder, &c., Earl of Flanders, Hainault, Holland, Zealand, &c., Father of the Country, the most gentle and religious prince, hath given this glass to embellish this church—May his throne, like a sun filling the whole world, stand for ever—in the year of our Lord Jesus Christ, 1557.

Dirk Crabeth, fig. et pinx. Goudæ.

The wise Solomon offers here in God's Temple, before the Ark of the Covenant, sheep and bullocks, to give a good example, and to teach people that their well-being only consists in the serving, fearing, and honouring of the Almighty; for who trusteth in Him, will find that all turns to his good.

WINDOW VIII.

This glass was given by the noble Prince Ericus, Duke of Brunswick, whose image stands underneath, and behind him St. Laurence, with a gridiron and a seether in his right hand.

One sees here the history of King Heliodorus, how Simon discovers the treasures of the temple at Jernsalem, and how Heliodorus being sent to rob them, was punished by an angel, but delivered from death by the prayer of the High Priest.

The Sacrilegious Heliodorus punished by the Angel.

The most illustrious Ericus, by the grace of God, Duke of Brunswick and Lunenburg, Prince of the Empire, Baron of Lysveld, Lord of Woerde, &c., hath for the Catholic religion's sake given this glass, 1566.

The Arms of

Brunswick, Baden Wolfgang, Brandenburgh, Bavaria, Stolburgh, Swartsenburgh, Mansveld, Saxony.

Brandenburgh, Baden, Saxony, Bohemia, Denmark, Brandenburgh, Saxony, Bavaria.

From the Duke's Glory.

Walter Crabeth, fig. et pinx. Goudæ.

The Temple robber, endeavouring to take the treasure and carry it away as a spoil, is struck by God, and lies falling down like dead; but because of the prayer of the High Priest, God restored him to life, and so shewed his wonders.

WINDOW IX.

This glass, standing at the north side of the choir, represents when the priest Zacharias was

officiating, how it was shewed him by an angel that John should be born.

It was given by Dirk Cornelisz van Oudewater, the 30th of October, 1561. Underneath one sees his portrait, and those of his wife and fifteen children, whereof two sons and two daughters were of the clergy, and are represented in their clerical habits.

Lamb. van Noord of Amersfort, inv. and fig.
Dirk van Zyl, pinx. Utrecht.

The angel Gabriel comes to acquaint Zacharias that his prayers are heard by God, and that his wife, ceasing to be barren, shall bring forth a son, to the great benefit of Israel, and that he being filled with the Holy Ghost, shall convert the people, and cry, Prepare the way of the Lord.

WINDOW X.

The Annunciation of the Virgin Mary, by the angel Gabriel.

The Lord Theodor Spiering van Wel, Abbot of Bernen, gave this glass.

The arms of the Lord Flockold, founder of the monastery of Bernen.

Lamb van Noord of Amersfort, inv. and fig.
Dirk van Zyl, pinx. Utrecht.

This glass was struck and broke by a tempest, but afterwards, by order of the churchwardens, caused to be made anew, and painted by Daniel Tomburg, in the year 1655, as may be seen by the following verses:

1559. Formerly the abbot of Bernen gave me.
1655. The churchwardens prevented my perishing.

The Arms of

Mr. Nicholas van der Graaf, Lord of Hoogeveen, Councillor, and formerly Burgomaster.

Mr. Anthony Vossenburg, Councillor, and formerly Burgomaster, Privy Councillor of Schieland.

Albert Houtman, Councillor, and formerly Burgomaster.

Herman Cincq, Councillor and Surveyor of Buildings.

Gerard Terre, Councillor, and formerly Alderman or Judge.

Dirk Beukel, Councillor and Burgomaster.

Hans Felbier, Councillor and formerly Alderman.

Donatus van Groenendyck, Councillor and Alderman.

Conradus de Wilde, Treasurer.

Holland. Gouda.

WINDOW XI.

The Birth of St. John the Baptist.

Underneath are five portraits of the heirs of Letmatius, with the images of Saint John and Elizabeth.

In remembrance of Hermes Letmatius, of Gouda, Chief Professor of the Sorbonne, and Prebendary and Dean of Saint Mary's Church at Utrecht, his heirs have given this glass, the last day of May, 1562.

Lamb van Noord of Amersfort, inv. and fig.
Dirk van Zyl, pinx. Utrecht.

Here the birth of John the Baptist is represented, with the loosening of Zacharias's tongue, who by the power of the Lord sounded forth the praises of the Most High.

WINDOW XII.

The upper part represents the birth of Christ; and in the undermost part, Christ in the midst,

and round about him the canons with all their arms.

The College of Saint Salvador at Utrecht, hath given this glass, 1564.
Walter Crabeth, fig. et pinx. Goudæ.

The shepherds come to seek Jesus, according to what the angel had told them: and they found him, that was the salvation of men, swaddled in linen clothes, and by his mother laid in a manger. O Saviour! thy birth shews us that no pride must ever dwell in a Christian.

WINDOW XIII.

Christ sitting among the doctors: the Hebrew letters signify the law of Moses.

Virtue is acquired by great trouble.

Given by the Abbot of the Monastery at Mariæwaert: his portrait is to be seen underneath, and before him the image of the Virgin Mary, with Jesus on her lap; and behind him the apostle Peter, with four coats of arms, 1560.
Lamb. van Noord of Amersfort, inv. and fig.
Dirk van Zyl, pinx. Utrecht.

Behold how Jesus, being twelve years of age, and sought by Joseph and Mary, was found in the midst of the teachers, who wondered at his great knowledge.

WINDOW XIV.

The first sermon of John the Baptist among the soldiers, to whom he said:

Do violence to no man, neither accuse any falsely, and be content with your wages.

Above, in a perspective, is represented King David with his army, sending two men to Nabal's house for bread.

Given by the Noble Lord Bishop of Liège, Abbot of Mons.

The Arms of
Mons, Boutersem, Saint Simon, Salsburrough, Brimeur, Rambure, Gridivre, Winoxbergue, Touteville, Croy, Loraine, Luxemburgh, Batre, Chateaubriant, Ville, Mony.

Be willing to do what you can.
Dirk Crabeth, fig. et pinx. Goudæ, 1567.

John teacheth the soldiers good manners, and bids them to molest nobody, but to be content with their wages. If this admonition were written in soldiers' hearts, furious war would not cause such calamities.

WINDOW XV.

This glass represents how Christ was baptized by John in the Jordan, and the Holy Ghost descending upon him in the shape of a dove, and a voice darting down from the clouds in a bright ray: This is my beloved Son, in whom I am well pleased.

Above the figure of the Holy Ghost, standeth Christ teaching his seventy-two disciples.

This glass was given by the Reverend Lord Georgius of Egmond, Bishop of Utrecht, and Abbot of St. Amand, between Tournay and Valenciennes. Underneath, his image is seen in a kneeling posture, and behind him that of Saint Martin giving alms to a leper; at which two hands appear from the clouds, full of gold, with these words:

Open the hand; exercise piety.

The Arms of
Egmond, Meurs, Arkel, Cleve, Linningen, Zarwarden, Gulik, Bergue Werdenbergh, Baden, Wirtemberg, Austria, Zimmeren, Nassau, Brandenburgh, Lorain.

Dirk Crabeth, fig. et pinx. Goudæ, 1555.

Here our Saviour descending into the water, is baptized in the Jordan by John, heaven opens itself, and the Spirit of God descends

upon him, with a voice saying, This is my Son, hear him, therefore, oh man! open thy heart and ears, because the voice of God himself bids us to hear him.

WINDOW XVI.

The First Sermon of Jesus Christ on the Mount.

Above, in a perspective, John is seen baptizing in the Jordan; and Christ commanded his disciples to go into all the world to preach and baptize.

The Reverend Lord Cornelius van Myerop, Provost and Archdeacon at Utrecht, and Canon of St. Saviour's Church at Utrecht, 1556.

His portrait stands underneath, and before him Mary with Jesus in her lap, a serpent under her seat, and behind him a great fire, with the image of Saint Benedict, having in his hand a stick, with a black raven on it: it being on record and reported that a raven came every day to the said saint to get his food, and also that one Florentius, who could not bear the virtue of Saint Benedict, sought to kill him by a poisonous loaf, which he sent him as a charity. But this holy man commanded the raven to carry the loaf where nobody should be able to find it: which being done by the raven, he returned to fetch his usual food.

The fire had this signification: Saint Benedict saw a temple, wherein on the altar stood a devil in the shape of the false God Apollo, to whom divine honour was paid. But this so troubled the holy man, that he broke the idol, threw down the altar, and set the temple on fire. The devil, incensed because of this, appeared in a most terrible shape, casting forth fiery flames from his mouth, eyes, and ears.

Dirk Crabeth, fig. et pinx. Goudæ.

The Lord Jesus sitting upon the mount, teacheth the multitude the true salvation, that so by his word they may despise the earthly kingdoms, since he sheweth them the way to life eternal. And you, therefore, oh man! so walk in this path; for then at the end thou shalt enter into the heavenly gate.

WINDOW XVII.

St. John preaching to King Herod, and reproaching him for enjoying his brother's wife.

This glass was given by Lord Walter van Bylaer, Bailiff of Saint Catherine's Commandery at Utrecht, 1556. His picture is to be seen underneath, and before him St. Elizabeth, with St. John in her lap; behind him St. John with a lamb and Catherine with a sword, and beside it six arms.

Moderate things are durable.

Lamb van Noord of Amersfort, inv. and fig.
Dirk van Zyl, pinx. Utrecht.

John plainly discovers to Herod his shameful deed and foul action, in committing adultery with his brother's wife, against the command of God and sound reason. Herod, angry because of this, consented to his death.

WINDOW XVIII.

Christ's sermon, and the question of St. John's disciples. Art thou he that should come? or do we look for another?

Above, in a perspective, is to be seen the imprisonment of St. John.

This glass was given by Gerard Heye Gerardson, and Margaret Hendriks, his wife, and Frederick Ariensz. Gierenbergh and his daughter.

Art thou he that should come?

Dirk Crabeth, fig. et pinx. Goudæ, 1556.

The eminent painter, Christopher Pierson,

made another after this glass, in the year 1675.

Art thou he that is to come, or do we expect another? Thus said St. John's disciples to Christ: and our Saviour bid them tell him; the blind are made to see, the lame to walk, the deaf to hear, and the dead are revived to life. Blessed is he that takes no offence.

WINDOW XIX.

Here is represented the beheading of John the Baptist. This glass was given by the Lord Henry van Swol, Commander of the Religious order of St. John at Haarlem, in the year 1570. His image is seen underneath in a kneeling posture, and behind him that of St. John the Baptist as patron.

I will cover carefully.

Oh! Saint John, must thou here lose thy life, and is Herod become so degenerate, that to reward a dance, he causes thee to die innocently, and so defiles his nativity feast with thy blood? His promise cannot excuse him; the blood of the martyrs cries to heaven for vengeance.

WINDOWS XX. AND XXI.

These two glasses, formerly ordered for the cloister of the Regulars in the country of Steyn, called Emaus, are made use of here, because the said cloister was ruined.

The one was given by Dirk Cornelisz, Treasurer of his royal Majesty for the quarter of Gouda, and by the Burgomaster John Hey, the other was given by the Reverend Lord Nicolas Niewland, Bishop of Haarlem.

They both represent the sufferings, resurrection, and ascension of Christ, and were made by the disciples of W. Crabeth, at Gouda, 1580.

Here our Saviour dieth for the sins of mankind; Joseph of Arimathea laid him into his own grave; but on the third day, the women coming to seek him, did not find him there, and acquainted his disciples with what the angel had told them concerning his resurrection. By this the fame and renown of Christ came to be spread; who, after forty days, was taken up to his Father in heaven, from whence he is to come to judge both the living and the dead.

WINDOW XXII.

Represents Christ, when he cast out from the Temple the sellers and buyers.

This glass was given by the most noble Lord of glorious memory, William, by the grace of God Prince of Orange, Count of Nassau, Castenellebogc, Vianden, Diest, Lingen, Buren, Leerdam, &c., Marquis of Ter Veer, Noseroy, Castlebillin, &c., Hereditary Viscount of Antwerp, Besançon, &c., Governor General of Brabant, Holland, Zealand, Friesland, Utrecht, Admiral General of the Mediterranean Sea, and Knight of the Golden Fleece.

Dirk Crabeth, fig. et pinx. Goudæ, 1567.

The founder of our liberty had given this glass, wherein is represented how Christ put a stop to the buying and selling in the temple because the house of God should be only a house of prayer; and the erring multitude would make it a den of thieves.

In the year 1657, the Lords twenty-eight Councillors of the city of Gouda caused this glass to be made larger, and ordered their arms to be painted in it by Daniel Tomburgh: they were then these following:

Dr. Martin Blonk, Councillor, and formerly Burgomaster.

Mr. Gerard Cincq, Councillor and Secretary.
Mr. Albert Houtman, Councillor and Burgomaster.
Mr. Franeis Herberts, Councillor, and Burgomaster.
Mr. Jacob Verboom, Councillor, and formerly Burgomaster and Lord of the Admiralty at Amsterdam.
Mr. Anthony Vossenburgh, Counеillor, and Burgomaster, and Privy Councillor of Schieland.
Mr. John van Immerzeel, Councillor, and formerly Burgomaster.
Mr. Nicholas van der Graaf, Lord of Hoogeveen, Counеillor, and formerly Burgomaster.
Mr. Dirk Beukel, Councillor and Burgomaster.
Mr. Florens Cant, Counеillor, formerly Burgomaster and Member of the Council of States.
Mr. Daem van Abbesteeg, Counеillor, formerly Burgomaster.
Mr. Isaak v. d. Berg, Counеillor, and formerly Alderman.
Mr. Hans Felbier, Councillor and Alderman.
Mr. Herman Cinq, Counеillor and Churchwarden.
Mr. Anthony van der Wolf, Counеillor and Bailiff.
Mr. Adrian Verryk, Counеillor, and formerly Burgomaster.
Mr. Æmilius Cole, Counеillor and Alderman.
Mr. Hiêronimus van Beverning, Counеillor and General Treasurer.
Mr. Gerard C. Cinq., Counеillor and Alderman.
Mr. Albert Sas, Counеillor, and formerly Alderman.
Mr. Gerard Sterre, Counеillor and Alderman.
Mr. Adriaan van Swaanswyk, Counеillor and Alderman.
Mr. Govert Suys, Counеillor, and formerly Alderman.
Dr. John de Vrye, Counеillor and Secretary.
Dr. Luke de Veth, Counеillor and Alderman.
Dr. Herbert v. d. Mey, Councillor, and formerly Alderman.
Dr. Donatus van Groenendyk, Counеillor and Alderman.
Dr. Gerard Cinq, Counеillor and Receiver.

WINDOW XXIII.

This represents the offering and sacrifiee of the prophet Elijah, whieh was eonsumed by fire from heaven, to eonfound Baal's priests. One may see here also how Jesus washed the feet of his apostles.

The Lady Margaret of Austria, daughter of the Emperor Charles the Fifth, Duehess of Parma, Placentia and Castro, and for the most potent Catholie King of Spain, Philip, her brother, Regent and Governor of the Low Countries, of a Christian piety, and an exaet observer of divine worship, gave this glass for ornament of this ehureh, in the year of our Lord 1562.

Underneath is to be seen her portrait, and behind her Saint Margaret, her patroness, with a dragon under her feet.

Walter Crabeth, fig. et pinx. Goudæ.

Here the sacrifiee is kindled by fire from heaven, to the amazement and eonfusion of Baal's priests. The people of Israel, though gone astray, yet return praises to the true God; thereupon idolatry is removed, and the Lord eaused his people to return to him by a miracle.

WINDOW XXIV.

The first representation is that of the angel, standing next to the apostle Philip, and bidding him to go to the way of Gaza, to instruet and baptize the Ethiopian, who was eunueh of the Queen Candaee.

The other representation is that of the

apostles Peter and John going to the Temple, and healing the lame in the name of Jesus, that asked them alms.

This glass was given by the noble Prince Philip, Earl of Zour, Lord of Lingen, Wassenaar, &c., Knight of the Golden Fleece.

Two coats of arms, and eight quarters.

Dirk Crabeth, fig. et pinx. Goudæ, 1559.

Philip instructs here the eunuch concerning the suffering of Christ and eternal salvation; who being ravished by this doctrine, professed the Lord Jesus Christ, and said to the apostle, See, here is water; which caused Philip to baptize him.

WINDOW XXV.

Above, in a perspective, is represented the relief and raising of the siege of the city of Leyden; and under it the city of Delft, with all its adjacent villages; Boisot and some other great men, with ships, soldiers, and victuals.

This glass was given by the Lords Burgomasters of the City of Delft, in the year 1603.

The Arms of

His Highness. Delft.

The Burgomaster Swanenburgh, at Leyden, inv. and fig.

Cornelius Clok, pinx. Leyden, 1603.

O Leyden! thou art come to a great extremity, because the enemy hath besieged the city, but by the flood that overflowed the land, the fleet of the States hath been relieved. The Spaniards at a loss, do not know what to do; but when God affords help, no enemy can hurt.

WINDOW XXVI.

The Relief of Samaria.

To the honour of God, and in remembrance of the wonderful deliverance of Samaria, from the close siege by the King Benhadad, (happened 275 years after the destruction of Troy, and 158 years before the building of Rome,) this glass was given by the city of Leyden.

Since the said city had likewise been strengthened and eminently delivered, as the other, in the years 5536 after the Creation, and this present, in the year of our Lord 1574, as an evidence that though 2481 years have expired between both, yet the mighty hand of the Lord hath not been shortened: for this was done by a Divine power, and the Lord's working was marvellous in our eyes.

This glass was given by the Lords Burgomasters of the City of Leyden.

The Arms of

Holland. Leyden.

The Burgomaster Swanenburgh at Leyden, inv. and fig.

Cornelius Clok, pinx. Leyden, 1601.

Samaria is represented here in great calamity; but God by his power chased the enemies. Four lepers give notice at the gate that every one might safely repair to the camp, where the hungry could be fed. The same God, O Leyden! delivered thee.

WINDOW XXVII.

Represents the Pharisee and the Publican in the Temple.

Given by the Lords Burgomasters of Amsterdam, in the year 1597.

The old and new city arms.

Mr. Henry Keyzer, Engineer, of Amsterdam, inv.

Cornelius Kuffens, fig. and pinx. Amsterdam.

The pharisee comes to pray into the Temple, boasting of his virtues before God; but the publican, truly humble, standing at the threshold, and smiting upon his breast, said, Lord have mercy upon me. By this parable, Christ

hath taught us, how a Christian must come to humility.

WINDOW XXVIII.

Represents the woman caught in adultery.

He that is without sin among you, let him first cast a stone at her.

Given by the Lords Burgomasters of Rotterdam.

The Arms of

Holland. Rotterdam.

Nicolas Johnson of Rotterdam, fig. and pinx. 1601.

The Jews bring here to our Saviour an adulterous woman, that she might be stoned to death according to the law of Moses; and they ask his judgment in the case. But Christ, who could try their hearts, answered, Let him that is without sin, cast the first stone.

WINDOW XXIX.

The Christian Knight or Champion.

Represented by the Prophet Nathan, reproving King David because of his sins.

Given by the Noble and Mighty Lords, the States of North Holland, 1556.

He that, like David, with repentance hath bewailed his sins, shall receive the crown of life and peace, having, like a Christian soldier, always had in readiness the arms of faith to fight with.

The Arms of

Alkmar, Enkhuisen, Munnikendam, Horn, Edam, Medenblik, Purmerend.

Joachim Uytewaal, at Utrecht, invent.

Adriaan G. de Vrye, fig. et pinx. Goudæ.

A true Christian must continually be girded with the arms of Charity, Hope, and Faith; then he need not fear the snares of the world, because his ears are deaf to its flattery; which makes him undauntedly approach to God, from whom he received salvation as a reward.

WINDOW XXX.

Represents the Prophet Jonah coming forth from the whale.

Behold! a greater than Jonah is here.

Given by the Company of Fishmongers.

Three days, O! Jonah, thou wast in the whale; and for three days Christ laid down human life. After three days Jonah was cast on shore; and after three days our Saviour came forth from the grave. Thou, O! Jonah, served us for an example, how Christ here on earth must suffer for us.

WINDOW XXXI.

At the south side of the middle cross is a glass, where Balaam is represented sitting on his ass, and the ass saying to him, Why beatest thou me?

Given by the Butchers' Company;

And made by one of the disciples of Dirk Crabeth.

What is done on earth is known to God, who by his wisdom dives into all secrets, by which he made a speechless brute to be his interpreter, and to acquaint man of his imminent danger. Therefore, when we are resisted by what is irrational, let us rather yield than go on.

The thirteen glasses above the choir, representing Christ and his Apostles, were painted by a disciple of Dirk Crabeth, in the years 1553 and 1557, &c.; but by whom they were given is not well known.

The city arms, in the middle part, have been painted by Adriaan de Vrye, in the years 1593 and 1594.

The perpendicular length of the windows, containing these extraordinary examples of Painted Glass, are 35 feet, except those in the transepts, which are 70 feet in length. At the risk of being thought tedious, we have dwelt rather long in a detailed description. It is, however, a pleasure to bring before the British public the devotion of a people in a former period, yet, for our own time, an example worthy of adoption.

WORKS ON THE SUBJECT OF PAINTED AND STAINED GLASS WHICH WILL PROBABLY BE REFERRED TO AND TREATED OF IN OUR FUTURE PARTS.

"Die Glas Malerey des Alten von J. J. Schmithals," in 8vo., pp. 48. Lemgo, 1826.

"Geschichte der Glasmalrei in Deutschland und den Niederlanden Frankreich, England, der Schweiz, Italien und Spanien. Von M. Gessert," 8vo., pp. 312. Stuttgart, 1839.

"Histoire de la Peinture sur Varre par Ferdinand Lasteyrie." Paris.

"Monographie de la Cathedrale de Bourges Vitreaux," in folio. Paris.

"Hedgeland's Restoration of the Window in St. Neot's Church." 4to.

"Parsons's Remains of Stained Glass in Kent," in 4to.

"Carter's Ancient Painting and Sculpture," in folio, containing some subjects of Stained Glass.

"Boisseric's Cologne Cathedral," containing the eastern windows coloured, a very expensive work, but it is to be reprinted for 4*l.* 4*s.*

"Lysons's Magna Britannia." 6 vols. containing several very interesting subjects.

"Glossary and History of Architecture," in 3 vols. 8vo, now about being published at Oxford by Mr. Parker.

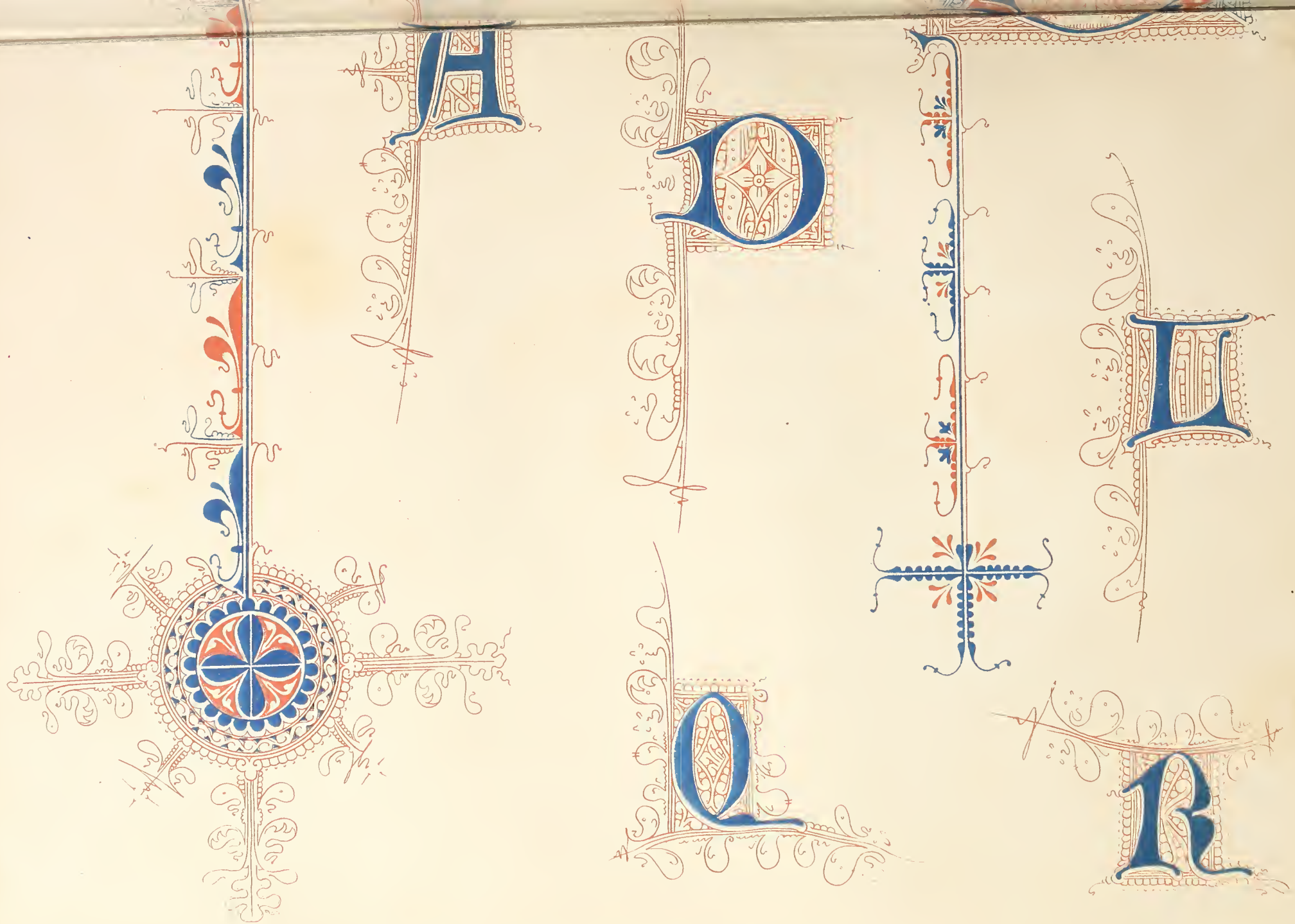
"Fowler's Ancient Stained Glass and Mosaics," an old folio volume, now scarce.

"L'Art de la Peinture Verre et de la Vitrerie par feu." M. le Vieil. Paris, 1774.

"John Kunckelii Ars Vitraria Experimentalis oder Volkommene Glasmacher Kunst." Franc. and Lips. 1689.

"Abbildungen der Glasgemalde in der Pfarrkirche der Vorstadt Au Munchen. 3d Lieferung, folio." Munchen.


gns me plus hys. do mine tu or
scas do mi ne qui a
ync sno ve re
milit do minus



EXAMPLES OF THE 14TH & 15TH CENTURIES.

F. Bedford Litho. 40, Ely Place

John Weale, 59, High Holborn, London.

Day & Haghe lith.rs to the Queen

ILLUMINATED SCRIPTURAL

PAINTED MINIATURES AND CAPITAL LETTERS

OF THE FOURTEENTH AND FIFTEENTH CENTURIES.

In the Netherlands, at the time and previous to its occupation by the Spaniards, there existed several very large ecclesiastical establishments, in which High Mass was performed with great musical splendour; the people always evincing great zeal for their church, as in the instance of the burning of the cathedral at Gouda, in 1552[a]. It is probable that, at the time of this calamity, some portion of the sacred books were lost. We have recently come into possession of an unique folio volume of the cathedral and church music, executed at a period nearly corresponding with the previous date of this fire. Upon inspection of the volume, we discover references in the Dutch language to church regulations; and the manuscript has evidently belonged to some richly endowed establishment, in which designs of the best studies of the art were known and practised by the ecclesiastics of the time.

It is our wish to add to the value of the Quarterly Papers, by a selection, in about twelve plates, made from the numerous examples in the volume. In the present Part one of the plates is given; the other eleven, each to have a miniature, will be inserted in Part III. and continuation. Mr. Bedford, the author of the Chart of Anglican Church Architecture, has made the present fac-simile, and will faithfully draw the others in his best style.

[a] See Article on the Painted Glass of Gouda.

THE TEMPLE CHURCH, LONDON.

The noble interior of the Temple Church has excited, in the mind of every one devoted to the restoration and decoration of church architecture, a desire to possess drawings made to a scale that shall do justice to the subject, and satisfactorily explain its detail in form and colour. Mr. R. H. Essex has been engaged for a considerable time in drawing the several admirable designs of stained glass and decoration, executed by Mr. Willement, together with other architectural delineations under the able direction of the architects employed, Decimus Burton, Esq., and Sydney Smirke, Esq. The accompanying specimens are taken from the windows at the east end of the side aisles. The coloured plates of the separate compartments are to a scale of two inches to a foot; the outline elevation, shewing the general arrangement of them, being one quarter the scale of the former, and numbered to correspond with it; the unfigured compartments of the side lights are each in accordance with the upper panel of No. 14, and those of the centre lights with the lower one of No. 19. Numbers 3, 11, and 22, stained glass from the windows at the east end of the north and south aisles. Numbers 4, 8, and 15, the same.

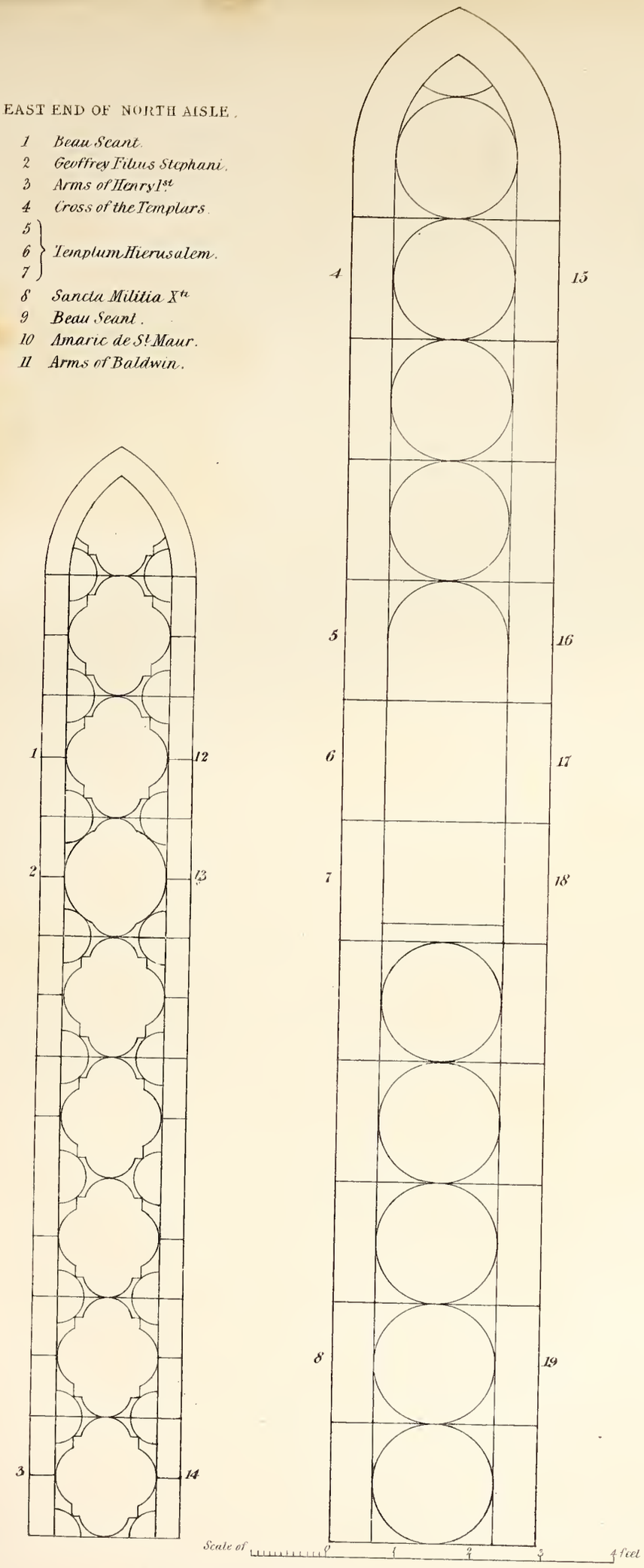
This edifice will be illustrated by a profusion of well executed plates, coloured after the originals. An interesting descriptive text, from the pen of Sydney Smirke, Esq., one of the architects, will, in future parts, complete the work.

EAST END OF NORTH AISLE.

1 Beau Scant.
2 Geoffrey Filius Stephani.
3 Arms of Henry 1st.
4 Cross of the Templars.
5, 6, 7 Templum Hierusalem.
8 Sancta Militia Xti
9 Beau Seant.
10 Amaric de St. Maur.
11 Arms of Baldwin.

EAST END OF SOUTH AISLE

12 Beau Seant.
13 Alanus Marcel.
14 Sigillum Templi.
15 Cross of the Templars.
16, 17, 18 Civitatis Bethlehem.
19 Arms of Henry 3rd
20 Beau Seant.
21 Robert de Montfort.
22 Cross Triumphant.



WINDOWS AT THE EAST END OF THE NORTH AND SOUTH AISLES.

TEMPLE CHURCH, LONDON.

London, John Weale, 59 High Holborn. January 1st 1844.

Scale of 0 1 2 3 4 5 Feet

DECORATION OF CEILING; TEMPLE CHURCH, LONDON.

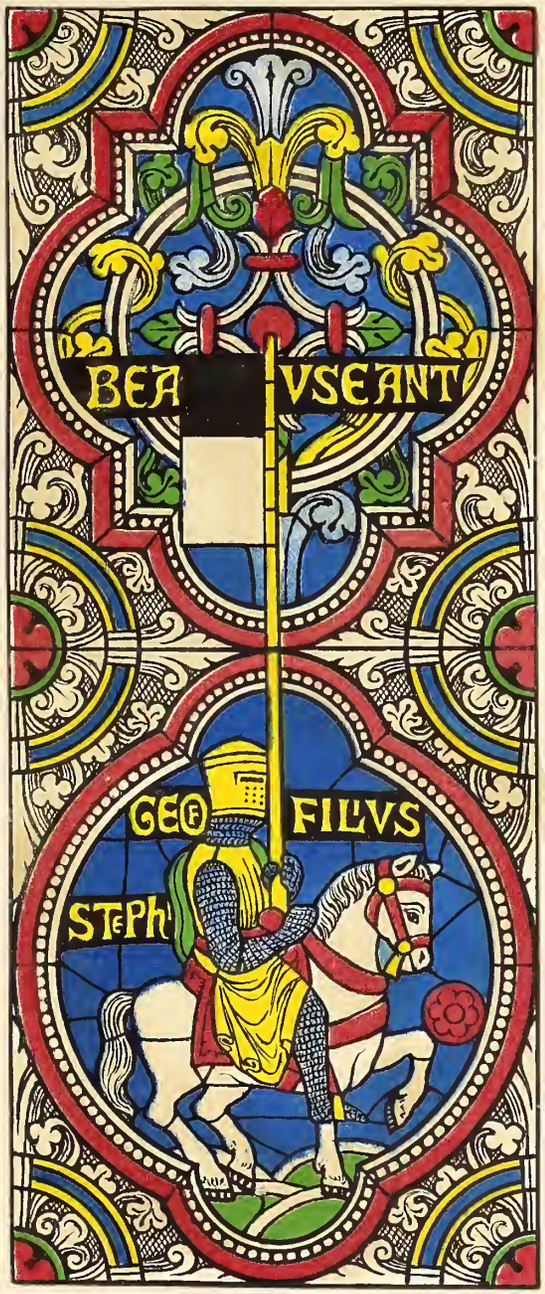
SPANDRILS AT THE EAST END OF NAVE

R H Essex del.

London, John Weale, 59 High Holborn. January 1st 1844

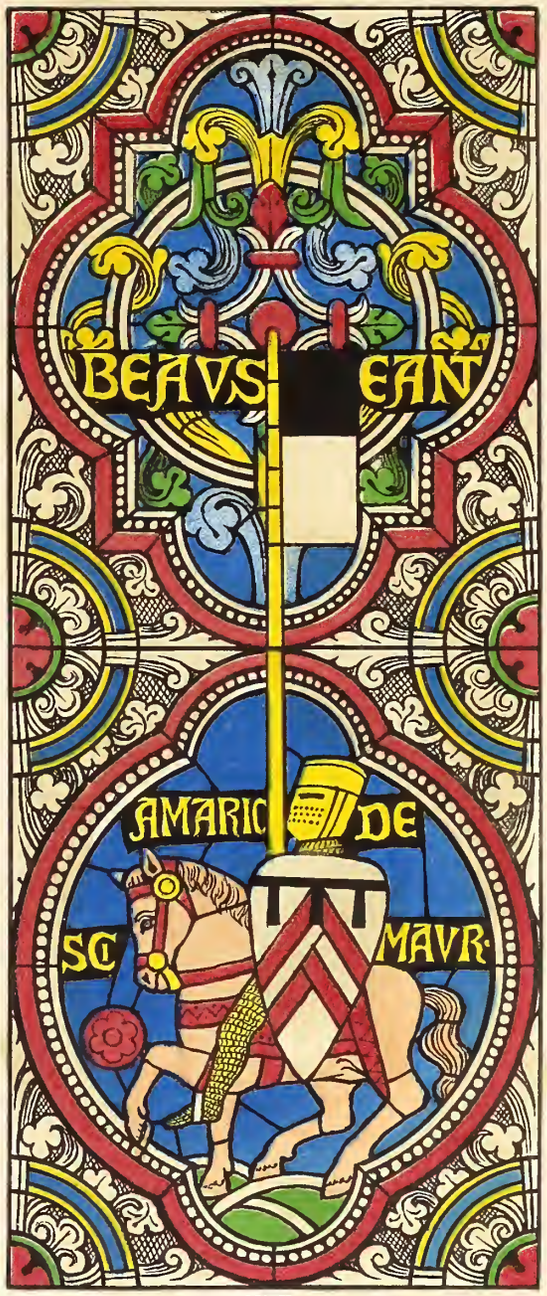
Day's Haghe Lith.rs to the Queen

Nº I.



R.H.Essex del. 1843 Nº II.

Nº IX.



Nº X.

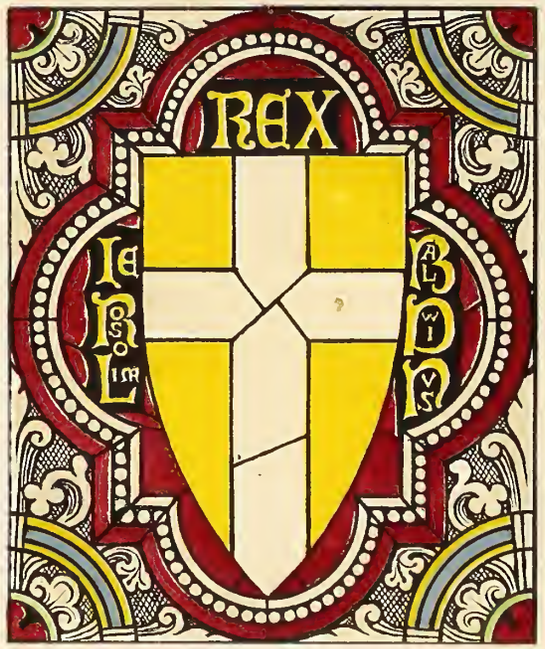
STAINED GLASS FROM THE WINDOWS AT THE EAST END OF THE NORTH AISLE,

TEMPLE CHURCH, LONDON.

London, John Weale, 59, High Holborn, January 1st 1844.

Day & Haghe, Lith^rs to the Queen.

N° III



N° XI

N° XXII

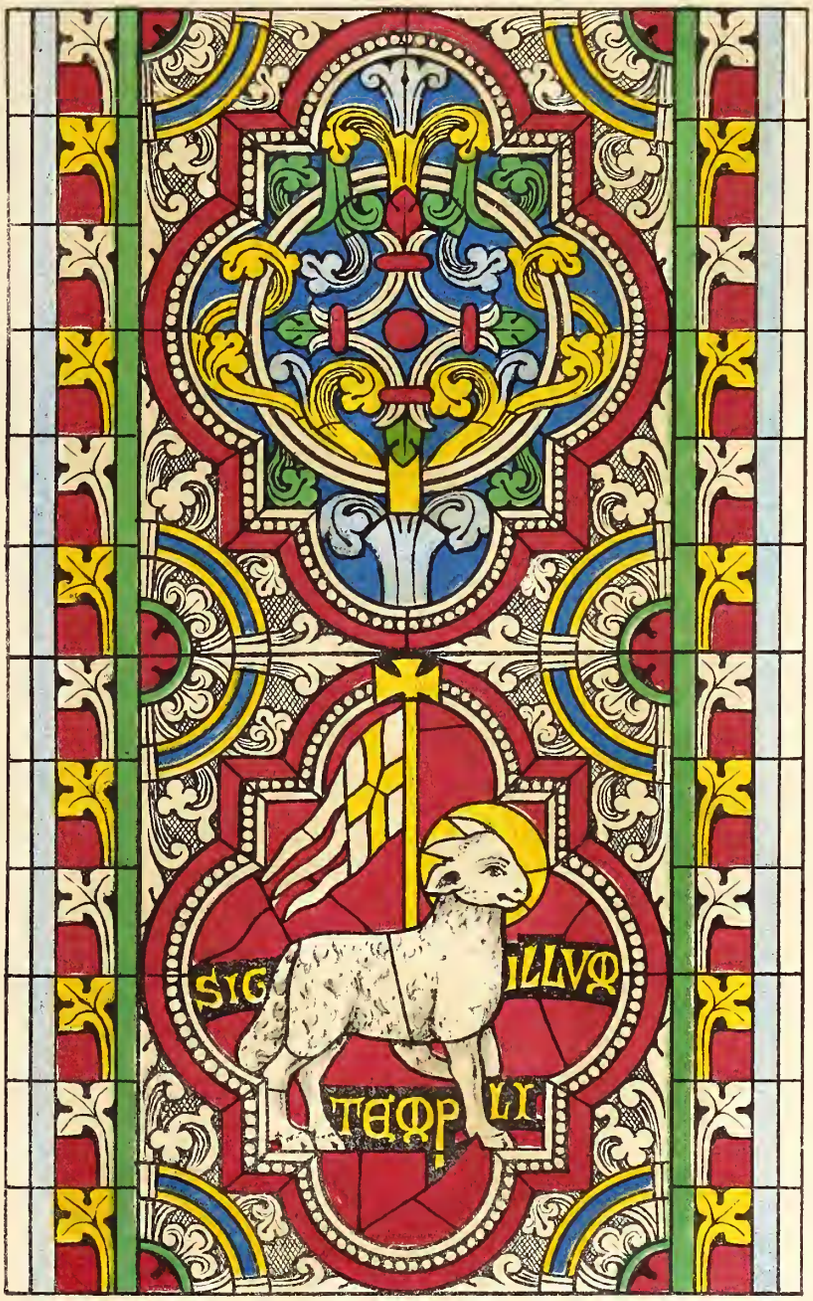
R H Essex lith.

STAINED GLASS FROM THE WINDOWS AT THE EAST END OF THE NORTH AND SOUTH AISLES,

TEMPLE CHURCH, LONDON.

London, John Weale, 59, High Holborn, January 1st 1844

Day & Haghe Lith^rs to the Queen



R.H Essex del N° XIV

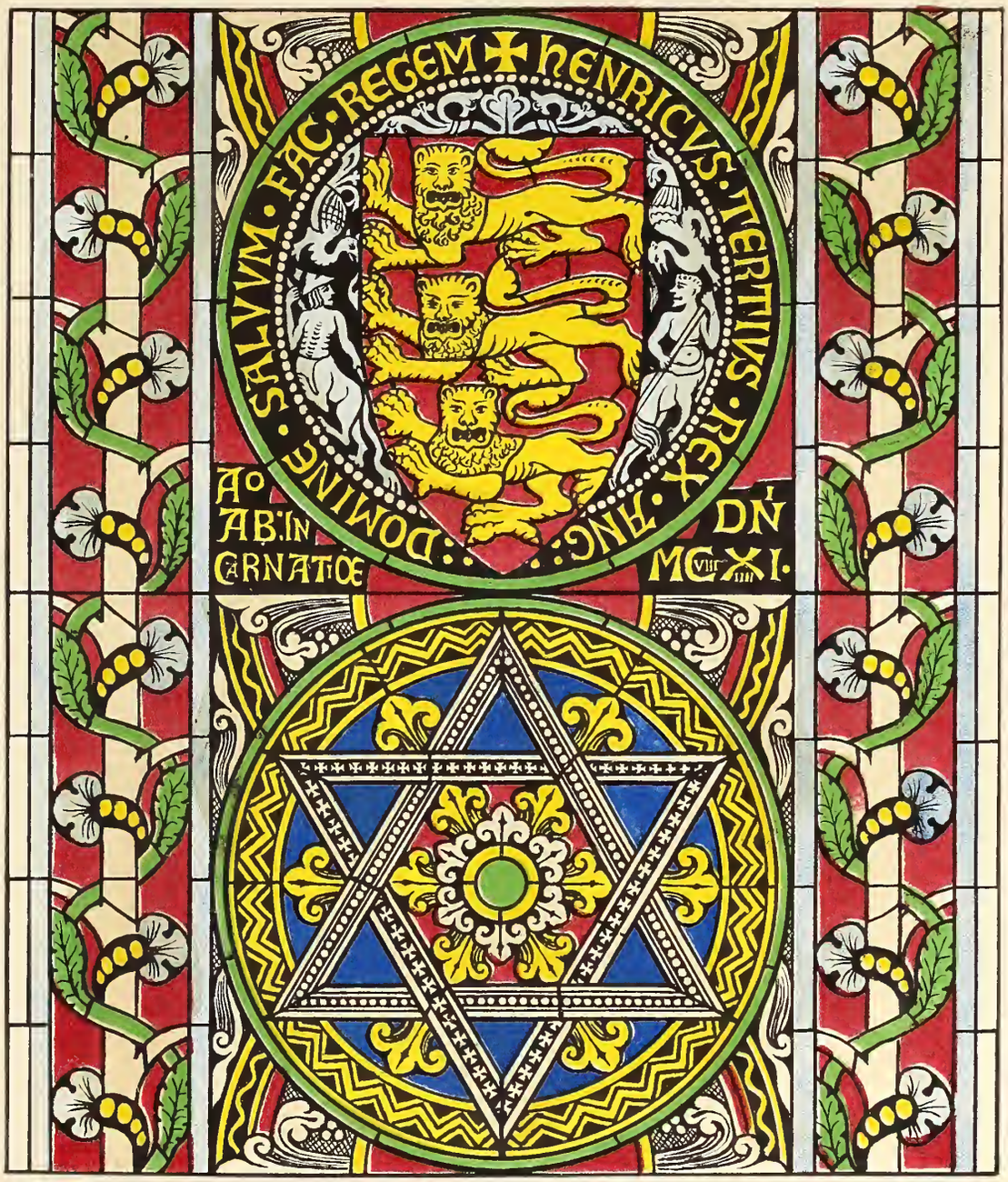
STAINED GLASS, FROM THE WINDOWS AT THE EAST END OF THE SOUTH AISLE,

TEMPLE CHURCH, LONDON.

London, John Weale, 59, High Holborn. January 1st 1844

Day & Haghe, Lith^rs to the Queen

N° XIX.



R. R. Essex, del.t 1843.

STAINED GLASS FROM THE WINDOWS AT THE EAST END OF THE SOUTH AISLE,

TEMPLE CHURCH, LONDON.

London, John Weale, 59 High Holborn, January 1st 1844

Day & Haghe lith.rs to the Queen

ON

ARTISTIC ECCLESIASTIC DECORATION,

AS EXHIBITED IN

A COLLECTION OF DESIGNS MADE ABOUT THE MIDDLE OF THE LAST CENTURY.

BY JOHN WOODY PAPWORTH, A.R.I.B.A.

In every year fresh proofs are brought to light of the gorgeous appearanee whieh most of our religious edifiees presented before the Reformation; and it may be eonsidered unneeessary to dwell upon the rash haste mingled with a false notion of economy with whieh they were reduced to their present beggarly eondition: whitewashed walls, denuded of their fairest ornaments historieal as well as religious; flagged floors, unwashed; the pietured glass removed, or patched in a manner that frightens the eye; these are the features which most distinetly impress themselves on our observation of Cathedral, Chureh, or Chapel, at the present time, and are the principal causes which produce on the mind and body of the visitor a chill that overpowers the flush of admiration and devotion; while the richness and grandeur of the interiors of foreign Churches (Lutheran or Romish) present a glow of eolor which warms the mental and corporeal faculties, and surely better prepares the frame for religious exereise. So few Protestants enter a Romish Chapel in England, that it is not surprising that even the dignitaries of our Reformed Communion should be unaware of the manner in whieh a Chureh may, or rather should, be furnished; while those amateurs of Art who have had opportunities of inspecting foreign houses of worship seem to have eonsidered the magnifieence of the interiors as belonging to the eustoms of the country they visited, and not as a proof of the possibility and propriety of the decent dedication of the best that the invention of man ean produce for the embellishment of our sacred places.

Many men of sineere religious feeling, and of acknowledged judgment and taste, had long been oeeupied in devising a means for the enlightenment of the popular

mind upon this subject, when the establishment of this publication appeared to offer a vehicle; and the acquisition of the work about to be described presented a list of the most conspicuous modes and articles of decoration in religious edifices prevalent about a century since on the Continent; and an enumeration or description of these subjects appears to offer an efficient way to obtain their desired end.

This unique volume, purchased by Mr. Weale, and now in his possession, supplies the following, and unfortunately almost the only, memoranda as to its date, creation, and purpose; it is a fine Manuscript Folio in a current hand, about three inches in thickness of three hundred and nineteen pages, and lettered on the back "PATRIARCALE . LISBON . MDCCLV." The title (the language employed is Italian) reads "Book of Sketches of the Designs of Works proposed which are being made in Rome by order of the Court." Under each of its fifty-three heads appears the name and denomination of the profession or occupation of one individual or firm, with specifications and estimates for the execution of autographic designs inserted on the subsequent alternate pages. These drawings compose a collection of designs for what was deemed necessary by the authorities and architect for the decoration and furniture of part of the Patriarchal Cathedral at Lisbon; but whether consequent on the events of the year 1748, or whether demanded by the fire of 1755 which so totally ruined the Cathedral, only an active personal exertion on the spot can now decide. The architect would appear to have prepared outline pencilled drawings of his preparations, which, when transmitted to Rome to the agents of the chapter, were filled up with designs, supplied by those artists and manufacturers who, it may be presumed, were the most eminent at that time in Italy. For example, there occur the names of Pompeio Battoni of Lucca, and of the Cavalier Sebastian Conca of Naples, both flourishing about 1750, and so authenticating the date inscribed on the volume; while the cypher accompanying the Royal Arms inserted in some of the designs points to Joseph of Portugal (1750—77) as the sovereign in all probability in whose reign and for whose country the execution of those designs was proposed. Already there must have sufficiently occurred to the memory of the reader, reminiscences of the patronage given in the Peninsula to the artists of Italy from the time of Charles the Fifth: and this collection adds to the proof of the employment of Italians distinguished in the arts, an unexpected evidence that the manufacturers of Spain and Portugal were then, as at present, considered unequal to the production of the beautiful and good.

Although no apparent connexion exists in the arrangement of the drawings, yet many reasons prompt the acceptance of the order in which they are found, as that, in which they should be described.

The first page gives a concise view of the manner in which each subject is treated: thus, first appears the name of the party, "Santi Riuti;" next, his occupation, "Arazziero" or tapestry maker; and lastly, the description and price of what he is to supply, namely,

"Three changes of cloth of Arras, similar in design, color, dimensions, and number to the *ancient* cloths of Arras with which the seats for the Cardinals in the Quirinal Chapel are covered; each change being of eight pieces, and 1114¼ square palmi[a] of the mercantile ell; which three changes compose in all twenty-four pieces, and 3342¾ pmi., which, at three scudi the pm. amount to 10028: 25. scudi;" or at the then valuation of the scudo, about four shillings and three pence, would amount to £2131 0*s.* 0¾*d.*, "as shown in the drawing No. 1 p. 3."

This drawing unhappily has been removed from the book.

"Pietro Ferloni, tapestry maker;

"Three changes of cloth of Arras, similar in design, color, dimensions, and number to those *lately* made to cover the seats for the Cardinals in the Quirinal Chapel; each change being of eleven pieces; which three changes compose in all thirty-three pieces, making 1219½ pmi. each change, which, at three scudi the pm., amount to *S* 10935 : 50 (£2323 15*s.* 10½*d.*) as shown in the drawing No. 2 p. 7."

This drawing exhibits a sort of carpet in four divisions, of which one falls over the back of the seat formed by the second, while the third hangs in front and turns on the ground for the fourth, as a footcloth. The style, that of Louis XV. principally displayed in foliage, is rendered almost captivating by the good taste of the treatment, both in design and coloring; the latter, on the principle of the Raffaellesque work in the Vatican in this and the succeeding similar designs is as powerful and as fresh as though executed within the last month.

"Antonio Gargaglia, tapestry maker;

"Three changes of the *old* cloth of Arras, *not the new*, similar to those which serve at present, in the Cathedral of St. Peter, the thirty Canons in their various functions when officiating; each change being of eight pieces, making twenty-four pieces, and 2016 pmi.; these trebled by reason of the ninety Canons, make seventy-two pieces, and 6048 pmi., which, at three scudi the palm, amount to *S* 18144 (£3855 12*s.*) as shown in the drawing No. 3 p. 11."

A carpet, which, within a narrow border, exhibits a central semicircular arrangement of foliage; bounded by three more borders alternately of natural and artificial flowers; the outer, or great semicircle of flowers, is in two grand festoons colored

[a] The Roman palm may be considered .733 of the English foot.

after nature; and spandrils of foliage form square lines leaving sufficient space for a wide banderole border: this, one of the finest designs in the collection, appears in arrangement both of form and color infinitely superior to any production of the loom for similar purposes of the present time.

The details of the subject next mentioned refer to the construction of a model of the altar and its accompaniments in the Gregorian Chapel of St. Peter's; upon which arrangement the determination of the disposition of the subsequently described works should seem to have depended, as that Cathedral appears throughout the volume to have served as a standard:

"The Gregorian Chapel in St. Peter's, for the Exposition of the Most Holy on Holy Thursday; and the seats in the Quirinal Chapel;

Carpenter	*S*2562	£544	8	6
Gilder	471 : 80	100	5	$1\frac{1}{2}$
Carver	22	4	13	6
Drawings, plans, fees to the servants of St. Peter's, inscrizioni stampati, cloths for the model, lace for the edgings of the said model; Locksmith for iron work, and other minutiæ	133	28	5	3
Packing	311 : 20	66	2	$7\frac{1}{2}$
	*S*3500 : 0 or	£743	15	0"

as shown in the drawings No. 4 p. 15; No. 5 p. 17; No. 6 p. 19; No. 7 p. 21;" which are geometrical plans and elevations of the arrangement of the seats for the Pope and Cardinals in the Quirinal Chapel at the Pontifical Palace: and of the altar, in the Chapel (dedicated to the Virgin) called the Gregorian in St. Peter's, decorated with the riches from several of the other Chapels in that edifice. It is useless to attempt to convey by words an idea of the magnificence expressed by these illustrations.

"Agostino Masucci, painter;

"Size of the pictures which are shown in the following drawings No. 8 p. 25; No. 9 p. 27; No. 10 p. 29;

"No. 8 Picture for the Retabolum (or recess for the Altar) of the Chapel, representing St. John the Baptist baptizing the Saviour, with Angels and the most holy Virgin accompanied by one of the Marys, on the sides, height, 18 pmi.; width, $9\frac{1}{6}$ pmi.:

"No. 9 Side picture of the Chapel representing the annunciation, height, $10\frac{5}{6}$ pmi.; width, $7\frac{3}{4}$ pmi.:

"No. 10 Side picture representing the coming of the Holy Spirit, in the guest chamber," (the Feast of Pentecost,) "height, $10\frac{5}{6}$ pmi.; width, $7\frac{3}{4}$ pmi.:

"Division of the *S*3000, price of the above described pictures:

The picture for the Retabolum	*S*1000	£212	10	0
The replica, or copy of the said picture .	400	85	0	0
Side pictures, *S*600 each, which together are	1200	255	0	0
The doubles, or copies of the said pictures, *S*200 each, which together are . . .	400	85	0	0
	*S*3000 or	£637	10	0"

The features in these pictures, in the style of Carlo Maratti, which are most worthy of attention, are the attitude of the Baptist, and the treatment of the draperies: it must be confessed, that one does not expect to find, in works executed in the decline of the Italian schools, either the delicacy, the expression, or the vigour of fancy of the immediate successors of Rafaello and Michel Angiolo.

"Mattia Moretti and Company, painters in mosaic;

"Size of the mosaic pictures, the above pictures Nos. 8, 9, and 10, to be worked in mosaic of small and polished stones, which pictures make in the whole about 332 square pmi.;

"Division of the *S*20000, price of the above named pictures in mosaic:

Manufacture at *S*46 the pmi. . . .	*S*15272	£3245	6	0
Expense of the stones	2760	586	10	0
Expense of the manual labour . . .	1968	418	4	0
	*S*20000 or	£4250	0	0"

"Enrico Envò and Company, painters in mosaic;

"Size of the mosaic of the Pavement, shown in the drawing No. 11 p. 35;"

Which represents an armillary sphere mounted in a stand intended to appear of a golden color, inclosed in an oval panel with a deep blue ground, surrounded by a wreath; the whole being inserted in a geometrical device for a pavement. As the merit of this drawing chiefly rests upon the simplicity of the design and the harmony of the coloring, no more detailed attempt at description could be useful.

"No. 11 The sphere, with its field, and moulding, and festoon surrounding it, and other festoons accompanying the said sphere; the band of large roses which surround the panels of porphyry, make, in the aforesaid mosaic, 170 square pmi.:

"Division of the *S*7000, price of the said mosaic:

Manufacture at *S*20 the pm.	*S*3400	£722	10	0
Stones, cut long, that they may rest well fixed in the pavement	2285	485	11	3
Expense of the manual labour, polishing, stucco, plaster, drawings, &c. . . .	1315	279	8	9
	*S*7000 or	£1487	10	0"

"Bernardino Lodovisj, sculptor;

"Size of the sculpture, shown in the drawings No. 12 p. 39; No. 13 p. 41;

"No. 12 Basso-relievo, of Carrara marble, representing St. John the Baptist preaching in the Desert; height, $5\frac{10}{12}$ pmi.; width, $4\frac{2}{12}$ pmi.; Children, which sustain it, each $4\frac{}{4}$ pmi. high; Group of Cherubim upon the metal molding of the said basso-relievo, 2 pmi. high:

"No. 13 Seven heads of Cherubim, for the caissons of the Vaulting of the Chapel, each $1\frac{1}{4}$ palm high:

"Division of the *S*2000, price of the said works of sculpture:

The basso-relievo, marble, and workmanship.	*S*800	£170	0	0
Children which sustain it, marble, and workmanship	840	178	10	0
Group of Cherubim upon it	80	17	0	0
Seven heads of Cherubim, at *S*40 each . .	280	59	10	0
	*S*2000 or	£425	0	0"

The Preacher and one of his audience, in particular, are well designed, and full of expression: the Boys are beautifully drawn.

"Carlo Marchionni, sculptor;

"Size of the sculpture shown in the drawing No. 14 p. 45;

"No. 14 Basso-relievo, of Carrara marble, representing the Visitation of St. Elizabeth, height, $5\frac{10}{12}$ pmi.; width, $4\frac{1}{6}$ pmi.: Price of the said basso-relievo, comprising marble and workmanship, *S*800, or £170."

The drawing for this is not now in the collection: it would seem to have shown a pendant to the preceding subject, for next in the list is

"Agostino Corsini, sculptor;

"Size of the sculpture shown in the drawing No. 15 p. 49;

"No. 15 Two Children, of Carrara marble, to sustain the above described basso-relievo, each $4\frac{3}{4}$ pmi. high; the group of Cherubim upon its molding, 2 pmi. high:

"Division of the $920, price of the above mentioned works of sculpture:

Children	$840	£178 10 0
Group of Cherubim	80	17 0 0
	$920 or	£195 10 0"

This is a very spirited sketch for two figures to complete the correspondence between the work of Lodovisj, and that of Marchionni.

"Pietro Wersciaff, sculptor;

"Size of the works of sculpture shown in the drawing No. 16 p. 53;

"No. 16 Angels, of Carrara marble, to be placed upon the cornice of the frontispiece of the Retabolum of the Chapel, each in the position shown, 5 pmi. high; Group of Cherubim forming a base to the gilt metal cross upon the said frontispiece, width, $4\frac{1}{4}$ pmi., height, $2\frac{2}{3}$ pmi.:

"Division of the $2350, price of the above named works of sculpture:

Angels at $1000 each	$2000	£425 0 0
Group of Cherubim	350	74 7 6
	$2350 or	£499 7 6"

These are two Angels in postures of adoration, on either side of a cross, from the centre of which issues a blaze of rays in metal. The figures are drawn with great delicacy.

"Pietro dell' Estasce, sculptor;

"Size of the works of sculpture shown in the drawing No. 17 p. 57;

"No. 17 Two groups of Cherubim, of Carrara marble, which terminate the porphyry cornices of the side pictures, each 1 pm. high; Four heads of Cherubim, of marble, for the caissons of the Vaulting, each $1\frac{1}{2}$ pm. high:

"Division of the $330, price of the above mentioned works of sculpture:

Group of Cherubim	$170	£36 2 6
Heads of Cherubim	160	34 0 0
	$330 or	£70 2 6"

Three heads, touched with great knowledge of effect.

"Antonio Corradini, sculptor;

"Size of the works of sculpture, shown in the drawings No. 18 p. 61; No. 19 p. 63;

"No. 18 The two Angels, of Carrara marble, placed upon the arch of the Entrance of the Chapel, and to accompany the Arms of His Majesty, each in the position shown, 8 pmi. long, 4 pmi. high:

"No. 19 Three heads of Cherubim for the caissons of the Vaulting, each $1\frac{1}{2}$ pm. high:

"Division of the *S*2020, price of the above named works of sculpture:

Angels	*S*1900	£403 15	0
Heads of the Cherubim	120	25 10	0
	*S*2020 or	£429 5	0"

These Angels are recumbent figures, serving, it may be presumed, as supporters to the Arms of Portugal alluded to in the next contract, that of

"Domenico Giovannini, sculptor;

"Size of the sculpture shown in the drawings No. 20 p. 67; No. 21 p. 69;

"No. 20 The Arms, in marble, of His Majesty, placed upon the arch of the Entrance of the Chapel, $9\frac{5}{6}$ pmi. high, $5\frac{2}{3}$ pmi. wide:

"No. 21 The festoons of marble to ornament the metal moldings of the bassi-relievi are 34 pmi. long, 1 pm. broad:

"Division of the *S*1000, price of the above works of sculpture:

Arms	*S*694	£147 9	6
Festoons	306	65 0	6
	*S*1000 or	£212 10	0"

"Antonio Arrighi, silversmith;

"Size and weight of the following works, of metal and silver gilt, shown in the drawings No. 22 p. 73; No. 23 p. 75; No. 24 p. 77; No. 25 p. 79; No. 26 p. 81; No. 27 p. 83; No. 28 p. 85;

"No. 22 The ornaments of gilt metal of the altar, and steps surrounding it, run $108\frac{1}{2}$ pmi.:" (The risers of the steps have a metal ornament at top and bottom, with external and internal mitres):

"No. 23 The Arms and Cypher of the name of His Majesty each 3 pmi. high; the moulding which surrounds the panels, on which are placed the said devices, run 140 pmi.:" (These panels formed the faces of beaufets for the vessels used during the service:)

"No. 24 The ornaments of the step or platform for the altar, $13\frac{1}{3}$ pmi. long, $\frac{11}{12}$ of a pm. high:

"No. 25 The ornaments of the porphyry molding of the pieture of the Retabolum, of the eorniee whieh makes the frontispiece to the said Retabolum, and of the base of the molding of the pieture, run 240 pmi.:" (These two last mentioned designs are almost the finest examples to be found in the volume of what can be done in metal work applied to arehiteetural purposes; their effect is greatly heightened by the pure, bold style of drawing in which they are exeeuted; the taste of the ornament is exeeedingly good:)

"No. 26 The six Candelabra, in sizes with the Cross, of gilt metal, for use on holy-days, the largest $4\frac{3}{12}$ pmi. high; these aforesaid works to weigh in the whole 2000 lbs.:

"No. 27 The ornaments of the Ciborium" (or tabernacle) "being so minute, the size eannot be given, but the weight to be 150 lbs.:

"No. 28 Maechinetta" (or temple) "of silver and gilt metal for the Exposition, ... pmi. high; the above works of silver to weigh 400 lbs.:

"Division of the *S*18000, priee of the above described works:

Copper	*S*400	£85	0 0
Silver	5040	1071	0 0
Gold, and expense of gilding	3800	807	10 0
Expense of models, wax, &e.	990	210	7 6
Manufaetures	7770	1651	2 6
	*S*18000	or £3825	0 0"

It is evident, from the design attached to the above description, that the Ciborium alluded to is, aecording to the prevalent use of the word in Italy, really the tabernaele or small temple plaeed on the eentral part of Roman Catholie altars, and in which the blessed Eueharist, deposited in the Pyxis which we term Ciborium, is reserved not only for the use of the rieh, but to be oeeasionally exposed to the adoration of the people, and to be perpetually present to exeite their devotion and draw the faithful to the house of God. The Maechinetta is the shrine wherein is enthroned, in similar manner, the Ostensorium; of whieh there will be oeeasion to speak further, when the arrangement of the deseription brings that article under consideration.

" Francesco Giardini, metal worker;

" Size and weight of the works, in gilt metal, shewn in the drawings No. 29 p. 89; No. 30 p. 91; No. 31 p. 93; No. 32 p. 95; No. 33 p. 97;

" Nos. 29 and 30 The capitals of the columns and pilasters each $2\frac{1}{4}$ pmi. high; The bases of the said columns and pilasters each $1\frac{1}{6}$ pm. high; The ninety-six strips of the columns to enclose the pannels of lapis lazuli each $15\frac{1}{2}$ pmi. long:

" No. 31 The ornaments for the two side doors altogether run 44 pmi.:

" No. 32 The ornaments for the great cornice a quattro ordini run 304 pmi.:

" No. 33 The ornaments for the base and surbase of the podium of the Chapel run 224 pmi.: the above named ornaments to weigh in the whole 10428 lbs.:

" Division of the *S*33836, price of the aforesaid works in gilt metal:

Copper, 10428 lbs., worth	*S*2085	£443	1	3
Gold for gilding, and expense of the gilding	15121	3213	4	3
Expense of models, wax, &c.	998	212	1	6
Manufacture	15632	3321	15	0
	*S*33836 or	£7190	2	0"

The " strips " referred to, are the beads on the fillets, both being of metal, that serve to confine the bands of lapis lazuli occupying the place of flutes in the columns; the practice is not uncommon in Italy, though rarely applied on so large a scale as that here indicated.

" Francesco Rosa, metal worker;

" Size and weight of the works, in gilt metal, shewn in the drawings No. 34 p. 101; No. 35 p. 103; No. 36 p. 107; No. 38 p. 109;

" No. 34 The ornaments for the frize and architrave of the Chapel run 220 pmi.;

" No. 35 The festoon and molding for the arch of the Vaulting of the alcove of the Retabolum run 144 pmi.:

" No. 36 The flowers and moldings for the caissons of the said Vaulting of the alcove run 90 pmi.:

" No. 37 The flowers for the caissons of the Vaulting of the Chapel are fourteen; The centre flowers four; The moldings of the said caissons run 1834 pmi.; to weigh in the whole 2640 lbs.:

" No. 38 The oval moldings for the marble bassi-relievi each 3 pmi. deep, $5\frac{1}{3}$ pmi. wide:

" Division of the *S*16600, price of the above named works in metal:

Copper, 2640 lbs.	*S*528	£112	4	0
Gold, and expense of gilding	8700	1848	15	0
Expense of models, wax, &c.	300	63	15	0
Manufacture	7072	1502	16	0
	*S*16600 or	£3527	10	0"

" Francesco Anibaldi, metal worker;

" Size and weight of the works, in gilt metal, shewn in the drawing No. 39 p. 113;

" No. 39 The plain moldings, cablings, and arabesque foliage which are placed on and compose the two porphyry moldings of the side pictures of the Chapel together run 249 pmi., to weigh in the whole 520 lbs.:

" Division of the *S*1960, price of the above described works in gilt metal:

Copper, 520 lbs.	*S*104	£22	2	0
Gold, and expense of gilding	720	153	0	0
Expense of models, wax, &c.	96	20	8	0
Manufacture	1040	221	0	0
	*S*1960 or	£416	10	0"

These ornaments, as described, form the frames to the side pictures of the Retabolum.

" Silvestro Doria, silversmith;

" Size and weight of the works, in gilt metal, shewn in the drawings No. 40 p. 117; No. 41 p. 119; No. 42 p. 121;

" No. 40 The perforated leaves, in gilt metal, of the side doors of the Chapel are each 10 pmi. high, each 5 pmi. wide:

" No. 41 The ornaments of the two archivolts of the Vaulting of the Chapel extend to 110 pmi.;

" No. 42 The molding which surrounds the pannels in the intercolumniations run 64 pmi.; weight in the whole 5344 lbs.:

"Division of the *S*12680, price of the above works in gilt metal:

Copper	*S*1068 : 80	£227	2 4½
Gold, and expense of gilding . .	3100 : 0	658	15 0
Expense of models, wax, &c. . .	495 : 20	105	4 7½
Manufacture	8016 : 0	1703	8 0
	*S*12680 : 0 or	£2694	10 0"

These are folding doors of four pannels in each leaf, every pannel being filled in with perforated foliage; these justly challenge a particular admiration of the elegant proportion of the parts and the harmony of the detail.

"Francesco Guerini, silversmith;

"Size and weight of the works shewn in the drawing No. 43 p. 125;

"No. 43 The two small gates of the Balustrade being 3½ pmi. high each, $2\frac{1}{12}$ wide each, the ornaments of the two external faces to weigh 250 lbs.:

"Division of the *S*700, price of the above named works in gilt metal:

Copper, 250 lbs.	*S*50	£10	12 6
Gold, and expense of gilding	300	63	15 0
Expense of models, wax, &c.	50	10	12 6
Manufacture	300	63	15 0
	*S*700 or	£148	15 0"

This drawing shews a pannel decorated with the Portuguese crown, and with the Cypher J and its reverse entwined with an ornament, appearing almost as a numeral V, tending to complicate the difficulty of ascertaining in what monarch's reign the work was to be executed: the pannel, enclosed by a metal ogee, is surrounded by four pieces of foliage springing from the corners; the addition of a metal base and surbase completes the idea of very effective and rich small doors, such as are in use as entrances through the enclosure for the communion table.

"Gio. Pavolo Caiser, metal worker;

"Size and weight of the works, in gilt metal, shewn in the drawings No. 44 p. 129; No. 45 p. 131;

"No. 44 The festoon in gilt metal of the arch of the opening of the Vaulting of the Chapel extends 37 pmi.; the horizontal moldings which surmount the said arch

run 36 pmi.; the festoons, placed in the soffit of the architraves to the spaces for the pictures and for the intercolumns run 26 pmi.:

"No. 45 The strips which enclose the mosaic for the Pavement run 500 pmi.; the whole to weigh 1220 lbs.:

"Division of the *S*7800, price of the above works in gilt metal:

Copper, 1220 lbs.	*S*244	£51 17 0
Gold, and expense of gilding	3546	753 10 6
Expense of models, wax, &c.	350	74 7 6
Manufacture	3660	777 15 0
	*S*7800	or £1657 10 0"

"Gaetano Smitti, metal worker;

"Size and weight of the works, in gilt metal, shewn in the drawing No. 46 p. 135;

"No. 46 The arabesque ornaments for the two arches of the Vaulting of the Chapel run, for the two together, 80 pmi., weight 700 lbs.:

"Division of the *S*1500, price of the above works:

Copper, 700 lbs.	*S*140	£29 15 0
Gold, and expense of gilding	435	92 8 9
Expense of models, wax, &c.	85	18 1 3
Manufacture	840	178 10 0
	*S*1500	or £318 15 0"

In this design, for an ornamental chain with links formed by foliage, as decoration for the soffits of the arches, both the composition and drawing deserve attention.

"Pietro Mascelli, metal worker;

"Size and weight of the works, in gilt metal, shewn in the drawing No. 47 p. 139;

"No. 47 The two festoons upon the two centre arches of the Vaulting of the Chapel run 76 pmi.; The moldings of the said two middle arches run 156 pmi.; weight, 530 lbs.:

" Division of the *S*3500, price of the above named works in gilt metal:

Copper	*S*106	£22	10	6
Gold, and expense of gilding	1800	382	10	0
Expense of models, wax, &c.	269	57	3	3
Manufacture	1325	281	11	3
	*S*3500 or	£743	15	0"

The drawing, to which reference is above made, contains a curious method of decorating an archivolt, of which festoons of foliage form the principal ornament, stopped at either end by a return of an architectural molding, apparently a cima recta: it also contains a correction, of the statement as to the length of that molding, substituting 80 for 156 pmi., with the autograph of the manufacturer, Mascelli.

" Agostino Valle, metal worker;

" Size and weight of the works, in gilt metal, shewn in the drawing No. 48 p. 143;

" No. 48 The rays extend 225 pmi.; The Cross $3\frac{8}{12}$ pmi. high; weight in the whole 2540 lbs.:

" Division of the *S*3000, price of the aforesaid works:

Copper, 2540 lbs.	*S*508	£107	19	0
Gold, and expense of gilding	1070	227	7	6
Expense of models, wax, &c.	85	18	1	3
Manufacture	1337	284	2	3
	*S*3000 or	£637	10	0"

These are the Rays and Cross to which allusion is above made in the description of the work to be done by Wersciaff, in whose drawing (No. 16) the Angels and Cherubim are represented adoring and supporting a Cross, with a background of rays, intended to be placed over the altar.

The illustrations next in order are two small sections of a chapel shaded in Indian ink, drawn geometrically on lines from north to south and from east to west; each accompanied by a similar but larger outline drawing to a scale of one palm in an inch of English measure: the ornaments are not inserted; but it is not difficult,

by the aid of the description, to understand the application of the different decorations above, and hereafter to be, alluded to. Each member of the composition is numbered, in reference to the annexed list:

" Pietro Paolo Rotolone, statuary;

" The dimensions of the works, in stone, shewn in the drawings Nos. 49 and 50, are not noted in this description, a scale being attached to those drawings No. 49 p. 149; No. 50 p. 151;

" Drawing No. 49;

" 1 Zoccolo " (or subplinth,) " in white marble, and negro antico, for the Podium:

" 2 Zoecoletto " (or plinth of the base of the Podium,) " in breccia antica:

" 3 Base and Cimasa " (or surbase,) " of the said Podium, in giallo antico:

" 4 Vivo " (or die of the Podium,) " in flowered figured alabaster:"

" 5" (Architrave of) " the side doors, in verde antico:"

" 6" Overdoor, or " frontispiece of the said doors, in verde antico; with pannels, in diaspro duro, and conchiglia d'amatista:

" 7 Pilasters, in flowered figured alabaster:

" 8 Centre pilasters and returns, in verde antico:

" 9 Fondi " (or grounds) " in fior di Persico;" probably persecchino, a peach blossom breccia with white and red spots:

" 10 Columns, in lapis lazuli:

" 11 Moldings, in porphyry, for the pictures:

" 12 Intercolumns, in flowered spotted alabaster, with margins in fior di Persico:

" 13 Architrave, in giallo antico:

" 14 Frize, in verde antico:

" 15 Cornice, in giallo antico:

" 16 Arch, of the opening of the Vaulting, in white marble; and pilasters, in the same marble, with pannels in breccia antica:

" 17 Arch, in giallo antico, springing from the pilaster No. 7:

" 18 Arch, in verde antico, springing from the centre pilaster and returns No. 8.

" 19 External arch of the Vaulting, in oriental alabaster, with margin in giallo antico:

" 20 Arches, in verde antico, springing from the columns:

" 21 Pieduccio " (or footing,) " of the Vaulting, in verde antico:

" 22 Pannels, in verde antico, of the caissons:

" 23 Moldings, in giallo antico, of the said caissons:

" 24 Vivo " (in this place the narrow general face from which the moldings of the caissons recede,) " of the Vaulting, in light oriental alabaster:

" 25 Margin " (and pannel) " in giallo antico, of the arch of the opening of the niche:

" 26 The face of the arch of the said opening, in flowered alabaster:

" 27 The above named arch, in giallo antico:

" 28 Pannels, in verde antico, of the caissons of the niche:

" 29 Moldings, of the said pannels, in giallo antico:

" 30 General face, of the said niche, in flowered alabaster:

" 31 Balustrade, in verde antico:

" 32 Step, in africano " (whether breccia or marble is not specified,) " of the said balustrade:

" 33 Old step of the Church, in white marble:

" Drawing No. 50;

" 1 Steps, in red porphyry:

" 2 Platform, in green porphyry:

" 3 Base and surbase, of the Paliotto " (or front of the altar) " and small pilasters, in giallo antico:

" 4 Margin, of the die of the altar and small pilasters, in amatista:

" 5 Pannels, at the angles of the Paliotto, in diaspro duro:

" 6 Pannels, to the dies of the small pilasters, in flowered veined alabaster:

" 7 Pannel of the Paliotto, in lapis lazuli:

" 8 The step " (on the altar for the exhibition of the ciborium, macchinetta, &c.,) " in lapis lazuli:

" 9 Plinth, at foot of the picture of the Retabolum, in diaspro duro:

" 10 Base and surbase, in giallo antico:

" 11 Margin, which surrounds No. 12, in amatista:

" 12 Pannel, in lapis lazuli," (enclosed by Nos. 11 and 10:)

" 13 Molding of the picture of the Retabolum, in porphyry:

" 14 Part of the molding, forming the frontispiece, in giallo antico:

" Division of the *S*48000, price of the above named works:

Expense of the lapis lazuli and stones .	*S*23000	£4887 10	0
Expense of pitch, plaster, fire, &c. . .	3000	637 10	0
Manufacture	22000	4675 0	0
	*S*48000	or £10200 0	0 "

as the cost of lining the interior of the Chapel, according to the design shewn, with an intermixture of marbles and precious stones: the result of the execution of the work here proposed, adorned with the various before-recited decorations on gilt metal, must have exhibited a very splendid effect of color, with judicious relief to the eye in the most confused moldings.

"Angelo Spinazzi, silversmith;

"Size and weight of the candlesticks, of silver gilt, shewn in the drawing No. 51 p. 155;

"No. 51 The six candlesticks of silver gilt, in degrees; with the Cross of similar materials; the largest 4½ pmi. high; weight, about 400 lbs.:

"Division of the $9000, price of the aforesaid candlesticks and cross of silver gilt:

Silver, 400 lbs.	$5040	£1071	0 0
Gold, and expense of gilding	1800	382	10 0
Expense of models, wax, &c.	160	34	0 0
Manufacture	2000	425	0 0
	$9000 or	£1912	10 0"

"Gioseppe Gagliardi, silversmith;

"Size and weight of the two candlesticks, of silver gilt, shewn in the drawing No. 52 p. 159;

"No. 52 The above named candlesticks each 11 pmi. high, weight about 800 lbs.:

"Division of the $24900, price of the above candlesticks, of silver gilt:

Silver, 800 lbs.	$10080	£2142	0 0
Gold, and expense of gilding	8200	1742	10 0
Expense of models, wax, and bases of gilt metal	1020	216	15 0
Manufacture	5600	1190	0 0
	$24900 or	£5291	5 0"

These Nos. 51 and 52, are two designs of candlesticks for wax flambeaux, as dissimilar in drawing as they resemble each other in composition: both consist of a plinth, with a shield for heraldic ornaments, and of figures of children on either side supporting the base, in which is represented a seated figure under a double scrolled

pediment resting on heads of cherubim, and supporting other youthful figures; above these bases both designs exhibit children standing amidst arabesque ornament enclosed in serolls again terminated by heads of cherubim; from this point, the remaining third of each design is absolutely identical: consisting of stems of foliage ending in serolls, confined about the middle by children clinging to them, and which are surmounted by an enriched capping, forming a dish at the summit as usual. The close correspondence, observable between these two drawings, shews how carefully the unity of the arrangements was attended to.

"Carlo Guarnieri, silversmith;

"Size and weight of the reliquaries, of silver gilt, shewn in the drawings No. 53 p. 163; No. 54 p. 165;

"Nos. 53 and 54 The eight isolated reliquaries each 4 pmi. high, weight about 400 lbs.:

"Division of the *S*10000, price of the above named reliquaries of silver gilt:

Silver, 400 lbs.	*S*5040	£1071	0 0
Gold, and expense of gilding	1965	417	11 3
Expense of models, wax, &c.	195	41	8 9
Manufacture	2800	595	0 0
	*S*10000 or	£2125	0 0"

On each of these pages appear two drawings for reliquaries, the work of different hands; the elegant proportions, in one design, combined with the variety consequent on a fertile invention, render it one of the most interesting features in the volume: the ideas of composition in the other three drawings would admit of the same general description as the works of Spinazzi and Gagliardi.

"Antonio Arrighi, silversmith;

"Size and weight of the Paliotto, of silver and gilt metal, shown in the drawing No. 55 p. 169;

"No. 55 The Paliotto of silver is $9\frac{1}{2}$ pmi. long, $4\frac{3}{4}$ wide, weighing 200 lbs.:

"Division of the *S*5000, price of the above Paliotto:

Silver, 200 lbs.	*S*2520	£535	10 0
Gold, and expense of gilding	780	165	15 0
Expense of models, wax, &c.	185	39	6 3
Manufacture	1515	321	18 9
	*S*5000 or	£1062	10 0"

The "Paliotto" is generally, and appears to be in this case, a moveable piece of decoration in the precious metals, which on high days is attached to the front of the altar.

"Francesco Smitti, silversmith;

"Size and weight of the works, in silver gilt, shewn in the drawings No. 56 p. 173; No. 57 p. 175; No. 58 p. 177; No. 59 p. 179; No. 60 p. 181; No. 61 p. 183; No. 62 p. 185;

"No. 56 Four large lanterns, each 13 pmi. high, inclusive of the staff:

"No. 57 Lampadarium, $3\frac{1}{2}$ pmi. high; $3\frac{8}{12}$ wide:

"No. 58 Processional Cross, 13 pmi. high, inclusive of the staff:

"No. 59 Casket for the holy oil, $\frac{6}{12}$ of a pm. high:

"No. 60 Case for the holy wafer, $\frac{6}{12}$ $\frac{2}{m}$ of a pm. high:

"No. 61 Snuffers, $\frac{11}{12}$ of a pm. long:

"No. 62 Staves for the Baldacchino, 12 pmi. high; weight of the whole in silver about 420 lbs.:

"Division of the *S*10812, price of the above works in silver gilt:

Silver, 420 lbs.	*S*5282	£1122	8 6
Gold, and expense of gilding	1740	369	15 0
Expense of models, wax, &c.	325	69	1 3
Manufacture	3465	736	6 3
	*S*10812 or	£2297	11 0"

The lantern, the head of the Cross, and the representative of the heads of the six staves or spears for the support of the Baldacchino or canopy are, all, exceedingly favorable specimens of the style of design at that time in most repute in Italy, and deserve careful examination. No. 61, shewing the design for a pair of snuffers, is probably the most spirited and artist-like sketch in the volume; proving that under the hand of taste, even a subject so apparently unpromising may become interesting.

"Francesco Paislach, silversmith;

"Size and weight of the lamps, of silver gilt, shewn in the drawings No. 63 p. 189; No. 64 p. 191;

"No. 63 Centre lamp with its chain, 6 pmi. high:

"No. 64 Side lamps with their chains, each $5\frac{1}{4}$ pmi. high; weight altogether about 240 lbs.:

" Division of the $5980, price of these works in gilt metal:

Silver, 240 lbs.	$3024	£642	12	0
Gold, and expense of gilding	1200	255	0	0
Models, wax, &c.	136	28	18	0
Manufacture	1620	344	5	0
	$5980	or £1270	15	0"

These two illustrations are the finest in the volume, both in design and drawing: too much praise cannot be bestowed upon the elegance of the arrangement of the parts, and the happy harmony of proportion, observable in the composition; while the bold, fearless, free style of the drawing displays the hand of a master in his art, thoroughly understanding the details which he made subservient to his purpose.

" Felice Scifone, metal worker;

" Size and weight of the Baldacchino or canopy, of plates of copper gilt, shewn in the drawing No. 65 p. 195;

" No. 65 The said Baldacchino is, with the projection of the molding, 11 pmi. long on each side; The pendants of the same are each $3\frac{1}{6}$ pmi. long, including the tassel; weight of the whole 1000 lbs., inclusive of the iron frame:

" Division of the $7000, price of the above described Baldacchino:

Plates of copper, 600 lbs.	$150	£31	17	6
Gold, and expense of gilding	2630	558	17	6
Expense of models, wax, &c.	320	68	0	0
Manufacture	3900	828	15	0
	$7000	or £1487	10	0"

A design formed by a rich frame of scrolled foliage, with escutcheons containing grouped heads of Cherubim at the corners, enclosing a field of clouds; in the centre of which is the Dove, descending from the halo expanding into rays: from the exterior edge of the frame depends a highly decorated metal valence, fringe, and tassels.

" Antonio Gigli, silversmith;

" Weight of the works, in gilt metal, shewn in the drawings No. 66 p. 199; No. 67 p. 201; No. 68 p. 203; No. 69 p. 205; No. 70 p. 207; No. 71 p. 209; No. 72 p. 211;

" No. 66 Censer:
" No. 67 Naviccllа, with Cucchiarino:
" No. 68 Cup with salver:
" No. 69 Two Purificatories with salvers, and two extinguishers:
" No. 70 Small bell:
" No. 71 A set of Vase and salver:
" No. 72 A large Purificatory:
" Division of the $1500, price of the above-named works;

Silver, 50 lbs.	$360	£76 10 0
Gold, and expense of gilding	420	89 5 0
Expense of models, wax, &c.	95	20 3 9
Manufacture	625	132 16 3
	$1500 or	£318 15 0"

The most remarkable of these drawings is that for the " navicella;" in accordance with custom, the vessel, to hold the incense before its consumption, should resemble a bark, as indicated by its name; and, in this design, the handle is formed by the poop of a ship, bearing the Arms and Crown of Portugal supported by a cherub, who appears to pay attention to the directions of another seated on the deck; the vessel, itself, assumes the form of the bark of the Nautilus, and terminates at the head of a cherub on the prow: the allusions, elegant in themselves, are ably supported by the delicacy of the design.

" Vincenzo Belli, silversmith;
" Weight of the Ewer and salver, of silver gilt, and of the set, of Vase and salver of similar material, shewn in the drawing No. 73 p. 215;
" Division of the $790, price of the above described works in silver gilt:

Silver, 18 lbs.	$226 : 80	£48 3 10½
Gold, and expense of gilding . . .	150 : 0	31 17 6
Expense of models, wax, &c. . . .	53 : 20	11 6 1½
Manufacture	360 : 0	76 10 0
	$790 : 0 or	£167 17 6"

The use to which these articles are appropriated in the Romish Church, is that of pouring water over the hands of the celebrants of the more solemn Masses, and from very interesting documents for the manufacturer of the present day; figures supporting scrolled escutcheons filled with groups, raised ornamented mouldings, and

foliage form well arranged designs, which in execution must have the most effective results.

" Carosi, De Alesandris, Princivalle, Tantardini, Bertetti, and Pozzi, siversmiths;

" Size and weight, of the thirty candlesticks, for the exposition of the most holy Sacrament, and of the two corresponding candlesticks for the Belief, shewn in the drawings No. 73½ p. 219; No. 74 p. 221;

" No. 73½ Candlesticks for the exposition, 4⅓ pmi. high:

" No. 74 Candlesticks for the belief, 4 pmi. high; weight of the whole about 1120 lbs.:

" Division of the *S*25912, price of the said candlesticks of silver gilt:

Silver, 1120 lbs.	*S*14112	£2998	16 0
Gold, and expense of gilding	5400	1147	10 0
Expense of models, wax, &c.	400	85	0 0
Manufacture	6000	1275	0 0
	*S*25912 or	£5506	6 0"

These works also require but the same description of their composition as that which has been applied to the designs of Spinazzi, Gagliardi, and Guarnieri: the coincidence of the general arrangement, in these apparently unimportant matters, presents an excellent example of the manner in which an architect should accustom himself to regulate the details of his decoration.

" Tomaso Politi, silversmith;

" Size and weight of the golden ostensorium with pedestal, of silver gilt, shewn in the drawing No. 75 p. 225;

" No. 75 The ostensorium of gold is 2½ pmi. high, weight about 20 lbs.; the pedestal on which the said ostensorium stands as a temple is ½ of a pm. high, weight 10 lbs.:

" Division of the *S*6476, price of the said golden ostensorium and pedestal of silver gilt:

Gold, 20 lbs.	*S*3176	£674	18 0
Expense of models, and loss of gold . .	290	61	12 6
Silver for the pedestal, 10 lbs.	126	26	15 6
Manufacture of the ostensorium and pedestal	2884	612	17 0
	*S*6476 or	£1376	3 0"

This ostensorium, so important a feature in the ceremonial of the Romish Church, is composed, according to custom, of a stem supporting a crystal case surrounded by rays of glory. The priest, having put incense into the thurible or censer, takes the blessed Sacrament out of the tabernacle, and enclosing it in the ostensorium, lays it on the altar, enthroning it under the canopy, incenses it, &c.

" Lorenzo di Caporali, silversmith;

" Size and weight of the chalice, of gold, shewn in the drawing No. 76 p. 229;

" No. 76 The golden chalice" (in unison with the above mentioned concordant designs) " is $1\frac{5}{12}$ pm. high, weight with its salver about $10\frac{11}{12}$ lbs.:

" Division of the *S*3100, price of the said chalice of gold:

Gold, $10\frac{11}{12}$ lbs. comprising the cup and salver, at the standard of 24 carats .	*S*1570 : 30	£333 13	$9\frac{1}{2}$
Expense of models, and loss of gold .	163 : 35	34 14	$2\frac{3}{4}$
Manufacture	1366 : 35	290 6	$11\frac{3}{4}$
	*S*3100 : 0 or	£658 15	0

" Francesco Princivalle, silversmith;

" Size and weight of the golden Pyxis, shewn in the drawing No. 77 p. 232:

" No 77 The pyxis of gold is $1\frac{8}{12}\ \frac{2}{m}$ pmi. high, weight about 11 lbs.:

" Division of the *S*3262, price of the said pyxis:

Gold, 11 lbs., comprising the cup, at the standard of 24 carats	*S*1862 : 40	£3 95 15	$2\frac{1}{2}$
Expense of modelling, and loss of gold	165 : 0	35 1	3
Manufacture	1234 : 60	262 7	$0\frac{1}{2}$
	*S*3262 : 0 or	£693 3	6"

The pyxis, correctly ciborium, is placed in the smaller tabernacle to which that term is now given.

" Gioseppe Ricciani, metal worker;

" Size and weight of the works, in gilt metal, shewn in the drawings No. 78 p. 237; No. 79 p. 239;

" No. 78 The lampadarium is $3\frac{1}{2}$ pmi. high, 3 pmi. wide:

" No. 79 The ornaments for the foot of the processional cross $2\frac{1}{2}$ pmi. high; weight of the whole of the above works 150 lbs.:

" Division of the *S*2000, price of the said works:

Copper, 150 lbs.	*S*30	£6 7 6
Gold and expense of gilding	870	184 17 6
Expense of models, wax, &c.	125	26 11 3
Manufacture	975	207 3 9
	*S*2000 or	£425 0 0"

The lampadarium is composed of a wreath of flowers suspended by a chain; through this wreath and pendant from it, are entwined the letter J and its reverse, strengthened by palm branches; the whole forms an excellent frame to which small lights might be attached.

" Agostino Valle, metal worker;

" Size and weight of the molding, of gilt metal, for the embroidered Paliotti, (or antependiums,) as shewn in the drawing No. 80 p. 243:

" No. 80 The metal molding which guards the embroidered altar fronts; The base which rests fixed on the platform (Pradella) run 40 pmi., weight 152 lbs.:

" Division of the *S*755, price of the said molding:

Copper, 150 lbs.	*S*30 : 40	£6 9 2½
Gold and expense of gilding	309 : 60	65 15 9½
Expense of model, wax, &c.	45 : 0	9 11 3
Manufacture	370 : 0	78 12 6
	*S*755 : 0 or	£160 8 9"

" Simone Miglie, silversmith;

" Size and weight of the lamps shewn in the drawing No. 81 p. 247;

" No. 81 Lamps, of gilt metal with ornaments of silver, each 5 pmi. high, weight 200 lbs.:

" Division of the *S*3000, price of the said lamps:

Copper, 150 lbs.	*S*30	£6 7 6
Silver, 50 lbs.	630	133 17 6
Gold and expense of gilding	620	131 15 0
Expense of models, wax, &c.	170	36 2 6
Manufacture	1550	329 7 6
	*S*3000 or	£637 10 0"

Represented, in a very carefully executed pencilled drawing, as similar to the lamps before described; but of a more massive and imposing character.

" Antonio Gargaglia, tapestry maker;

" A most rich carpet, to cover on high days the platform or dais for the altar of the Chapel, the woof with gold, the warp of silk: 300 pmi. at *S*10 the palm *S*3000 or £637 10*s.*: as shown in the drawing No. 82 p. 251."

This is followed by a note, in another and a more vigorous, powerful hand; " Be it understood that this, as well as the two subsequent carpets, are not only to cover the dais and steps of the altar, but also two pmi. of the pavement round the last step.

" A rich carpet without gold, woven with silk, to cover on festivals the dais of the altar of the Chapel: 300 pmi. at *S*6 the palm *S*1800 or £382 10*s.*: as shown in the drawing No. 83 p. 255.

" A less rich carpet, with little silk, to cover on holy-days the dais of the altar of the Chapel; 300 pmi. at *S*4 the palm *S*1200 or £255: as shown in the drawing No. 84 p. 259."

The noble character of these three designs, and the clearness with which they are drawn, render them almost the most interesting in the volume; in addition, the colors, which are beautifully indicated, are as brilliant and effective as though lately drawn. The style is precisely that which is now obtaining repute for the Scotch carpets, and would, if worked at the present time, afford very magnificent results.

" Pietro Ferloni, tapestry maker;

" Rich and noble hangings, to cover the seat for the celebrants at the chanted Masses, and carpet under their feet; The arras $76\frac{1}{4}$ pmi. at *S*8 the palm. The carpet $52\frac{1}{2}$ pmi. at *S*3 the palm, amount in the whole to *S*767 : 50 or £163 1*s.* $10\frac{1}{2}d.$ as shown in the drawings No. 85 p. 263; No. 86 p. 265."

The arras in its arrangements is extremely similar to that at the commencement of the volume, to be supplied by the same manufacturer; the carpet is unlike any other in the volume, and indeed such a design has probably never been surpassed in daring opposition of colors, judiciously disposed, and harmonized by various combinations.

" Andrea Valadier, silversmith;

" Size and weight of the Grating, of gilt bronze, for the Baptistery of the Patriarcale, as shown in the drawing No. 87 p. 269:

" No. 87 The said Grating is 12 pmi. high, the length altogether of the three façades 30 pmi., weight 14000 lbs.

" Division of the *S*36000, price of the above described Grating:

Copper, 14000 lbs.	*S*2800	£595	0	0
Gold, and expense of gilding	8000	1700	0	0
Expense of models, wax, &c.	1300	276	5	0
Manufacture	23900	5078	15	0
	*S*36000 or	£7650	0	0

" Be it understood, that the Grating shown in the accompanying design has on the inside the same decoration as on the exterior; and so of all the Gratings of the Patriarcale: be it further understood that in the sizes given, of all the said Gratings, there are not included the ornaments which run along the cornices of the same."

" Francesco Giardoni, metal worker;

" Size and weight of the works, in gilt metal, shown in the drawing No. 88 p. 273;

No. 88 The cover for the Baptismal Font, 4 pmi. high, $6\frac{1}{2}$ pmi. wide, the ornaments of the said Font run 30 pmi., weight of the whole about 500 lbs.;

" Division of the *S*4000, price of the above named works in gilt metal:

Copper, 500 lbs.	*S*100	£21	5	0
Gold, and expense of gilding	1985	421	16	3
Manufacture	1915	406	18	9
	*S*4000 or	£850	0	0"

The drawing referred to is in the grand style visible throughout the collection, and is drawn with great taste.

" Cav^r^. Conca, painter;

" Size of the picture shewn in the drawing No. 89 p. 277;

" No. 89 The picture for the Baptistery of the Patriarcale is $9\frac{1}{4}$ pmi. high, $9\frac{1}{12}$ pmi. wide: Price of the said picture, *S*700 or £148 15*s*."

The subject of the picture is identical with that of the work, above mentioned, by Masucci, but the present sketch is superior to its predecessor in every quality of the Artist. A remarkable resemblance, to be traced between the two figures of the Baptist, shows how low the servile imitation of the works of the great masters had reduced the imagination of the Italian schools.

" Gioseppe Ricciani, metal worker;

" Size and weight of the works, in metal gilt, shown in the drawing No. 90 p.

281; understanding that the two Children, which sustain the crown, upon the molding of the picture, should be represented seated.

"No. 90 The ornaments, of gilt metal, for the molding in the Baptistery extend 350 pmi.; weight in the whole, with the Children and crown of flowers, about 645 lbs.:

"Division of the *S*2700, price of the said works:

Copper, 645 lbs.	*S*129	£27	8	3
Gold, and expense of gilding	745	158	6	3
Expense of models, wax, &c.	139	29	10	9
Manufacture	1687	358	9	9
	*S*2700 or	£573	15	0"

"Pietro Paolo Rotolone, statuary;

"Dimensions of the works, in stone, shown in the drawings No. 91 p. 285; No. 92 p. 287:

"No. 91 Molding of the picture in the Baptistery, of verde antico di Luee, width $9\frac{1}{12}$ pmi.; height $9\frac{1}{4}$ pmi.; The baptismal font of porphyry $4\frac{1}{2}$ pmi. high together with its foot, but not including the cover.

"No. 92 Pavement of the said Baptistery $15\frac{1}{3}$ pmi. long, $9\frac{1}{8}$ pmi. wide:

"Division of the *S*7000, price of the above works in stone:

Expense of stones	*S*2300	£488	15	0
Expense of pitch, plaster, and fire . .	700	148	15	0
Manufacture	4000	850	0	0
	*S*7000 or	£1487	10	0"

Of these designs for a pavement, for the two halves of the drawing differ, it is impossible to speak too favourably: the lightest in effect has been marked as that which was most desirable for execution; but the other has great claims to attention from the unity of tint which pervades it, disturbed only by the clear marking of the outline, which gives it the necessary variety: the drawing of the half preferred by its author, presents, on the contrary, different marbles, placed in bold contrast as to color, and harmonized by the varied tints employed in the detail of the pattern. If the elegant execution alone of the drawing be considered, this illustration will always be interesting, the truly artistic representation of the marbles deserving a very careful examination of the handling employed to produce so good an effect; but when

the successful application of an opposition and harmony of color with agreeable outline of detail, is added, the work, though small, may be considered scarcely short of perfection.

" Antonio Arrighi, silversmith;

" Size and weight of the Grating of bronze gilt for the larger Chapel of the Patriarcale, as shown in the drawing No. 93 p. 291:

" The said Grating is $13\frac{11}{12}$ pmi. high, $28\frac{2}{3}$ pmi. long, weight 15000 lbs.:

" Division of the *S*38000, amount of the said Grating:

Copper, 15000 lbs.	*S*3000	£637	10	0
Gold, and expense of gilding	8500	1806	5	0
Models, wax, fire, and other expenses . .	2100	446	5	0
Manufacture	24400	5185	0	0
	*S*38000 or	£8075	0	0"

Although of a mixed style, this is the most satisfactory of all the designs for Screens in the Volume; like the others, it consists of three divisions, one of which forms the gates, and all of which are in two heights; the lower about the usual height, three feet, from the ground, contains pannels of open tracery; while the upper, divided from it by an ornamented open rail, is decorated with upright standards of very handsome design, connected with each other at the top and at the bottom of the pannel, forming the *grille* or grating; surmounted by an enriched molded cornice, &c.

" Matteo Piroli, silversmith;

" Size and weight of the Grating, of bronze gilt, for one of the Chapels of the Patriarcale, as shewn in the drawing No. 94 p. 295:

" The said Grating is $13\frac{1}{3}$ pmi. high, 24 pmi. long, weight 18000 lbs.:

" Division of the *S*35000, price of the above named Grating of bronze gilt:

Copper, 18000 lbs.	*S*3600	£765	0	0
Gold, and expense of gilding	7000	1487	10	0
Expense of models, wax, &c.	1650	350	12	6
Manufacture	22750	4834	7	6
	*S*35000 or	£7437	10	0

" Paolo Zappati, silversmith;

" Size and weight of the Grating, of bronze gilt, for one of the Chapels of the Patriarcale, as shown in the drawing No. 95 p. 299:

" The said Grating is $13\frac{1}{3}$ pmi. high, 12 pmi. long; weight 8000 lbs.

" Division of the *S*23000, price of the above named Grating:

Copper, 8000 lbs.	*S*1600	£340	0	0
Gold, and expense of gilding	6000	1275	0	0
Expense of models, wax, &c.	900	191	5	0
Manufacture	14500	3081	5	0
	*S*23000 or	£4887	10	0"

The design illustrative of the last article is in the same style as that of Piroli; but as superior to it in every quality of grandeur, as itself is surpassed by the next design, that of

" Antonio Montauti, metal worker;

" Size and weight of the Grating, of bronze gilt, for one of the Chapels of the Patriarcale, shown in the drawing No. 96 p. 303:

" The said Grating is $13\frac{1}{3}$ pmi. high, 12 pmi. long; weight 12000 lbs.:

" Division of the *S*22000, price of the above described Grating:

Copper, 12000 lbs.	*S*2400	£510	0	0
Gold, and expense of gilding	5900	1253	15	0
Expense of models, wax, &c.	900	191	5	0
Manufacture	12800	2720	0	0
	*S*22000 or	£4675	0	0"

A magnificent Rafaellesque design, and certainly the grandest of all the ideas for Screens contained in the Volume: it may, however, be reasonably doubted whether the employment of metal in so massive a manner, would be so efficient as in the style indicated by the design, before mentioned, of Arrighi.

" Pompeio Batoni, painter;

" The pictures, shewn in the drawings No. 97 p. 309; No. 98 p. 311;

" No. 97 Painting representing the Virgin and Child:

" No. 98 Painting representing the Eternal Father:

" Division of the *S*1000, price of the above pictures:

Painting of the Virgin and Child	*S*800	£170	0	0
Painting of the Eternal Father	200	42	10	0
	*S*1000 or	£212	10	0"

These are beautifully executed drawings in red chalk, to one of which is affixed the autograph, " Pompeio Batoni pittore Lucchese fece." The designs have an air

of grandeur, which tell that they were arranged by one who had been brought up within the domains of the great masters.

" Company of the most holy name of the Virgin ;"

A standard or banner, representing on the one side the Emperor Leopold in the attitude of prayer before the Virgin and Child, on the other the Church triumphant over the Turks, accompanied by " A drawing of the Fanale, or large lantern in the shape of an eagle, partly gilt, partly black ; in the body of which may be placed a light, to shine through the perforations forming (the monogram of) the most holy name of the Virgin, cut in the breast of the eagle, which is placed on a group of palm leaves colored green, with the crescent moon underneath. The whole allusive to the victories obtained under the Emperor Leopold by the defeat of the Ottoman empire in the pontificate of Innocent XI. of holy memory." This is followed by a drawing of a banner, suggestive of an extremely elegant mural monument ; it is described as " a drawing of the standard of black velvet ; with embroidery, partly of gold, partly of silver ; such as is carried in the procession of the Archiconfraternity of the most holy name of the Virgin, on occasions of the functions of the Company, and to accompany the deceased Brothers to the church destined for their sepulture.

" These are shown in the drawings No. 99 p. 315 ; No. 100 p. 317 ; No. 101 p. 319 ; and amount to *S*950 or £201 17*s*. 2*d*."

The unity in style of the designs alluded to, and the general excellence of the detail and execution, combine to render the grandeur of the proposed works still more magnificent. All the artists, before whom the work has been laid, express their surprise at the number of subjects it contains ; and those who have seen the effect of such decoration confess that, pleased with the result, they had never bethought themselves of making a catalogue, as it were, of the various matters rendered subservient to the purpose. All, too, mention their fears that it would be impossible to find, in the different factories, young artists to whom such works might be confided. The foundation of the Government School of Design, now nearly seven years past, was a preparatory step to the creation of a class of artists, whose works should exhibit, to those who depreciated British attempts at the exposition of fine fancy and sound judgment, that in the fields of art, as well as in those of severer studies and of arms, the English nation could compete with credit and success against their continental rivals. The difficulty which lay in the way of the establishment of that Institution would naturally chiefly be found in the selection of competent instructors ; this however could be obviated, as indeed the gentlemen under the direction of Mr. Papworth appeared qualified to communicate their knowledge ; and since none among the

students could be found qualified to receive their highest views, it is not surprising that several years should have passed in the perfection of the education of the most gifted pupils; but when this happy consummation arrived, the predicted discovery also occurred of the certainty that, noble as the exertions of the artist's invention might be, the patronage supplied by the tradesman employer must be limited, from the well known fact that, the sale of a number of repetitions of an article is to be depended on, to repay the outlay incurred by the expense and perfect execution of the views of the designer; thus no large work can be undertaken as a matter of speculation, and a mere exhibition of his designs will not prove a remuneration to the industrial artist, who finds himself exiled, by the want of discernment to which the people are accustomed, from one of the most important spheres of his utility.

The only successful attempt, at an exhibition of the cause producing this suspension of the good taste twice revived for a time by our monarchs the Charleses, appears to be the acknowledged deprivation suffered by the arts, when the liberal patronage of the Romish Church could no longer be extended to their professors in this country; though the extent of this loss has never, until a very late period, been clearly understood. The sculptor, the architect, but especially the painter, have lamented audibly the rigour with which the Reformed Church of England regards the introduction to her votaries of the seductive influence of the sculptured or painted image; while the sorrows of the practitioners of the lower branches of those arts have been unheeded, if not indeed unheard: and as it is to the above mentioned cause, together with the plainness enforced by the Puritans and other sections of the Church, that may be ascribed the absence of good decorative taste in England, (the schools of Rubens and of Wren of course excepted,) it was with great pleasure that the work above described was perused and enlarged upon, as containing the groundwork of a complete explanation of the steps that might be taken, without compromising the observance of the modest simplicity prescribed by the Church of England, to elevate the decorative taste of this country to at least the point which had been attained at the commencement of the latter half of the seventeenth century; beyond which the vigorous and revivifying principles of a sound doctrine of art will enable the English artists to reach a station, whence they will challenge the works of their most renowned predecessors to a comparison, with equal pleasure and certainty be it predicted an unsuccessful comparison, with their own. That England, under our sovereigns the eighth Henry and his immediate predecessors, exhibited a spectacle of luxury and of refinement in the arts with which her neighbours were dazzled, appears from the elaborate elegance of her architecture and from the opinion expressed by Flaxman as to the purity in taste of her sculpture of that period; as well as by the astonishment excited in the minds and recorded in the observations of those foreigners who were witnesses

to the English display and profusion on the Field of the Cloth of Gold, and on similar occasions, political and ecclesiastic. The piety of our ancestors considering the Church as superior to the State, their consecrations to its service of books, vestments, ornaments of gold and silver decorated with jewels, plate, hangings of embroidery, pictures, &c., were munificent and princely; so that of the entire realm may be deemed true that which is said of Canterbury; "at this time the church had reached the zenith of its splendour, from which it was so rapidly to decline: its edifices were nearly all complete; the store of decorative articles for the processions and other religious rites was immense; men of taste and magnificent spirit superintended the concerns of the Church; its fame spread abroad throughout Christendom; grand and imposing in all its accompaniments, it overwhelmed the senses of beholders, and drew forth rapturous exclamations from the learned Erasmus, who witnessed its splendor a short time before it received the death blow." In such a spirit would the restorers of the Cathedral at Lisbon appear to have given their directions, and though the total of the sums above mentioned reaches to the amount of £111,818 9*s*., it must be recollected that for similar decoration in a Church of the usual size for the performance of our own ritual, a much less sum would amply suffice. In conclusion, it is left to the reader to consider whether carpets, tapestry, mosaics, metal work of all descriptions in gold, silver, and bronze, silk and other descriptions of what is termed furniture, in fact the display of form and color in all their beauty, without the introduction of the Saints and Martyrs, (for the sculpture and painting of the human form are not essential,) may not be as susceptible of introduction in our own Churches as in those of Protestant Germany, France or of Italy; although their continual exclusion may appear as a sentence of banishment. Such is the opportunity, in which a close calculation of expense is the falsest economy; such is the field, hitherto totally neglected, in which the industrial artist may roam, only so far fettered as to impel efforts each higher than the preceding; such is the sphere, in which the principle of artistic competition may be most nobly developed, as tending to a truly national service. What indeed can be more patriotic than an offering of the best, that a private individual can produce, to the purposes of the Public Temples?

Mr. Weale will have much pleasure in exhibiting the work to those who may be prompted to give a careful consideration to the merits of the designs in this extraordinary volume; he is desirous, in selecting for publication those subjects in the collection that may be interesting and useful at the present time, of paying due deference to the opinions of learned divines and of connoisseurs.

SELECTIONS

OF

PAINTED AND STAINED GLASS FROM YORK.

BY

MESSRS. BELL AND GOULD,

ARCHITECTS, YORK.

ANGEL WITH CENSER.

This beautiful subject is from the traeery of a three-light deeorated window in the east end of the south aisle of St. Martin's Church, Mieklegate, where it has formed a part of the general design of this magnifieent window. The lower lights are filled with three very rieh canopies, the middle one of which is slightly varied in colour, and surrounded with a border of lions and fleurs-de-lis, with referenee to the arms of Edward III. The figures of St. Mary and St. John, as usually represented on eaeh side of the rood, remain under the side eanopies; but unfortunately the eentre has disappeared, whieh, without doubt, was the erucifixion.

The merehant's mark  and the following remains of the inseription, ✣ ꝑRIЄƇ ꝑUR .... ꝑIChC .... ЄN .... ЄRAIꝑЄ preserve the Christian name, although unfortunately the remainder is lost. Yet, with some degree of probability, it may be assigned to Nieholas de Langton, who, in the year 1342, was elected Mayor of York for the seventeenth time. See Plate V.

ST. ANNE TEACHING THE VIRGIN MARY TO READ. Plates I. and II.

ST. CRISTOFORE[a] CARRYING OUR SAVIOUR. Plate III.

ST. JOHN THE BAPTIST. Plate IV.

These three subjects are all surmounted by three similar canopies, and fill the greater part of the east window of All Saints' Church, North Street, which, from the following inscription,

ꝛate ꝓꝛo aiabꝫ Nicholai blakeburn Junioꝛ in the south light, and

uoda maioꝛ Tuitat Eboꝫ et + + ſu + ggaꝛete ꝟeꝛis mim fideli ꝓꝛaꝫ Ꝺꝛate

in the north, is dedicated to the memory of Nicholas Blakeburn, his wife and son. A representation of the former, in a kneeling position, occurs under St. John in the north light. He was Lord Mayor in the year 1413, the first, and 1429, the second time. A similar representation of his son, under St. Cristofore, fill the south light, whilst a representation of the Trinity, similar to the one shown in Plate X., under St. Anne, completes the whole of the lower part of the window, which is in the most wretched state imaginable; the upper half of St. Anne, from the cross bar, is turned inside out, whilst the lower part has the proper side inwards, but placed as much as possible out of its proper position. The other figures are more or less mutilated or displaced[b].

[a] Spelt in Plate III. St. Christopher.

[b] As to its painted windows, the first north-west, consists in resemblances of feeding the hungry, clothing the naked, relieving those in prison, giving drink to the thirsty, entertaining strangers, and visiting the sick. In the second, plain glass. The third, St. Thomas, our blessed Saviour, and St. Timothy. In the fourth, St. John, St. Anne teaching the blessed Virgin, St. Christopher, and the Holy Trinity. On each side of which are the effigies of the two Nicholas Blackbournes, both Lord Mayors of this city; as also the effigies of their wives in devout postures. The fifth window contains the Coming to Judgment, and the stupendous revolution of things which are to happen at that time: as, the sun falling from heaven, graves opening, towers and castles overturned, waters mixed with flames, trees as it were dropping blood, and the whole course of nature in direful confusion. In the little north-east window are only coats of arms. The window over the altar contains the Offering of the Eastern Kings, salutation of the Virgin, birth of Christ, He on his cross; crowned with his mother, together with his resurrection. In the south-east window, St. Catherine, St. Mary Magdalene, Crucifixion, &c. In the first window south, St. Michael, St. John the Divine, and underneath, the family of the Bagitleys and of Robert Chapman. In the third window, an angel, cardinal, bishop, pope, king, nobles, and a religious procession preceded by angels, &c. The last, towards the south door, St. John Baptist, Virgin Mary, our blessed Saviour, an appearance to a bishop from heaven, and underneath, Paul and Silas in prison. Gent's "History of the famous City of York," p. 163.—1730.

ORNAMENT FROM THE LOWER PART OF THE EAST WINDOW OF ACASTER MALBIS CHURCH, NEAR YORK. Plate VI.

This church is a most beautiful and simple specimen of the decorated style, it is cruciform, and surmounted by a wood spire at the intersection, and has contained three altars. All the windows have been filled with stained glass of the same period, which unfortunately, a few years ago, came under the destroying hands of a country glazier, who, annihilating some, confused the rest. The subject of this plate is the only design remaining out of seven similar, which have occupied the lower part of the east window.

THREE SPECIMENS OF ORNAMENTAL PATTERN FROM THE WEST WINDOW OF YORK CATHEDRAL. Plates VII. VIII. and IX.

Every person is acquainted with the elegance of the stone work of this window, but few are aware of the beauty and delicacy of the glass. These three plates will give a slight idea of the manner in which the Gothic architects varied their designs. The other five designs in the same range are more slightly varied. In this window the archbishops and saints, which form the principal part of the design, are shaded and finished with the delicacy of an oil painting, whilst the profusion of ornament on the dresses requires the spectator to be on the same level, and close upon them, to make it out.

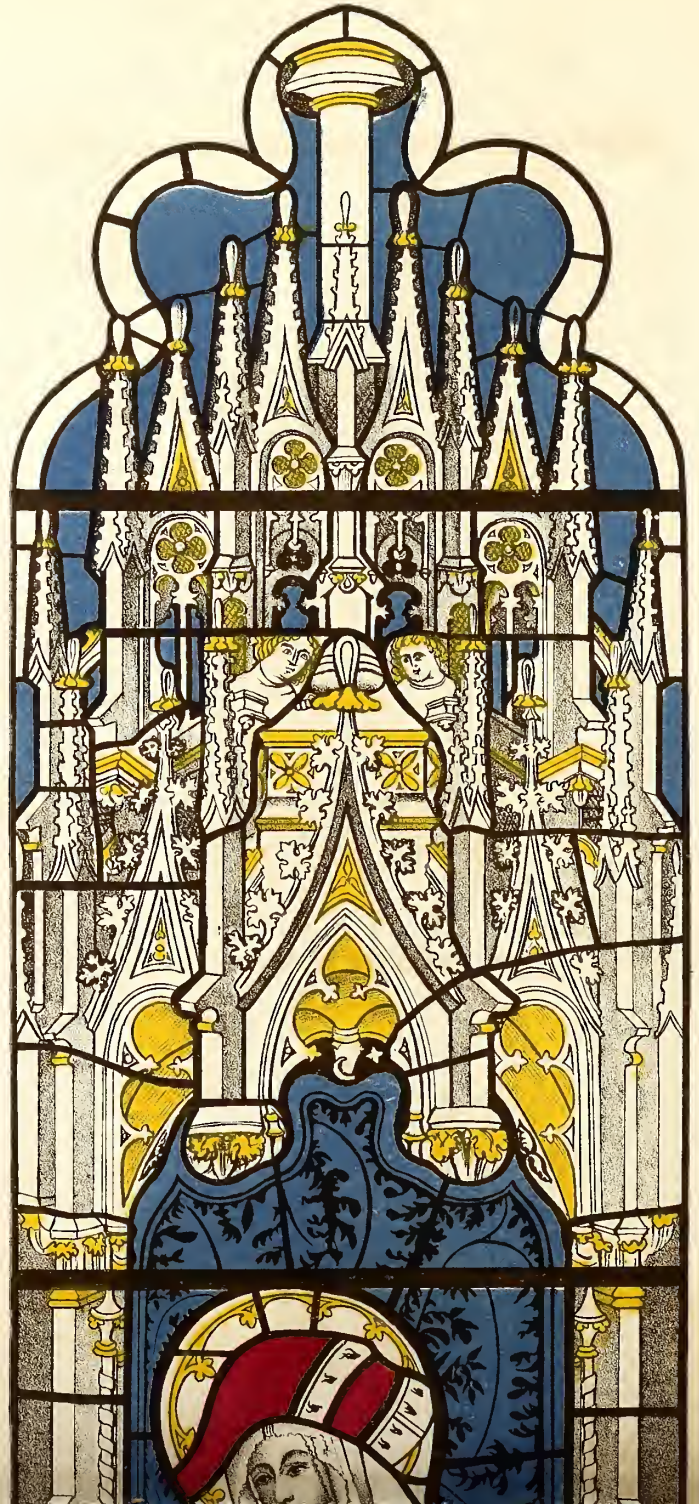
William de Melton is said to have finished the west front of the cathedral in 1330, but the introduction of the fleur-de-lis, as shown in Plate VII., and also a border of lions and fleurs-de-lis which surrounds a window in the nave, would lead us to place the date of the glass a few years later.

EMBLEM OF THE TRINITY. Plate X.

This curious subject has now found a place in the east window of the north aisle of St. John's Church, Micklegate. It has originally been one piece of glass, but is now in a sad state, as will be seen from the Plate. It is of the late perpendicular period, and will be interesting to our readers, as it is the representation of one of those subjects that caused so much animadversion at the Reformation.

HEAD OF OUR SAVIOUR. Plate XI.

This is from the window over the north door of St. Mary's Church, Castlegate; it is all that remains of the figure; indeed nearly all the painted glass has disappeared out of this church. This will give a better idea of the manner in which the greater part of the old glass is drawn than a written description could. A slight description of the manner in which the glass remaining in York is executed may not be uninteresting. The oldest glass is that in the clere story windows of the cathedral, consisting of foliage and figures of the Norman era, next the early pointed of the transepts, and the decorated glass of the Chapter House, are all similarly drawn with strong and decided lines, and whatever appearances of shading exist is executed by hatching and cross hatching. The decorated glass of the nave and churches, with all the perpendicular glass, is finished with the greatest delicacy by shading, in some instances rivalling the softness of an oil painting, and in others the extreme finish of a miniature. The generality of the faces are left white, with golden hair, but many exceptions exist in some of the finest specimens. In the magnificent figures of St. Cristofore and St. Lawrence, in the south aisle of the nave of the cathedral, the faces, hands, and feet are of a light flesh colour, and the hair of a light gray; the dresses covered with a profusion of ornament, impossible to be seen from below, at once strike the beholder with the high motives which have actuated the designers. In every instance the various coloured glass is cut and adapted to the design, the meetings and joinings falling as much as possible in the outline, and put together with lead, which, in some instances, forms a very conspicuous part of the design.



R. GOULD. DELT. C.F. CHEFFINS, LITHO

St ANNE TEACHING THE VIRGIN TO READ.

FROM THE EAST WINDOW OF ALL SAINTS, YORK

London John Weale, 59, High Holborn October 1st 1845

St CHRISTOPHER CARRYING OUR REDEEMER

FROM ALL SAINTS, EAST WINDOW, NORTH STREET YORK

Scale 2 Inches to a foot

London John Weale 59 High Holborn October 1st 1843

Printed in Colors by C.F.Guillaume

ST. JOHN THE BAPTIST.

FROM THE EAST WINDOW, ALL SAINTS, NORTH STREET, YORK

Scale, 2 Inches to a foot.

London, John Weale 59, High Holborn, October 1st 1843

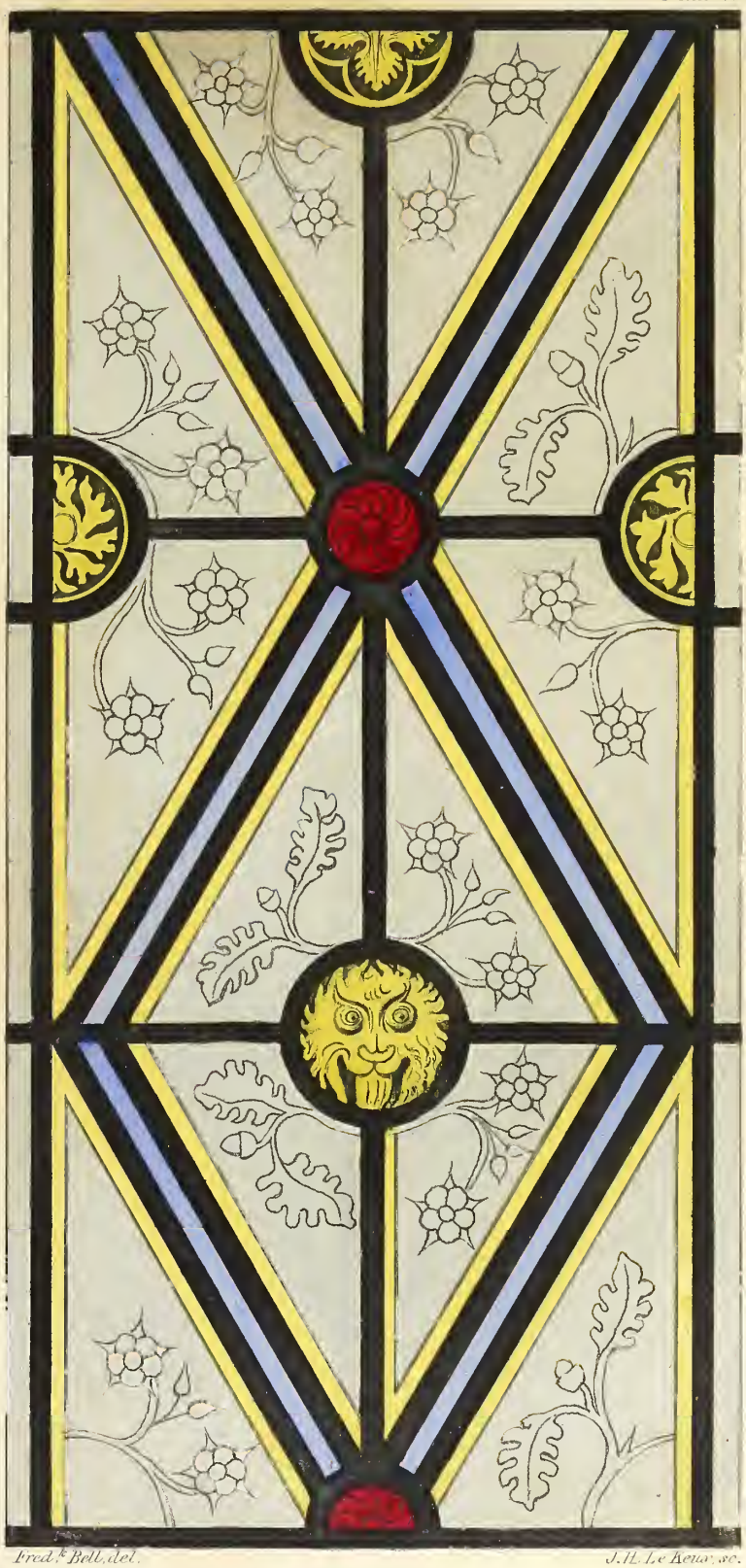
Printed in Colors by C.E. Dutton

FROM THE [illegible] WINDOW [illegible]

ST MARTINS CHURCH, MICKLECATE, YORK.

London John Weale, 59 High Holborn October 1st 1843

Printed in Colors by C. F. Cheffins

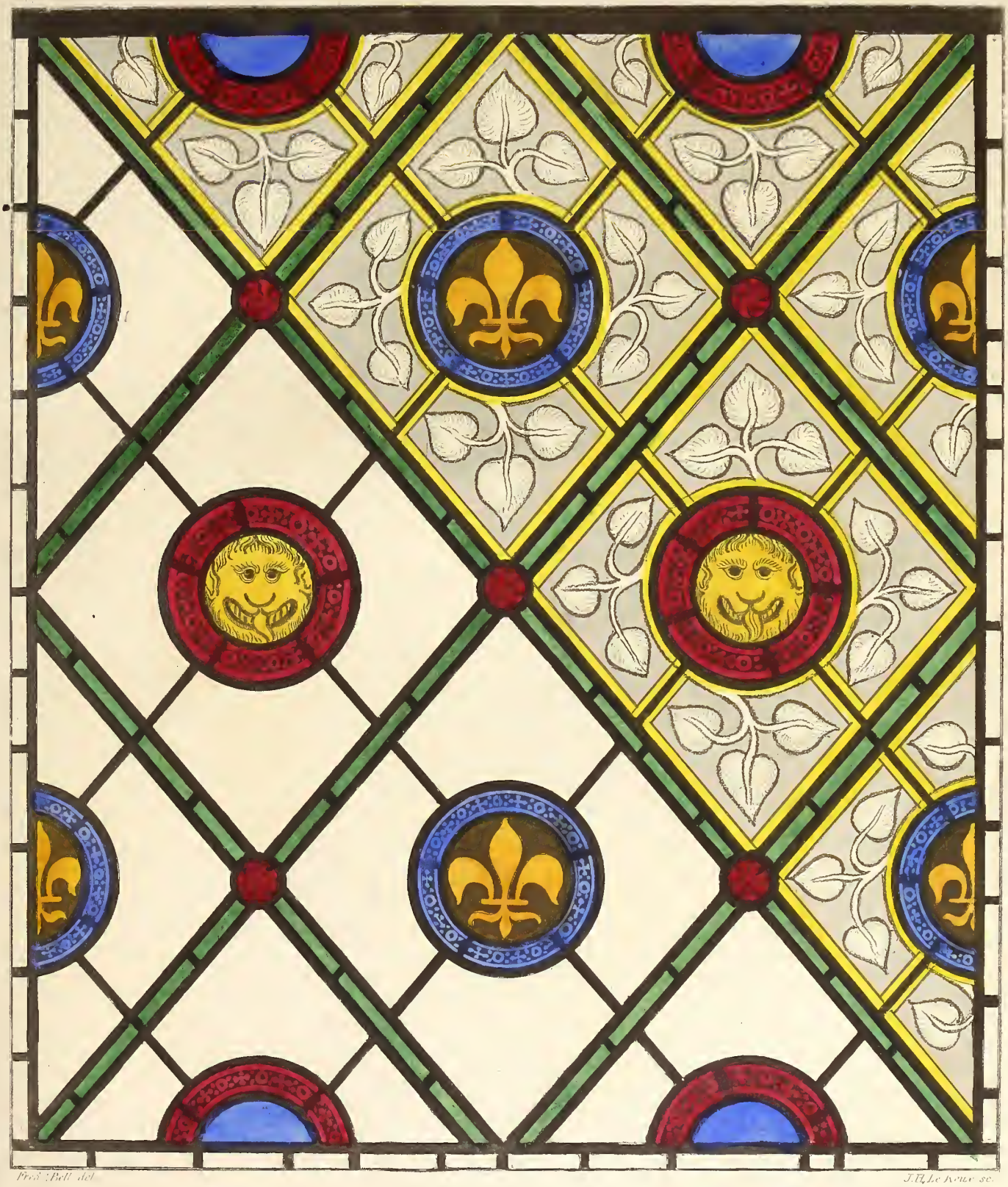


Fred.k Bell, del. J.H. Le Keux sc.

LOWER PART OF EAST WINDOW, ACASTER MALBIS CHURCH

½ size of the Original.

London: John Weale, 59, High Holborn Jan.y 1, 1841.



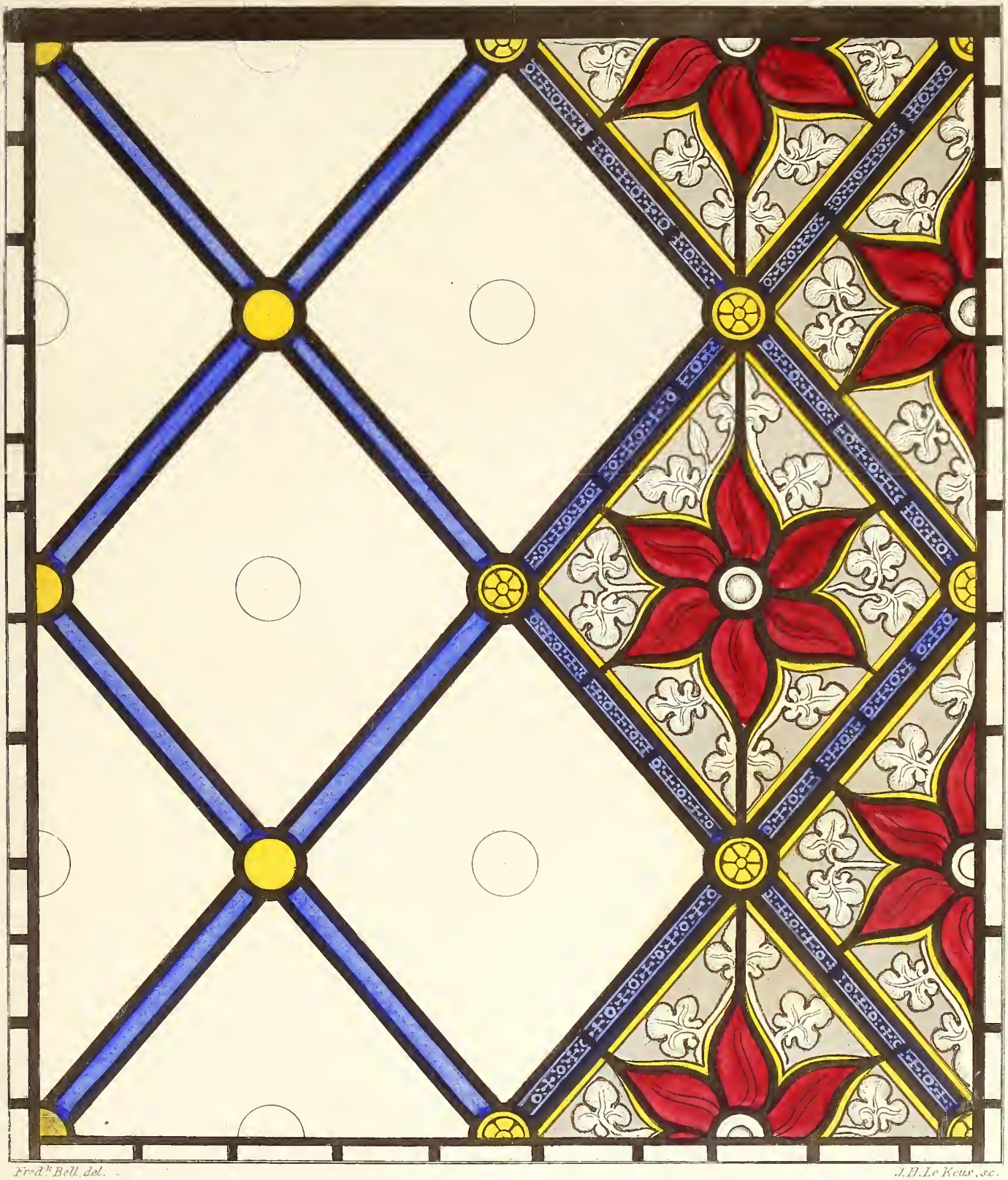
Fred.k Bell del.

J.H.Le Keux sc.

WEST WINDOW OF NAVE YORK CATHEDRAL

¼ size of the Original.

John Weale 59 High Holborn Jan.y 1 1841

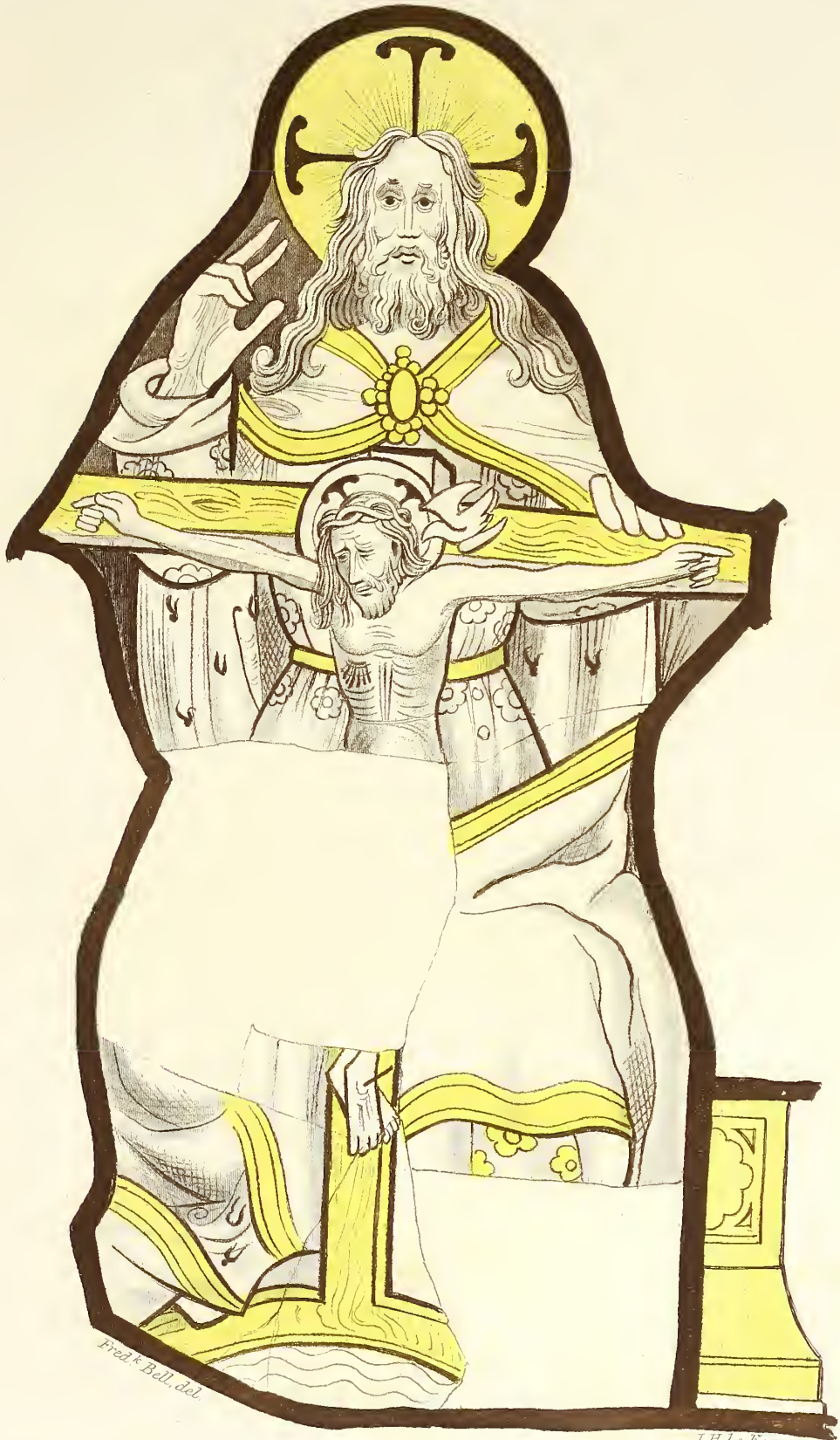


Fred.k Bell, del. J.H. Le Keux, sc.

WEST WINDOW OF NAVE, YORK CATHEDRAL.

¾ size of the Original.

Pubd. by John Weale 59, High Holborn, Jan.y 1, 1841.



EMBLEM OF THE TRINITY — ST JOHN CHURCH.

½ size of the Original.

London, John Weale, 59, High Holborn, Jan.y 1, 1844.

HEAD OF OUR SAVIOUR FROM St MARY's CASTLE GATE, YORK.

London John Weale 59 High Holborn Jan.y 1.1844

AN

HISTORICAL ACCOUNT

OF

The Church of Saint Margaret, Stoke-Golding,

LEICESTERSHIRE.

Stoche[a], *Stocke*[b], *Stoke Goldenham*[c], or, as it is now written, *Stoke-Golding*, was

[a] In an extract taken from the antient registry of the abbey of Lyra, Robert Earl of Leicester concedes and confirms all the gifts which his father Robert made to this abbey, namely, "Ecclesiam de Hinkelai cum capellis de *Stochis* et Daldintone," &c., &c., which were confirmed by king Henry II. DUGDALE'S "*Mon. Ang.*" vol. vi. part 2, p. 1030. Lond. 1830.

[b] The parish chest is marked "*Stocke* chest," and is now in the church, see page 6.

[c] A case is reported by Sir Richard Hutton, in his Reports, 1656, fol. 93, *Hilton* versus *Paule*, Hil. 2, Car. Rot. 565, in which "Richard Hilton brought an action against Robert Paule, for the taking of a saddle, at Stoke Goldenham, and upon 'not guilty' pleaded, the jury gave a special verdict, viz.: 'That the parish of *Hinckley* was *de temp dont memoriæ*, &c., and yet is, an antient rectory, and a church parochial; and that the town of *Stoke Goldenham* is an antient town, and parcel of the rectory of Hinckley, and that from the time of Hen. VI. and afterwards until this time, there hath been and is, in the town of Stoke Goldenham, a church which by all the said time hath been used and reported as a parish; and that the inhabitants of Stoke Goldenham by all the said time had had all parochial rights and churchwardens, and that the town of Stoke Goldenham is distant two miles from Hinckley,' and the verdict concluded, 'if it should seem to them that Stoke Goldenham is a parish for relief of poor within the statute of 43 Eliz. cap. 2, then they find for the plaintiff, if not, for the defendant;' and this case was argued by Serjeant Buckley, and he vouched Linwood, fol. 89, and said that there is *Ecclesia major et minor*, and a dependent church upon the principal and mother church, and which is found to be used and reported, *ergo* it is not a parish; and that the exception of the chapel of Fownes, which by the statute is made a parish, proves that chapel and parish are not within the statute. He vouched 4 Edw. IV. 39, and 5 Edw. IV., to prove that divers towns may be in a parish. And the Lord Richardson said that it is a clear case that this is a parish within the intent of the statute 43 Eliz. for

formerly a *Chapelry* attached to the *Alien Priory of Hinckley*[a], and is at the present time attached to the vicarage of Hinckley; but since before the time of Henry VI. the inhabitants have had all parochial rights and churchwardens, and it was found to be a parish for relief of the poor within the statute 43 Eliz. cap. 2, in the year 1656[b]. It is locally situate in the hundred of Sparkenhoe, in the county of Leicester, and, according to Burton, was antiently called *Stoke-Manfield*[c]. This seems likely to be an error committed by Burton, and must have been mistaken by him for Stoke-Mandeville in Buckinghamshire, and Nichols has not only quoted this error, but says that the old subsidy roll which Burton *had seen*, was in his, Mr. Burton's, possession[d]. It is bounded by Dadlington on the north, by Barwell on the east, by Wykin on the south, and Higham on the west.

It is one of the townships which pay suit and service to the court at Hinckley.

In the Itinerary of 1280, Stoke, Higham and Upton answered collectively as one vill. In 1293, *Nicholas de Warwick*, and *Joan* his wife, gave this manor to *Alice*, widow of *William de Hinckley*, in exchange for the manor of Fulbroke, county of Warwick.

the relief of the poor, and that the churchwardens and overseers of Stoke Goldenham might assess for relief of the poor. And though it be found that after the time of Henry VI., and until now, it had been used as a parish church, that doth exclude that it was not used so before. And a reputative chantry is within the statute of chantries, 1 Edw. VI. And this statute being made for the relief of the poor, and that they might not wander, therefore the intent of the statute is to confine the relief to parishes then *in esse*, and so used. And every one of the court delivered their opinion and concurred, and so judgment was given for the plaintiff." Nichols's "*Hist. of Leic., Sparkenhoe Hundred*," vol. iv. part 2, pp. 715, *et seq.*

[a] "This was an alien priory for two Benedictine monks, belonging to the abbey of Lyra, in Normandy. Tanner says it was given to Lyra by Robert Blanchmaines, Earl of Leicester, before A.D. 1173. Nichols, who has gone more minutely into its history, ascribes this foundation to Hugh Grentismainell the elder. Mr. Nichols has also printed an extent of this house taken in 1380. This house had the fate of all the alien cells of being often seized during the wars with France, and at length was wholly suppressed in the Parliament of Leicester, 2 Hen. V. Hinckley had been given for a time to the Carthusian priory of Mountgrace, in Yorkshire, by king Richard II., and was wholly annexed to the same by king Henry V. After the dissolution of Mountgrace it was granted to the Dean and Chapter of Westminster, Aug. 5, 34 Hen. VIII., who still enjoy it." Dugdale's "*Mon. Ang.*" vol. vi. part 2, p. 1030. Lond. 1830.

[b] Vide note c, page 1.

[c] "Stoke, in the hundred of *Sparkenhoe*, called in an old subsidie rolle (which I have seen) made in the 20 yere of Henry the 7, *Stoke Manfeild*." "*The Description of Leicestershire*," by William Burton, Esq. Lond. 1622, p. 269.

[d] "Stoke, in an old subsidy roll of the year 1505 (which was in Mr. Burton's possession) called *Stoke Manfield*, is now called *Stoke Golding*." Nichols's "*History of Leicestershire, Sparkenhoe Hundred*," vol. iv. pt. 2, p. 715.

In 1297, it was found that *Edmund*, Earl of Lancaster, the king's brother, at the time of his death, held divers lands at Stoke.

In 1342, *Thomas Nevile*, by fine, entailed the manor of Stoke on the heirs of his body, lawfully begotten, and, for default, on his brother *Henry*, and for default, on *John*, the son of *Cicely Simond*, and the heirs male of his body, lawfully begotten; and for default, on *Thomas*, the brother of the said John, and the heirs male of his body lawfully begotten, and for default, on *Thomas*, the son of *John Woodford*, and the heirs male of his body lawfully begotten.

In 1346, Robert Champaigne, *Giles Meignell*, *John Marshall*, and *John Bare*, (on the aid then granting for knighting Edward of Woodstock, the king's eldest son,) were assessed 20*s*. for half a knight's fee, in Upton and Stoke, parcel of the honors of Leicester and Winton[a]. "The moiety, or one-half of this manor, was the ancient inheritance of *Rafe* Lord *Basset*, of Sapcoate, in the time of king Edward the First, who held the same of *John* Lord *Hastings*, (whose issue was after Earle of *Pembroke*,) as of his mannor of *Dadlington*. From *Basset* (by an heyre generall) it came to *Moton*, and in like manner from *Moton* to *Harington*, all which did appeare for the said land at the Court Baron of the said mannor of *Dadlington*, and performed their suites and services for the same, as is apparent and to be proved by divers antient Court Rolles belonging to the said mannor; and also by inquisitions and records. The other moiety or one-half of this mannor was belonging to the family of Champaine whose heyre generall was married to *Turvile*, from Turvile (by alienation made) it came to *Harington*. Sir John *Harington*, after Lord *Harington* of *Burley*, in the county of *Rutland*, was seized of the whole, and (not many years since) sold it to the tenants."[b] Having brought down the history of the manor and its

[a] Nichols, *ut supra*.

[b] "*The Description of Leicestershire*," by William Burton, Esq. London 1622, pp. 269, 270. Nichols had seen "a copy of Burton possessed by the late Miss Charnel," in which was the following note: "This Lord Hastings had no manor of Dadlington, nor in Dadlington; but, if any part of Stoke be of the fee of this Hastings, then it is a query whether Dadlington manor was holden of him as of the manor of Barwell, and not otherwise." The copy of Burton quoted by Nichols must have been different from the one quoted above, 1622, as his quotation commences thus:—"This manor containeth 32 yard lands; whereof 23 and 3 quarters was the antient inheritance of Rafe Lord Basset," &c.; and proceeds, "The other 8 yard lands and a quarter (as it appeareth by an inquisition taken 24 Hen. VI., after the death of Reginald *Moton*) was some time the inheritance of Sir Roger de Stoke, knight, who gave it in frank marriage to Sir *Robert de Campaigne*, knight, with *Margaret* his daughter; which *Robert* was descended from the antient earls of Champaigne, one of the peers of France; whose lineal ancestor being a cadet of the said earl's house, coming into England with king William the Conqueror, received from him great lands and possessions in this shire, and in the counties of Northampton, Oxford, Lincoln, and Salop. The heir general of Champaigne was married to *Tourvile*;

possessors, so far as can be ascertained from data, to the time of the building of the church, all other digression will be unnecessary.

The church, dedicated to the honor of Saint Margaret the Virgin[a], consists of a nave and chancel, a south aisle and chantry, and a tower and spire.

There are no documents which can be received as conclusive evidence of the date of any portion of this fabric beyond the style and the details of its architecture. Burton says "this towne is in the parish of *Hinckley*, and hath in it *a very fayre and large chappell*, equalizing many parish churches, which is free, having all sacramental rights, as marrying, buriall, christening, and communion; see the

from whom (by alienation made) it came to Sir *John* Harrington, knight, lord of *Harrington* and Exton, who, being afterwards seized of the whole lordship, inclosed it, and soon after sold it to the several tenants; the deed tending to the uses of the fine and recovery bearing date 3 Jac. I., wherein there is mention of a messuage and several closes to be settled for the use of *William Cart.*" This copy of Burton seems to have been corrected by his MS. See NICHOLS *in loco.*

[a] "Saint Margaret, whose festival (20th July) has been restored to our calendar after having been once expunged, was the daughter of an idolatrous priest at Antioch, in Syria, a person distinguished as having been one of the greatest enemies of his time to the Christian doctrine. Being remarkable for personal charms, Olybius, the president of the east, became enamoured of our saint, and used every effort in his power, supported by the authority of her father, to make her abjure the Christian religion, to which she had recently been converted; but, not being able either to induce, or to terrify her into such renunciation, he caused her to be put to the most cruel torments, and afterwards to be decapitated, about the year 275. The history of St. Margaret, in the earliest breviaries of the Romish church, was so fraught with impious and absurd anecdotes, that they have been, from time to time, so much altered and amended as scarcely to retain any part of her original legend; though, as she has been worshipped with extreme fervour by both the eastern and western churches, for a supposed power in assisting females in CHILD-BIRTH, one miracle was necessarily preserved, until nearly the end of the 17th century, as an explanation of the cause of that peculiar province having been assigned to the saint. Neither Olybius, nor her father, having been capable of diverting her from a steady adherence to the Christian faith, recourse was had, say her monkish historians, to the assistance of Satan himself, who, *in the shape of a dragon*, swallowed her alive, though she speedily burst from that horrid confinement, and effected her escape. So miraculous a circumstance *naturally* pointed out the peculiar powers over which providence designed her to have empire; for who could so well be capable of aiding the struggles of the yet unborn infant, as one who had extricated herself even from the body of the arch enemy!

"The *girdle* of this virgin saint was long stated to have been kept in pious custody at St. Germain's abbey, at Paris; and being girt with it, was universally esteemed of the utmost service to ladies who were likely soon to require the assistance of the obstetric art; *but* the holy friars were obliged to superintend the ceremony, 'a piece of charity,' says an old author, 'to give them their due, they were seldom wanting in.'

"The Eastern church records this saint under the appellations of *St. Pelagia*, and *St. Marina*, while the Western church pays reverence to her by the name of *St. Geruma*, or, as our calendar retains it, *St. Margaret.*" "*Clavis Calendaria*," by JOHN BRADY. Lond. 1813, 2d edition, vol. ii. pp. 103, 104, 105.

record of the 5th of Henry the Third, before in *Hinkley*[a], which also hath a high spire steeple, the top whereof was shaken down in that generall earth-quake which happened in the year 1580."[b] And Nichols has the following quotation from the copy of Burton, corrected by his MS. "Some, I hear, would have the first founder of this church to be the abbot of Lira, in Normandy, and the prior of Hinckley, who was belonging to the said abbot, and had to their use the tithes of this town. I will not deny but that they might be speciall benefactors; but, out of all doubt, Sir Robert de Champaigne was the principal agent and chief in the foundation. And sure I am (by whomsoever it was founded) it is a worthy piece of work, neatly built with cut and chased stones, frizes, and architectry, with fair and large windows, equalizing some cathedral churches; the battlements are of a fine kind of fretwork, garnished with many high and curious cut pinnacles. It hath a fair high spire steeple; the top whereof was shaken down in that general earthquake which happened in the year 1580."[c]

Nichols goes on to state "the steeple (containing four bells) which is at the west end thirty yards high, is supported by strong abutments."

"The south side and east end of the church has been by the architect finely ornamented in the windows and on the roof, (which is well leaded,) which gives it a pleasing and solemn appearance; but if it had been raised higher it would have been more majestic. Compared with the steeple and the ground it stands upon, it is rather low, but yet makes a good appearance." (See the S.E. view, Plate III.) "The view of the chancel from the east bears the character of gravity and veneration; on the north it is finished in a plainer manner, and supported by strong abutments of good stone and mortar, which appear hardened by standing in the air; at least the corroding hand of time has made but little impression on them in five centuries." One only of these abutments or buttresses seems to be of the original fabric, the second from the east, (see N.E. view, Plate II.,) which belongs to the chancel. The first from the east bears the date of "1629," and the initials "T" and "C", which, as this buttress also belongs to the chancel, are no doubt the

[a] "Ecclesiæ de Hinkle patronus Abbas de Lyra habens eam in proprios usus de dono Wilielmi filii Osberti ab antiquo. Et habet tres capellas, Stoke, Dadelington et Wichen. Capella de Stoke libera est habens omnia sacramentalia et reddit synodalia ut matrix ecclesia 3. *s.* 6. *d.* et habet capellanum residentem per priorem ministrantem ei necessaria. Capella de Dadelington debet deseruiri tribus diebus in ebdomada per provisionem prioris. Capella de Wichen non nisi semel in anno. Et debent omnia bona illius ecclesiæ expendi apud Hinckle ad sustentationem duorum monachorum ibidem residentium et ministrorum ecclesiæ et hospitalitatis faciendi. Vicarius Robertus institutus per Hugonem Episcopum Lincolum." Rot. 5 Hen. III. Burton, pp. 134, 135.

[b] Ibid. pp. 269, 270.

[c] Nichols, vol. iv. pt. 2. "*Sparkenhoe Hundred.*"

initials of Thomas Cleiveland, the then rector of Hinckley, upon whom the expense of this repair would fall. The third buttress from the east seems to have been built at the same time, and it is to be presumed that a serious settlement had about that time taken place, as the north wall overhangs twelve inches, while these buttresses, added, no doubt, to secure the safety of the fabric, are nearly perpendicular. The last buttress on this side, between the doorway and small window, seems also an addition, as the courses of stone of which it is built are not bonded in with those of the wall, and as the small window seems to have been inserted subsequently to the original building, it may be presumed that this buttress was added at the same time as a precaution against a weakening of the wall at that part.

" In the south side wall remains an arch of an old monument." (See Plate I. fig. 2, where an elevation, plan, and section of this arch are given.)

" A small gallery at the west end of the north side of the church was erected about 25 years ago." This hideous appendage at the west end of the nave, the stairs to which wind round and obstruct the view of one of the piers, is used only as a private pew, occupying an area of at least 16 ft. by 8 ft.!

" Within are five arches supported by beautiful clustered pillars, terminated by handsome groups of flowers intermixed with grotesque heads." Details of these piers and arches are given in Plate I. at figs. 3, 4, 11 and 12.

The beams of the roof of the nave bear various dates. " On a beam at the west end of the nave, over the belfry door, 1620." " On another beam, at the west end of the nave, W. W. C. W." " On another beam, A°. D. M.DCXC."

1668. D. Nath. Brokesby prius. . .

" The town chest," now in the chantry, " is marked

" Stocke chest."

C. W.
W. B. 1636 T. O.

" The king's arms were new painted in 1783, John Hayfield, churchwarden."

" Here is an old dial, dated 1620, from which the hand has long been broken off."

" The communion plate has the following inscriptions:

" Hanc laginam, una cum patinâ Basilius Firebrace, Miles, in usum ecclesiæ de Stoke Golding, in agro Leicester, D.D., Anno Dom. 1689."

" Hanc calicem cum operculo Henricus Firebrace, Miles, in usum ecclesiæ de Stoke Golding in agro Leicester, D.D., Anno Dom. 1689."

" B. F. Anno Dom. 1689, ecclesiæ de Stoke Golding."

" H. F. Anno Dom. 1689, ecclesiæ de Stoke Golding."

" The statue of *St. Margaret* stood formerly in the south chancel, painted and gilt; but in 1642 the pedestal only remained." (See Plate I. fig. 5.) " Her figure

yet stands in the west window of the steeple." This figure, together with the mullion and tracery of the window, have perished, and their place is supplied with brickwork.

In 1619, this church contained the following arms:

Or on a fesse *gules*, three plates. *Colvile.*

Gu. a fesse dancette, between ten crosslets *Or*. *Engaine.*

Ar. two bars and a canton *Gu.* *Boyes.*

Ar. a plain cross *Gu.* *St. George.*

Or a fesse *az.*, from which a lion naisant *gules*. . . . . .

Gu. three lions passant guardant *or*, a label of *France.* *Earls of Lancaster.*

Gu. a lion rampant *Ar.* *Mowbray.*

Or a fret *sable.* CHAMPAIGNE. "These arms are in several of the windows, and the frettes cut on the pinnacles of the steeple." But, alas! none of these now remain except those upon the font described elsewhere; the windows being glazed in common quarries, and the pinnacles of the steeple having disappeared.

"The lead on the chancel of this church was recast, and several pieces of new timber put into the roof by the Rev. Dr. Staunton, rector, in May, 1808."

"There now remains (1810) several fragments of old painted glass; the most perfect of which are two small heads of apostles, and the patron St. Margaret, in the north window of the north chancel."

A sad tale is told of the fate of this painted glass, in the Ecclesiologist, June 1843, pp. 156, 157, which, though true as to the fact of the loss of these valuable relics of antiquity to this fabric, the author is happy to be able to contradict in some important particulars. The painted glass was taken out as it required repair, and common quarry glazing was substituted. A Lady Thompson on visiting the church, thinking that the glazier had had ample time to complete his task, made inquiries respecting it; but being unsuccessful in her attempts to ascertain where he was to be found, wrote to the Bishop of Lincoln, of whose diocese Stoke-Golding then formed a part, upon the subject; his lordship attended to her communication, the painted glass was sent back to Stoke Golding, and arriving by a Hinckley carrier, it was taken to the then churchwardens, *upon whose refusal to receive it!* it was left to the tender mercies of the person who had the lien upon it, the carrier, and has been lost to Stoke church ever since![a] It is, however, devoutly to be wished that, now that a more searching inquiry, to wit, so public an one as that set on foot by the statement in the Ecclesiologist, may be the means of again bringing back the missing property,

[a] See ATHENÆUM, No. 839, p. 1048. The NOTTINGHAM JOURNAL, Dec. 8, 1843. The Rev. G. R. Boissier, of Oakfield, Penshurst, Kent, the author of the article on Stained Glass in "The Ecclesiologist," has made an ample apology to Dr. Staunton for the false statement therein contained.

as there are churchwardens and inhabitants of Stoke-Golding who would gladly reimburse the carrier not only for his charge of transit but also for any he might make *in moderation* for safe keeping.

" This town (as it is evident by the Matriculus roll of Hugh Wallis, bishop of Lincoln, made 1220, 5 Hen. III., vouched before in Hinckley,) was then in the parish of Hinckley, having in it a free chapel that had all sacramental rights, but since that time (as I am now fully ascertained by an old record imparted to me since the first edition of this book) the old chapel was pulled down by the above named Sir *Robert de Champaigne*, who, about the latter end of the reign of king Edward the First (?) built this church which now here standeth, procuring it to be made an absolute parish[a], dedicating it (according to the name of his wife, and in love to her, for that by her he had the same land) to the honor of *St. Margaret*, whose statue stood at the upper end of the church, fairly painted in oil, and gilt, which is now gone, only the pedestal remaining; but the picture in colours in glass yet standeth, very old, in the west window of the steeple. For further proof of this foundation, the arms of *Champaigne* are first set in the windows, and the batunes of the fret are cut upon many pinacles of the church, all which myself have seen." The foregoing is from Burton's MS. quoted by Nichols.

" The following memorial is transcribed from a stone still remaining against the wall in the north aisle (nave) of the church :"

ROBERT-DE
CAMPANIA
MIL. ET MARGARE-
TA VXOR EIVS
FILIA ROGERI
DE STOKE MILI
TIS FVNDAVE-
RVT HANC EC-
CLESIA IN HO
NORE S. MARG-
ARETE VIRGI-
NIS. TEMP'E ED: I.

" From this period," says Nichols, " Stoke is to be considered as a separate parish, though the rectory has been constantly annexed to the vicarage of Hinckley.

[a] " The like," says Nichols, " was performed by Sir Thomas Welch, in the reign of Richard II., for *Wanlip;* who of a chapel made it a parochial church, building a new fabrick from the ground. *Peckelton* was in 1220 a chapel belonging to Kirky Malory, but was made a parish church in 1329. So *Angodesthorpe*, (now Osgathorpe,) which 5 Hen. III. was a chapel belonging to Whitwick, is now a parish church, and others might be pointed out."

That it was, however, perfectly distinct as to parochial rates, was determined by a cause tried regularly at the Lent assizes for the county, in 1627, and confirmed the same year by a solemn determination of the Court of King's Bench."[a]

That this free chapel[b] was ever constituted a separate parish church is by no means evident; such constitution could not have taken place but by royal licence, which would have been recorded[c]. Burton states that "an old record was imparted to" him "since the first edition of" his "book;" but does not give any reference to that old record, nor does Nichols, who quotes his (Burton's) MS. Many free chapelries were declared to be *separate parishes for the relief of the poor* by the statute of Elizabeth; but this circumstance did not necessarily constitute those free chapels separate parish churches, for had it done so in this case, the rectory would have been severed from the vicarage of Hinckley, to which it is still annexed.

It is not likely that the inscription tablet on the north wall of the nave, which still exists, was there prior to the time that Burton wrote, who dates his address to his readers "from Falde, neere Tutbury, com. Staff., October 30, 1622," as he, having personally inspected the building and noted the "armes set in the windows," surely would have transcribed this document.

That the zeal of those who caused this tablet to be affixed outran their discretion is evident by the foundation being thereon dated "Temp'e Ed. I." into which mistake either Burton, or the old record by which he was deceived, must have led them; whereas it is ascertainable from the style and details of the fabric, 1st, that the portions built by Sir Robert de Champaigne and Margaret his wife are not of earlier date than the reign of Edward III.; 2ndly, that the present *nave* and *chancel*, which have been originally divided by a rood-arch, were in existence prior to the building of the *south aisle* and *tower;* and, 3rdly, that the *chantry* was an addition to the south aisle at a subsequent period. Two windows of the north side, viz., the second of the chancel and the second of the nave, from the east, are of elegant design in the purest decorated style; the other window of the chancel and the other of the nave, (see Plates II. and V.,) the first of each from the east, partaking of the flamboyant style of continental Gothic, seem to have been inserted after the north wall was built, having been removed probably from the south wall of the nave when the south aisle was added. That the south wall of the chancel was originally an external wall is evident from the existence in it of the small lancet light with the

[a] See note [c], p. 1.

[b] In the time of Henry II. it is styled *capella*, see note [a], p. 1. And, in the time of Henry III., it is styled "*capella libera*, habens omnia sacramentalia et reddit synodalia *ut matrix ecclesia*." It therefore paid synodals *as* a mother church, but was still a free chapel only.

[c] In Bacon's *Liber Regis*, St. Margaret, Stoke, is put down "a chapel in the parish of Hinckley."

groove for the glass still remaining. It is therefore to be presumed that the south wall of the nave was taken down by Sir Robert de Champaigne, the roof supported by the elegant arches and piers, the aisle added southward, and the tower and spire westward of the nave; under the sill of the first window east of the south doorway is situate the tomb recess represented at Fig. 2, Plate I., supposed to be that of the founder. It is also to be presumed that the chantry was a subsequent addition to the south aisle eastward, from the circumstance of the archway in the south wall of the chancel not being of similar design with those of the nave; from the piscina (Fig. 6, Plate I.) being situate under the sill of the third window, east of the south doorway, which proves that an altar at one time stood nearly in a line with it, against the *then* east wall of the south aisle; from the fact of one of the south windows of the chantry being of inferior workmanship to those of the aisle, and from the existence of the double piscina (Fig. 7, Plate I.) at the east end of the south wall of the chantry, which is also of inferior workmanship to that of the aisle; the present east window of the chantry having been probably removed from the east wall of the aisle together with the pedestal (Fig 5, Plate I.) and statue of St. Margaret. Supposing this theory to be correct, the tracery and details of the south window must have been copied, *but badly*, from those of the aisle at a much later period, as may be fairly presumed by the remains of an oak screen at the east end of the south aisle, which, probably, was erected at the same time. This screen, from the section of its mouldings, and the marks of the rich tracery by which the pannels have been ornamented still visible, may be safely ascribed to the reign of Henry VI. The mouldings of this screen are shewn at Fig. 8, Plate I., which, by the rebate on the last mullion southward, and a mortise in that mullion level with the rail, still existing, seems to have returned westward, and then to have returned southward again, abutting against the south wall close to the piscina, (see the plan;) the label of the piscina never having been complete, but there being a projection of about half an inch from the flush of the wall where the label is stopped, it may be presumed either, that originally *a credence* existed at this place, which, probably, was inclosed by the screen when the altar was removed, the torus moulding under the sill of the window being cut away to receive it, or, that the altar abutted against the south and east walls of the aisle; these, in their turn, giving place to the detestable pews, to suit the convenience (?) of the occupiers of which an elegant and richly carved oak screen was sacrificed.

The font[a], which is situate against the first pier from the west immediately oppo-

[a] Nichols gives the following description of this font: "An octagon font, with rude figures on seven of the sides, expressive of the seven deadly sins, but almost obliterated; the eighth plain." This is indeed a strange mistake, hardly to be accounted for by the many coats of whitewash and ochre which, when the author first saw the font in the early part of the present year, begrimed its enrichments.

site the south entrance, is of the same date as the south aisle, and is richly carved on seven of its sides, the eighth being plain and abutting against the pier. On the south side is the symbolical representation of Saint Margaret the Virgin, with a rod surmounted by a cross in her hand, treading a dragon under foot, the end of the rod piercing the dragon's mouth, in allusion to her legend, given in note [a], p. 4, and a young female figure before her in a kneeling posture; on the south-east side is a symbolical representation of St. Katharine the Virgin, with a spiked wheel in her right hand and a sword in her left; on the south-west side is the figure of a bishop, probably that of St. Nicholas, who was the protector of Virgins, his right hand upraised in benediction, and his left supporting his crozier; these three figures have each canopies over them of varied design springing from small columns with caps and bases; the west side has an ogee cuspated canopy, with crockets and finial, occupying the entire height of the pannel, with one shield bearing the following arms: a chevron .... between three quatrefoils .... slung from a hook in the centre of the canopy, and two other shields, suspended in the same manner, the bearings on which are not discernible, one on either side of the finial of the canopy; the north-west side has a very rich tracery-head springing from small columns; the north side has a canopy and shields nearly similar to the west side, and the north-east side has a very rich tracery-head of another pattern.

On the south face of the south wall of the chancel, towards the chantry, is a small brass escutcheon bearing the following inscription:

In piam memoriam
Francisci Brokesby, vici hujus gen.
qui licet prosapiâ, ortus honestâ
uxore felix unicâ
prole lætus pulchrâ
vicinis gratus, vicissim amatis;
aliam tamen,
sperandi præposuit sortem,
spirandi adhibuit normam,
respirandi contigit metam
gratiam in terris, gloriam in cœlis.
Posuere
Obadiah, Nathaniel } filii nati { maximus. proximus.
obiit anno { ætatis 55 / salutis 1633
Præivere { Ruth 1611 / Gamaliel 1627 / Elizabetha

Secuti { Nehemiah 1663
Abel 1676

Mox Secuturi { Obadiah
Nathaniel
Ruth
Abigail
1684

The arms on this escutcheon are, Barry nebulé of six *argent* and *gules*, on a canton *gules* a mullet pierced *or;* Crest, a boar's head and neck couped *sable:* and on the outside of the east wall of the chantry is a small mural tablet, on which is the following inscription: "Near this place ly interred the bodies of Thomas Davill Ironmonger who died A° D^ni^ 1684, aged 87, and of his 2 wives, Elizabeth Smith by whom he had issue Thomas, Elizabeth, and Mary, and of Ruth Brokesby by whom he had 2 sons John and Ralph." The foundation of Thomas Davill's charity bears date Aug. 16, 1702.

The north face of the south wall of the chancel is occupied by a large and, in its style, well executed mural monument in statuary to the memory of Henry Firebrace, who, from the Latin inscription thereon, seems to have been a faithful adherent to King Charles the First, "*per res suas difficillimas:*" he died on the 27th Jan., 1690, aged 72. This monument, *which is situate within the altar rail*, blocks up the small lancet light in the south wall of the chancel before referred to and, most likely, a piscina, as the small square piscina, under the sill of the first window of the chancel from the east (shown at Fig. 9, Plate I.) is a modern recess, and as the piscina was invariably placed on the south side of the altar. There are no other monuments of any interest even to the general reader.

In 1646, an inquiry was instituted by a Parliamentary Committee into the manner in which Stoke-Golding was served, Mr. Cleaveland, the then vicar of Hinckley, allowing only "£13 per annum to a curate to officiate there, although the tithes and dues belonging to the said church of Stoke-Golding amount to £60 a year;" and it was ordered, that "Mr. Cleaveland do allow a competent maintenance for a minister out of the said tithes, &c.;" which order, in February of the following year, was rescinded. The initials T. 1629 C. being on the first buttress of the north wall of the chancel from the east, it is to be presumed that they are those of Mr. Cleaveland, who must have set up this buttress; and, as the details of the first buttress of the north wall of the nave are precisely similar, it must have been set up at the same time.

Dr. Staunton, whose name has been mentioned before, was vicar of Hinckley and rector of Stoke-Golding in 1810, and his curate, the Rev. Isaac Robinson,

master of the grammar school. The Rev. —— Brown was afterwards vicar of Hinckley and rector of Stoke-Golding for many years, and the Rev. J. D. Schomberg[a] was master of the grammar school.

The present vicar of Hinckley and rector of Stoke-Golding is the Rev. George Dealtry, and his curate is the Rev. Thomas Bourne, who is also master of the grammar school[b].

Although all the plates have been referred to before, it will be necessary to give a slight description of each in consecutive order.

PLATE I.

THE GROUND PLAN AND DETAILS.

The Ground Plan, Fig. 1, consists of *the nave* and *chancel*, originally divided by an arch, traces of which are still visible, and one of the mortises which received the ends of the rood-beam still exists on the south side; they were afterwards divided by an oak screen, the sill and one of the uprights of which still exist; the upright is cut level with the pewing, and bears evidence of having been richly painted: *the south aisle* and *chantry*, divided also by an oak screen; the sill and uprights, details of which are given at Fig. 8, still exist, as also the panncl-boards of the lower portion, on which marks of rich ogee-headed tracery, with foliated cusps, are distinctly to be seen; this screen seems not to have gone straight across, but to have returned westward, within two or three feet of the south wall, and then southward again, abutting close to the east side of the piscina in the south wall, represented at Fig. 6., this screen, and that which divided the nave from the chancel, together with the oak roof over the whole of the church, seem to be of the time of Henry VI.: and, *the tower*.

The nave and chancel seem to be of the beginning of the reign of Edward III.; and the label of the east window of the chancel (see Plate IV. Fig. 1.) is terminated on one side by the head of a king, seemingly in the flower of youth, and on the other by that of a queen. Probably these represent Edward III. and his queen Philippa. These portions of the building seem to have been left up by Sir Robert de Champaigne Knight, the reputed founder of the church, who, in the same

[a] Author of "*The Theocratic Philosophy of English History.*"

[b] The Grammar School was founded by Mrs. Hester Hodges, Sept. 12, 30 Car. II. The Right Hon. the Earl Denbigh is the sole Trustee.

reign, must have taken down the south and west walls of the nave, carrying the roof on the south side by the elegant piers and arches, (of which the details are given at Figs. 3 and 4, and an elevation of one of each at Fig. 10,) and to have added the south aisle and the tower and spire. In the quatrefoils of the parapet of the tower are the heads of a king in old age, and a queen, these again representing Edward III. and queen Philippa; see Plate VI. Fig. 1. The chantry, or as Nichols calls it, the south chancel, seems to have been added to the south aisle at a later date, but with considerable care as to similarity of detail. The east window, together with the pedestal and statue of St. Margaret (the pedestal still exists, and is shown at Fig. 5, and its situation on the north side of the east window of the chantry may be seen on the plan,) must have been removed from the *then* east wall of the south aisle; and the west window of the south aisle seems to have been removed, and one of inferior detail as to mouldings (the mullions and tracery have given place to staring red brickwork) substituted. This west wall seems to have been rebuilt, or at any rate recased with ashlar, in consequence of the tower having settled away from the original wall, as the beds of the stone-work return past the angle, and are afterwards lost in a broken line. It seems probable that the first window west of the buttress which divides the south aisle and chantry, has been originally the west window of the south aisle, as, while *it* corresponds in every particular with two of those of the south aisle, *the one next to it* has evidently been badly copied in its tracery from those of the south aisle. That some such changing has taken place is further probable from the fact of the sill of the east window of the chantry not fitting the jamb on the south side by five inches, the jamb-mouldings being stopped on the bevel or weathering of the sill outside, for the purpose of receiving the jamb; while they, the jamb-mouldings, start, in the next course, from off the top bed of the sill five inches back from the stopped end which should have received them, thereby exposing a flat surface to the weather,—and, inside, the same misfitting is apparent.

There are no signs of any arch having divided the south aisle from the chantry, but on the south face of the great pier can be traced the place whence the east wall of the south aisle returned; by its removal a deformity was created, which must have been hid in a great measure by the screen. Another reason why it may be presumed that the chantry was built at a subsequent period to the south aisle is, because the archway in the south wall of the chancel is four-centred-pointed, and is much plainer than those between the nave and aisle, with which it ranges. It is not likely that, had the chantry and aisle been built at one time, the south wall of the chancel would have been left solid, so as to impede a view of the altar

from the south aisle; but that an archway, or even more than one, equally as much if not more ornamented, would have been made in it, by so munificent a benefactor as the one who built the south aisle and tower. Extensive repairs seem to have taken place at one and the same time: the high-pitched roof over the nave and chancel was removed, and the present one of a very low pitch substituted; the rood-arch removed, and a screen erected; the south aisle re-roofed; the chantry added, and a screen erected; the south wall of the chancel pierced by a four-centred-pointed archway, the members of which are plain chamfers and fillets, *and the whole of the nave and south aisle fitted up with open seats in oak, the ends being beautifully finished with fleurs-de-lis.* These, probably, took place soon after the annexation of the priory of Hinckley to the Carthusian priory of Mountgrace, in Yorkshire, which was effected in the reign of Henry V.

At Fig. 2 are a plan, section, and elevation of a tomb recess in the south wall of the south aisle, *supposed to be the tomb of the founder, Sir Robert de Champaigne Knight,* but no effigy remains.

Fig. 3 gives a plan of the jamb-mouldings of the first archway from the west, and of one of the piers, the filleted rounds and deep hollows of which have a rich and bold effect. A plan of the base is also shown.

Fig. 4 is a plan of the arch-mouldings over the same jamb and pier, on the spring line, the label-moulding being also given, and a plan of the abacus of the capital.

Fig. 5 shows the remains of the pedestal which supported the statue of St. Margaret.

Fig. 6, the single piscina in the south wall of the south aisle.

Fig. 7, the double piscina in the south wall of the chantry.

Fig. 8, the details of the oak screen, which divided the south aisle from the chantry. The details of that which divides the nave from the chancel are similar.

Fig. 9, the square recess in the north wall of the chancel.

Fig. 10, the first archway of the four which divide the nave from the south aisle in elevation, showing the font, which is in its original situation, the circular base being built in with the base of the pier.

Fig. 11, the section of the bases of the piers, and

Fig. 12, the section of the capitals of the same.

Fig. 13 gives the jamb and mullion of the west window of the tower, in which was the figure of St. Margaret in stained glass,—the mullion and tracery are destroyed, and the opening bricked up.

Fig. 14, the mouldings of the great archway in the east wall of the tower.

PLATE II.

THE NORTH-EAST VIEW.

This view is valuable, as giving the tower and spire in their full proportions, and shows the north wall of the nave and chancel, which seems, together with the east wall of the chancel, the oldest portion of the building. Both walls, however, have been much altered. The large buttresses of the north wall, one of the chancel and one of the nave, are not older than 1629. The only original buttress of this wall seems to be that at the west end of the chancel, and originally formed the abutment of the rood-arch. Immediately above this buttress is a trefoil perforation in the parapet, which seems to have been placed there to mark the boundary of the nave and chancel, as a line drawn down through its centre exactly corresponds with that of the west side of the buttress. Whether this existed prior to the lowering of the roof of the nave, is a question not easily decided; but, if we may judge from what was likely to have been the thickness of the rood-arch, viz. fifteen inches, it is improbable that a gable existed at the east end of the nave originally; and as the detail of the trefoil would date it back as far as the rest of the nave and chancel, it may be presumed that this was either originally intended as the boundary mark, and that the roof of the nave and chancel were of the same height, or that it was removed from the east gable of the nave, if any did exist, or from that of the chancel when the roof was lowered. In both this view and the south-east one, we cannot but regret the loss of the high-pitched roof of the nave; and even if the nave had no east gable originally, we would, as a matter both of taste and propriety, gladly supply one. The east end has a peculiar richness of effect;—the high pointed arch of the east window,—the sparkling light and shade of the panelled and crocketed pinnacles,—the *three* circles of *equal dimensions* in *one* arch in the east window, in allusion to *The Trinity in Unity*, and the beautiful foliated cross which surmounts the coping enriched with paterae, all tend to impress the mind with reverence. The gable of the chancel has evidently started from a lower point than it does at present, and has pitched much higher, for, on the sides of the pinnacles may be seen stone inserted in the place whence the lower stone of the coping started, showing that the pinnacles stood detached at least three feet below their spiral terminations. The roof of the nave had originally dripping eaves, as may be inferred from the fact of the weathered drip or hood-mould, still existing on the east face of the tower, which formed a flashing to the roof, extending downwards below the line of the present parapet, which parapet must have been added at the time the roof was lowered. The north windows of the chancel and nave are of great beauty; they have been before referred to.

* PLATE III.

THE SOUTH-EAST VIEW.

This shows the exquisite additions made to the chapel by the munificence of Sir Robert de Champaigne and Margaret his wife, by which it was made to "equalize many parish churches." The south front has been evidently chosen by this benefactor as the principal one; for in the quatrefoils of the parapet of the tower are the crowned heads shewn in Plate VI. Fig. 1; the loop which lights the bell-ringer's floor is richly ornamented in its ogee arched head, and the south doorway, now, unhappily, hid by a modern brick porch, is beautifully finished, having three-quarter columns divided by deep hollows, with foliated caps, whence spring rich arch-mouldings and label very similar to those of the internal piers and arches; and the whole south wall of the aisle is beautifully finished in detail, in the parapet, the buttresses, the windows, and the basement-moulding. The east window of the chantry, in its tracery, is certainly inferior to those of the south side; the flatness of the arch was a necessary evil, in consequence of the low elevation of the nave obliging the architect to keep that of the south aisle still lower. The cross by which the gable of the chantry is surmounted is of great beauty; see Plate IV. Fig. 5. The parapet of the south aisle, though rather meagre in its general effect, in consequence of there being no sunk member to the quatrefoils, the cusps springing off a plain face on all four sides, yet is tastefully finished by small buttresses between the quatrefoils, terminated on the coping by fleurs-de-lis; see Plate IV. Fig. 7. The cornice under the parapet is of great beauty, projecting boldly from the face of the wall, as also the basement-moulding; see Fig. 9, Plate V.

PLATE IV.

WINDOWS AND DETAILS OF THE EAST FRONT.

Fig. 1. Is an elevation of the chancel window restored, the enriched cinquefoil of the upper circle being destroyed. The lines of the jambs of this window, instead of forming tangents to those of the arch, form angles with them on the line of the spring of the tracery, which is a peculiarity not often met with, nor is it pleasing; but the superior richness of the mouldings, and the composition of the tracery, compensate fully for any disappointment that may be felt at the first discovery of any eccentricity. The mouldings of this window are given at Fig. 2.

Fig. 3. Is the east window of the chantry. The mouldings of this are the same as those of the south side, given at Fig. 8, Plate V.

Fig. 4. The cross which terminates the gable of the chancel.

Fig. 5. That of the chantry.

Fig. 6. Is a portion of one of the pinnacles of the chancel, which are of great beauty.

Fig. 7. Is a portion of the parapet of the south aisle.

PLATE V.

WINDOWS AND DETAILS OF THE NORTH AND SOUTH SIDES.

Fig. 1. Nos. 1 and 2, are the windows of the north wall of the chancel; their mouldings are given at Fig. 5.

Fig. 2. Is the trefoil perforation in the parapet of the north side, which divides the nave from the chancel; the buttress belonging to the chancel.

Fig. 3. Nos. 1 and 2, are the windows of the nave, the mouldings of which are given at Fig. 6.

Fig. 4. Is the window or opening of the belfry, the mouldings being given at Fig. 7.

Figs. 5, 6, and 7 are the jamb-mouldings just referred to.

Fig. 8. Is the detail of the windows of the south aisle and chantry.

Fig. 9. Is the detail of the parapet, cornice, and basement-moulding of the south aisle.

Fig. 10. Nos. 1 and 2, are the windows of the south aisle. The small medallion at the intersection of the tracery is a peculiarity and a beauty, as is also the shallow channel or quirk which divides the front member of the mullion, and with it traverses the tracery; see the jamb-mouldings at Fig. 8; the deep hollow sunk from the main face of the wall at the under side of the label, terminating on the spring line in a point, by the introduction of which a superior richness is acquired for the label, is dispensed with when the same moulding is used as a string course.

PLATE VI.

DETAILS OF THE CORNICE AND PARAPET OF THE TOWER; AND THE FONT.

Fig. 1. shows the details of the richly ornamented parapet and cornice of the tower, which has been terminated at the angles by pinnacles, the base of one of which is shown. There are eight quatrefoils in the whole length on each side, in two divisions of four each, separated by the projecting mullion which rises from the weathering of the cornice, and stops under the mouldings of the coping. From the existence of a circular hole immediately over each of these central divisions in the

coping, it is more than probable that originally a cross or some other ornament surmounted them. In the third quatrefoil from the west, on the south side, is the king's head here shown, which is evidently that of an old man; and in the corresponding quatrefoil of the other division is the queen's head. These the author presumes to be those of Edward III. and his Queen Philippa, and have been before alluded to. The cornice has a peculiarly rich effect from the ground, and is simple yet bold, in its details.

Fig. 2. The font; which, having been previously described, the reader is referred to p. 11. Suffice it to say that the south pannel, the centre one in the elevation here given, represents the patron, St. Margaret; the south-east pannel, St. Katharine; and the south-west pannel a bishop in the act of benediction, probably St. Nicholas.

The survey of the Church of St. Margaret at Stoke-Golding, in its present condition, is indeed calculated to superinduce a deep melancholy; and had not the churchyard been inclosed a few years ago by the instrumentality of the Rev. W. Greenway of Newbold-Verdun, the then rural dean, the architectural antiquary might have had to regret still more deeply the mischievous spoliation which had, up to that period, been committed, the south wall having been actually used as the parish grinding stone! Little, very little, has been done for the main fabric since the time that the whole church was re-roofed and fitted up with open seats. The north walls of the chancel and nave, the plan of which at the level of the wall-plate would be correctly expressed by a serpentine line, seem to have failed at an early period; as, in 1629, it was found necessary to add a large buttress to each, the beautiful windows having been left to take their chance after having their mullions put in irons and bedaubed with Roman cement; the head of one, that west of the doorway, has, as might have been expected, fallen a sacrifice; the wall itself overhangs twelve inches.

The east end is in still worse condition; a subsidence must have taken place at the south-east corner of the chancel, whether at the time of the general earthquake mentioned by Burton, or more recently, it would be difficult to determine; but from its extent, its consequences, and the remedial measures taken to save the east wall of the chancel from giving way entirely, one would be led to imagine that nothing short of a convulsion of nature could have been the cause; the sill of the chancel window having parted nearly two inches, and the wall being at the present time fourteen inches out of the perpendicular. The south-east buttress seems either to have been entirely taken down and rebuilt, (the materials being used again,) or added

to, and the east wall tied in with iron. The effects of this serious settlement are being felt to this day; a crack an inch wide, in the east wall of the chantry, is daily becoming both wider and longer, and threatens swift destruction. Those stones which remain of the crocketed weatherings of the buttresses and pinnacles of the chancel are loosened from their beds; the mullions of the east window are composed at the present time much more of wrought-iron and Roman cement than of stone. The tracery of the upper of the three circles having proved troublesome to the glazier has been neatly cut out, so that by measuring the inner diameter he might the more easily perform his task by making his *new light* perfectly circular! The tracery of the east window of the chantry is falling out piecemeal, and the pierced parapet of the south wall is being rent to pieces by the effects of the oxidation of the bar-iron, which occupies the place of the upper member of its coping, and runs along the whole length. On going round the south-west angle, we find that the west wall of the south aisle overhangs several inches; the mullions and tracery of its window have long since given place to staring red brickwork, through which is projected the pipe of a stove, long in disuse, slung up at the time of its erection by hooks and eyes to the ashlar, in order that it might pour forth its murky volumes over the parapet. The tower, which is certainly the most substantial part of the whole fabric, seems to have decayed inside more than out, the stone which composes the internal faces of its walls having the appearance of being eaten away by some iron-toothed insect. The west window of the lower stage, in which the stained glass figure of St. Margaret was seen by Burton, has been entirely deprived of its mullion and tracery—brickwork and a small cottage lead light being substituted—and, *for the convenience of the sexton*, a doorway has been made immediately under the window through the basement moulding. The stairs to the belfry having worn away, instead of having been carefully restored in stone, have been cut away and oak treads inserted, by which the abutment of the whole tower at this corner is seriously weakened. The pinnacles of the elegant parapet are lost, and the spire is being rent to pieces by wrought-iron ties and braces. In the interior a much more melancholy coup d'œil presents itself, and one from which a history of the rise, progress and decline of inclosed seats might be written and copiously illustrated. Not content with adding benches at the back of the original open seats, so as to debar the devout worshipper from kneeling, *according to the ritual*, during prayer, we find that the worthy inhabitants of Stoke-Golding have been permitted from time to time to add framing in front of the carved ends, to raise the backs, and thus to form them into pews; while the more influential have constructed others of a greater elevation. Some benches are found supported on loose bricks, some lying on the

floor, and some nailed upon portions of the fine old oak screens, which have been sawn through and removed within the memory of the present sexton. In many of these seats the bare earth forms the floor. In a word, the whole of the internal fittings look as if they had been thrown together on either side of the aisles or passages by chance.

If ever a church possessed interest as *a national monument* and as *an example of ecclesiastical Gothic architecture*, it is the CHURCH OF ST. MARGARET AT STOKE-GOLDING, with its elegant tower, having the date of its erection engraven on its frontlet, terminated by a spire of just proportions, overlooking as it does the far-famed Bosworth Field, where Richard fought, where Stanley temporized, where Richard fell, where Richmond conquered;—where, after thirteen pitched battles, a struggle that had for thirty years distracted England, at the awful sacrifice of upwards of one hundred and five thousand of her sons! was ended. Surely this fabric, in the immediate vicinage of which *the crown of England*[a], which had fallen battered from the head of a cruel and relentless tyrant, was, by a layman, placed upon that of Henry the Seventh, ought not, *will not* be suffered to go to decay and ruin. For nearly five hundred years has it endured as a noble example of private munificence; and for nearly four hundred years has it remained without, *until now*, requiring *extensive repairs!*—having withstood the pelting storm, the lightning's flash, the earthquake's heave!

The inhabitants of Stoke-Golding have been but recently led to appreciate the beauties of their parish church by the visits of the many whose laudable zeal in the study of Gothic architecture has drawn them to the spot; but in consequence of the distress which, until lately, had so long impoverished all manufacturing districts, and their parish in particular, they are totally unable to do more than is barely sufficient to sustain *a place* of worship, much less to come forward with the means *now absolutely necessary*, in order to effect a thorough restoration of so noble a pile.

[a] "Richard was the only English monarch since the conquest, who fell in battle, and the second who fought in his crown; an indication of courage, because from such a distinguishing mark, the person of majesty is readily singled out for destruction; Henry the Fifth appeared in his at Agincourt, which was the means of *saving* his life, by sustaining a stroke with a battle-axe, which cleft it. But Richard's falling off, in his last fiery struggle, was taken up by a private soldier, who contrived to secret it in a bush in the field, perhaps with a view to secure it for himself. But being discovered, it was delivered to Sir Reginald Bray; hence arises the device of a crown in a hawthorn bush, at each end of Henry's tomb, in Westminster Abbey.

"When the pursuit was over, Bray delivered the battered crown to Lord Stanley, who placed it on Henry's head, hailed him king, and, as usual, sung 'Te Deum,' and taught the soldiers to huzza the rural monarch with 'Long live King Henry.' This was performed upon a hill near Stoke, from thence called Crown-Hill, forty-three acres."—THE BATTLE OF BOSWORTH FIELD, *by W. Hutton, F.A.S.S.* Octavo. Birmingham, 1788, pp. 132, 133.

To the antiquary and architectural student it is a building of great importance, as affording an undoubted example of a transition between the Decorated and the Perpendicular English styles of Gothic architecture, possessing rich mouldings in every part, and ramifications of tracery in great variety. It is, therefore, devoutly to be wished that, on all accounts, it may be handed down to posterity not merely by the graphic and descriptive art, but by the skill and anxious care of the architect and the well directed labour of the artisan.

The parishioners, when appealed to in the early part of the present year, immediately consented to levy a much larger church rate than had ever been remembered to have been granted in Stoke-Golding, the proceeds of which, however, will be barely sufficient to cover one half of the expense of refitting the interior, which is all that is likely to be attempted at present; and this step is about to be taken by the vestry, unaided (from prudential motives) by professional superintendence, while the main fabric *requires* immediate attention.

PEDIGREE OF CHAMPAIGNE OF THURLESTON.

ARMS:—*Or* fretty *sable*, on every joint a cross crosslet crossed *Argent*.

ROBERT DE CHAMPAIGNE, of Thurleston, Knight = MABELL, daughter and heir of —— GAWEY.

ROBERT DE CHAMPAINE =

ROBERT DE CHAMPAINE, Knight, 24 EDW. I. =

ROBERT DE CHAMPAINE, Knight, 10 EDW. III. = MARGARET, daughter and heir of ROGER DE STOKE, Knight.

WILLIAM CHAMPAIGNE, of the age of 30 years, 27 EDW. III. =

- MARGARET, dau. and co-heir, married to —— FOUCHER.
  - GEFFR. BOUG, of Leke, in the County of Nottingham. = MARGARET, co-heir of MARGARET DE SOULNEY.
  - ELIZ. married to TH. HUNT; after to EDMUND DE HERDWIK, of Lindley, co-heir of MARGARET DE SOULNEY.
  - EDMUND BOUG =
    - BALDWIN BOUG of Thurleston, died 1435.
    - MARGARET, sister and heir, married to RICH. TURVILE.
- MARGARET, dau. and co-heir, married to ROBERT DE HASTINGS.
  - MARGARET, dau. and heir, married to JOHN DE SOULNEY, Knight, died 5 RICH. II. without issue.
- JOANE, dau. and co-heir, married to —— DAUNDELINE.
  - WILLI. DAUNDELINE, of the age of 30, 5 RICH. II., one of the heirs of MARGARET DE SOULNEY.

Burton, pp. 289, 290.

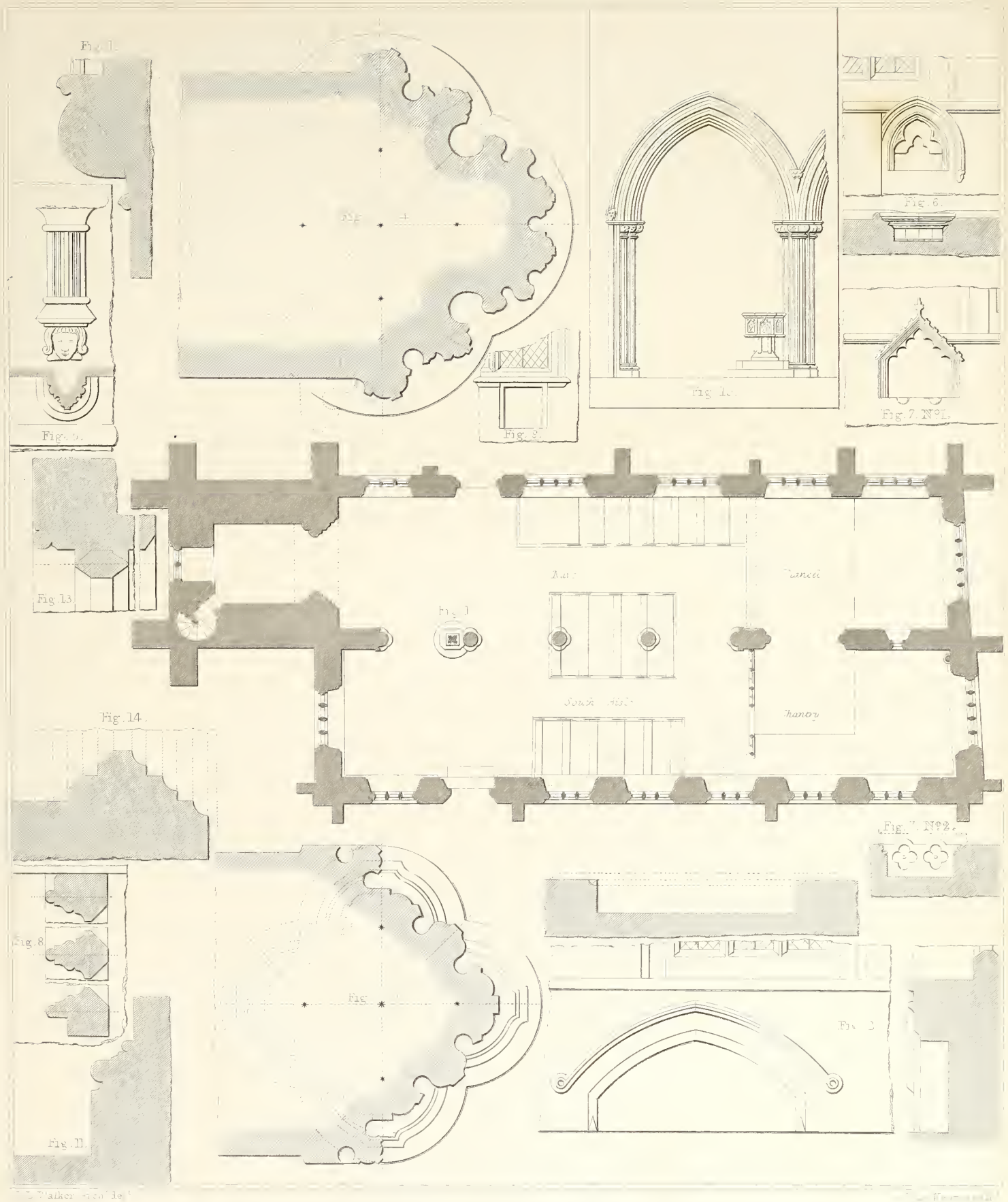


Fig. 1.
Fig. 5.
Fig. 9.
Fig. 10.
Fig. 6.
Fig. 7. N°1.
Fig. 13.
Nave
Chancel
South Aisle
Manor
Fig. 14.
Fig. 7. N°2.
Fig. 8.
Fig. 11.

THE CHURCH OF SAINT MARGARET, STOKE-GOLDING, LEICESTERSHIRE.

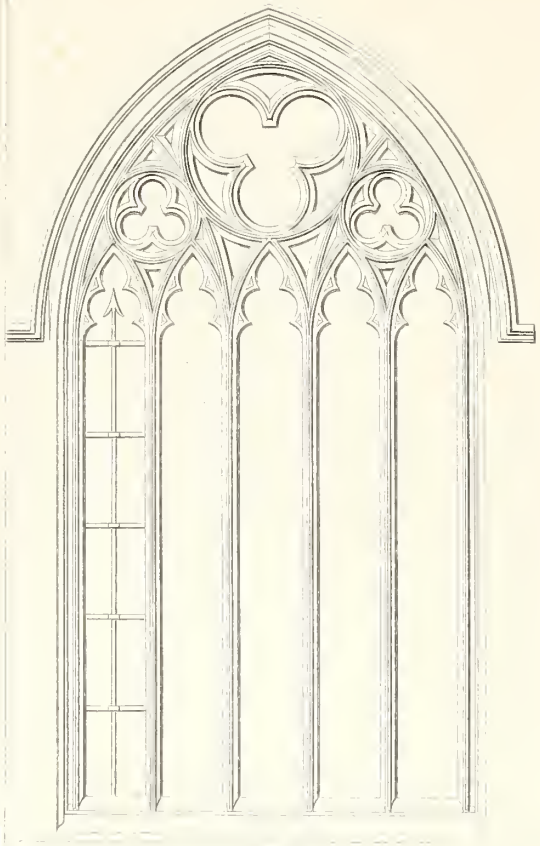
View from the South East.

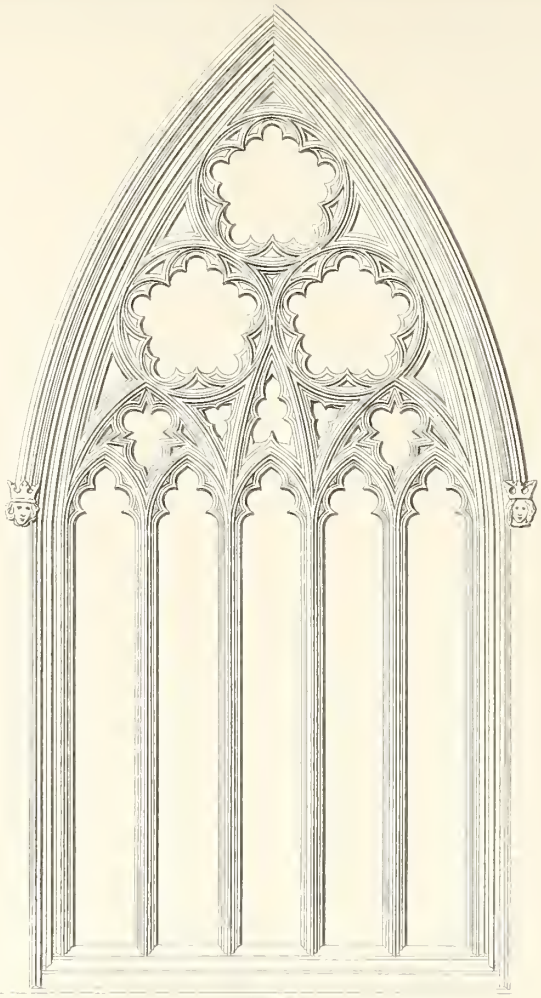
London, John Weale, 59, High Holborn, June 1, 1844.

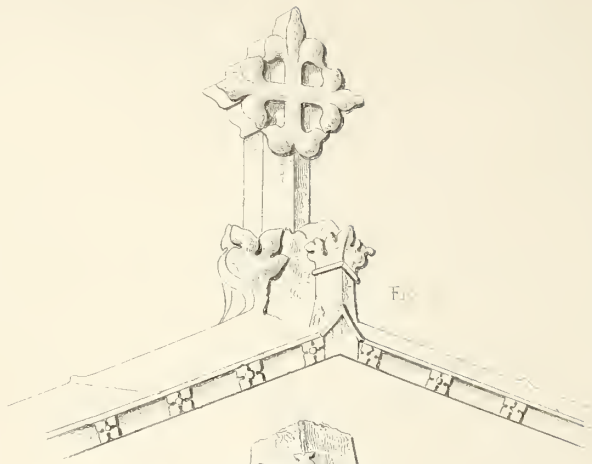
THE CHURCH OF SAINT MARGARET, STOKE-GOLDING, LEICESTERSHIRE.

View from the North East

London, John Weale, 59, High Holborn. Jun.ª 1







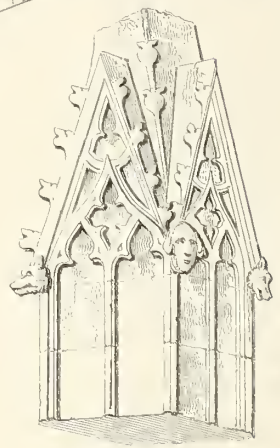
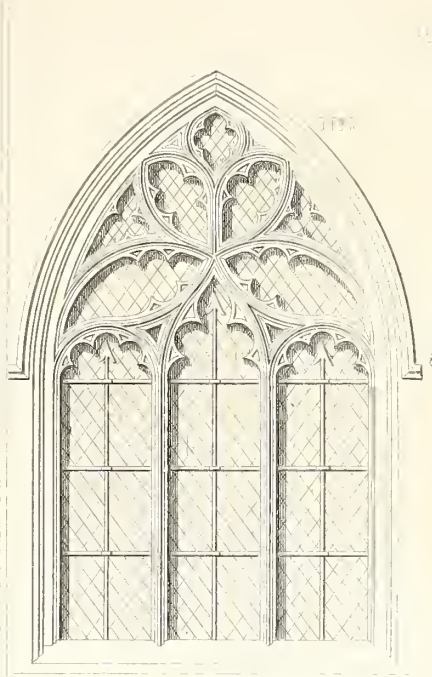
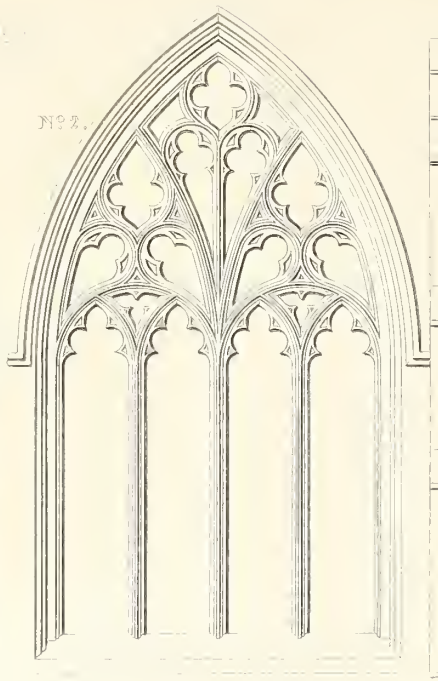
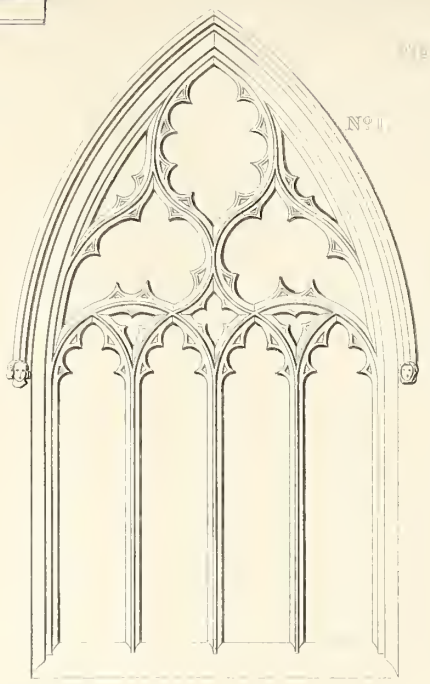


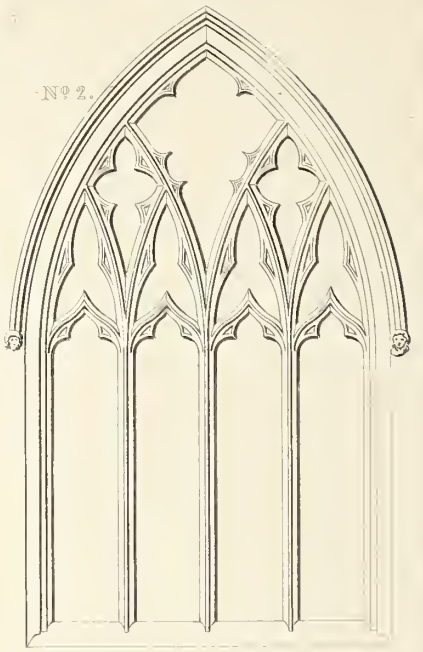

Fig. 2

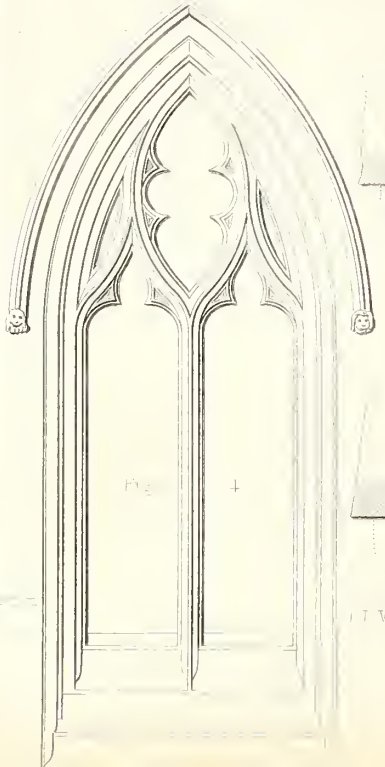
Fig. 2.

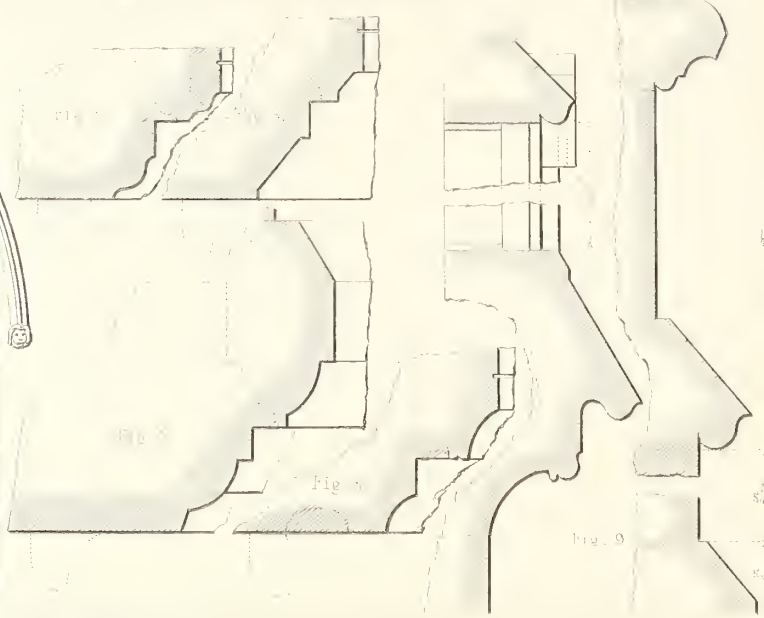


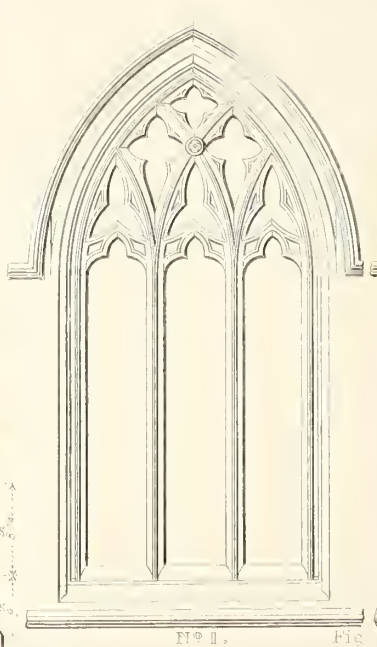




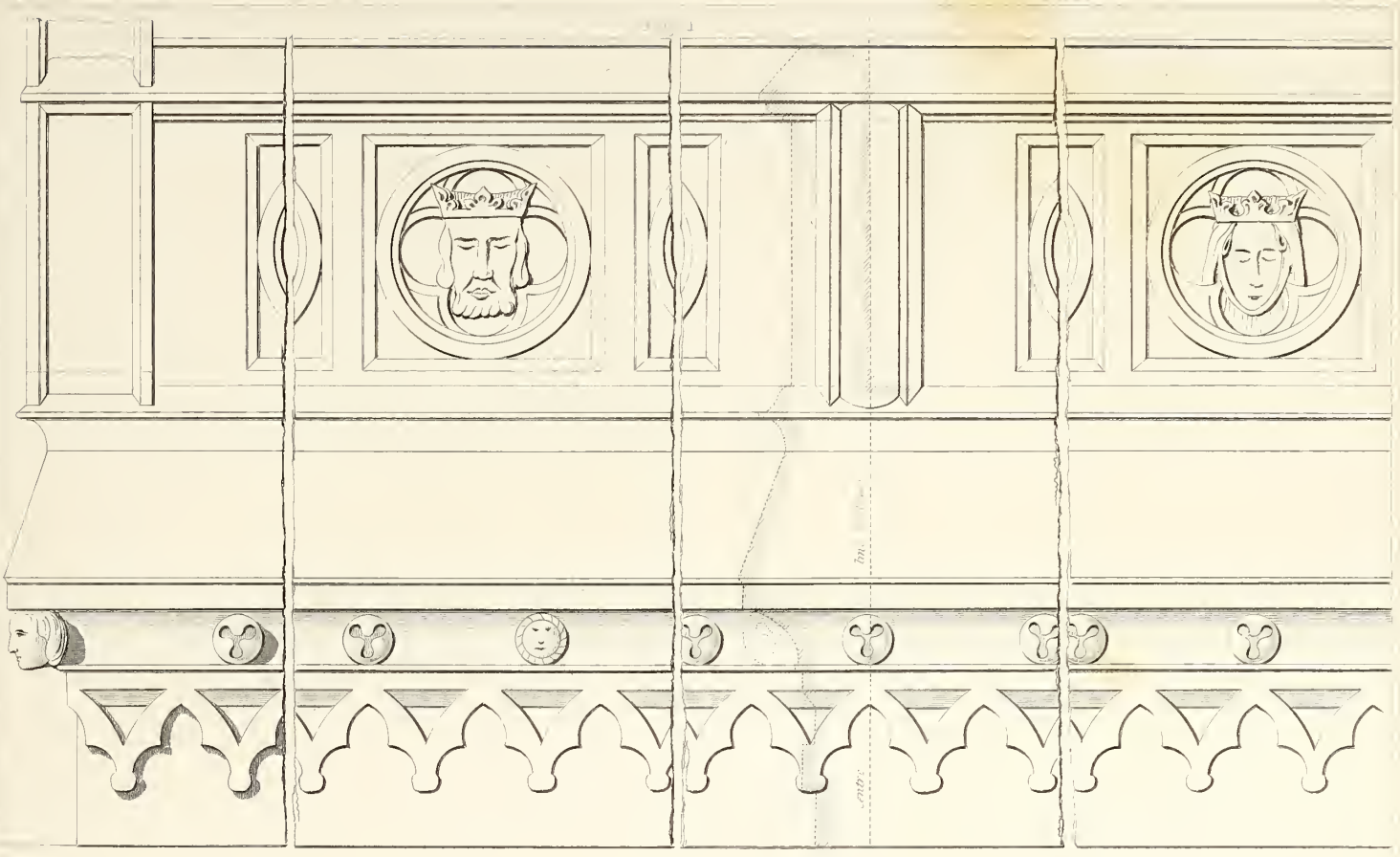


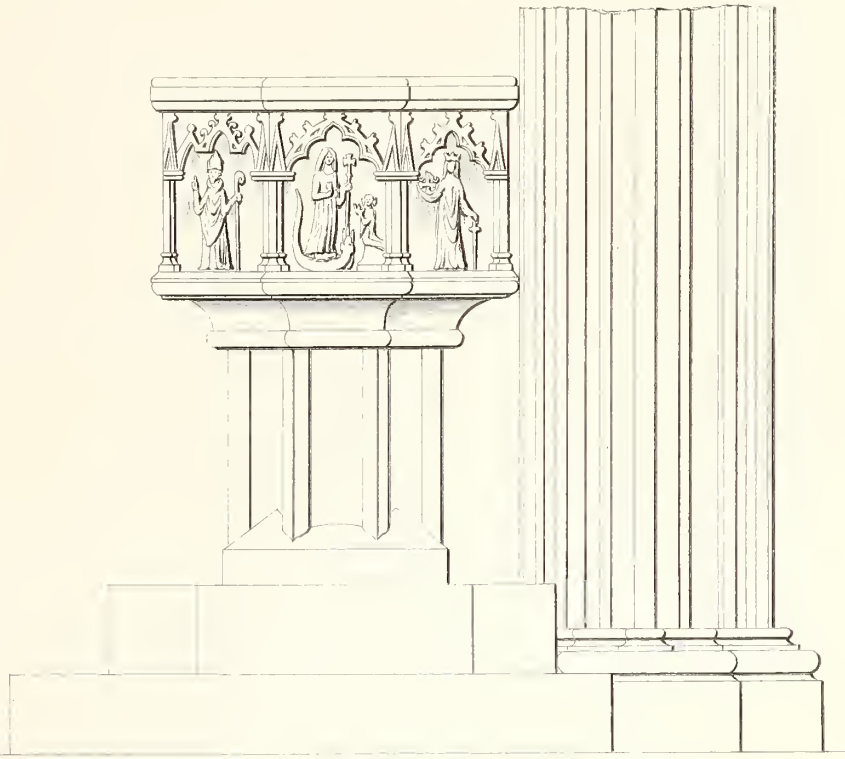






N° 1. Fig. 10. N° 2.





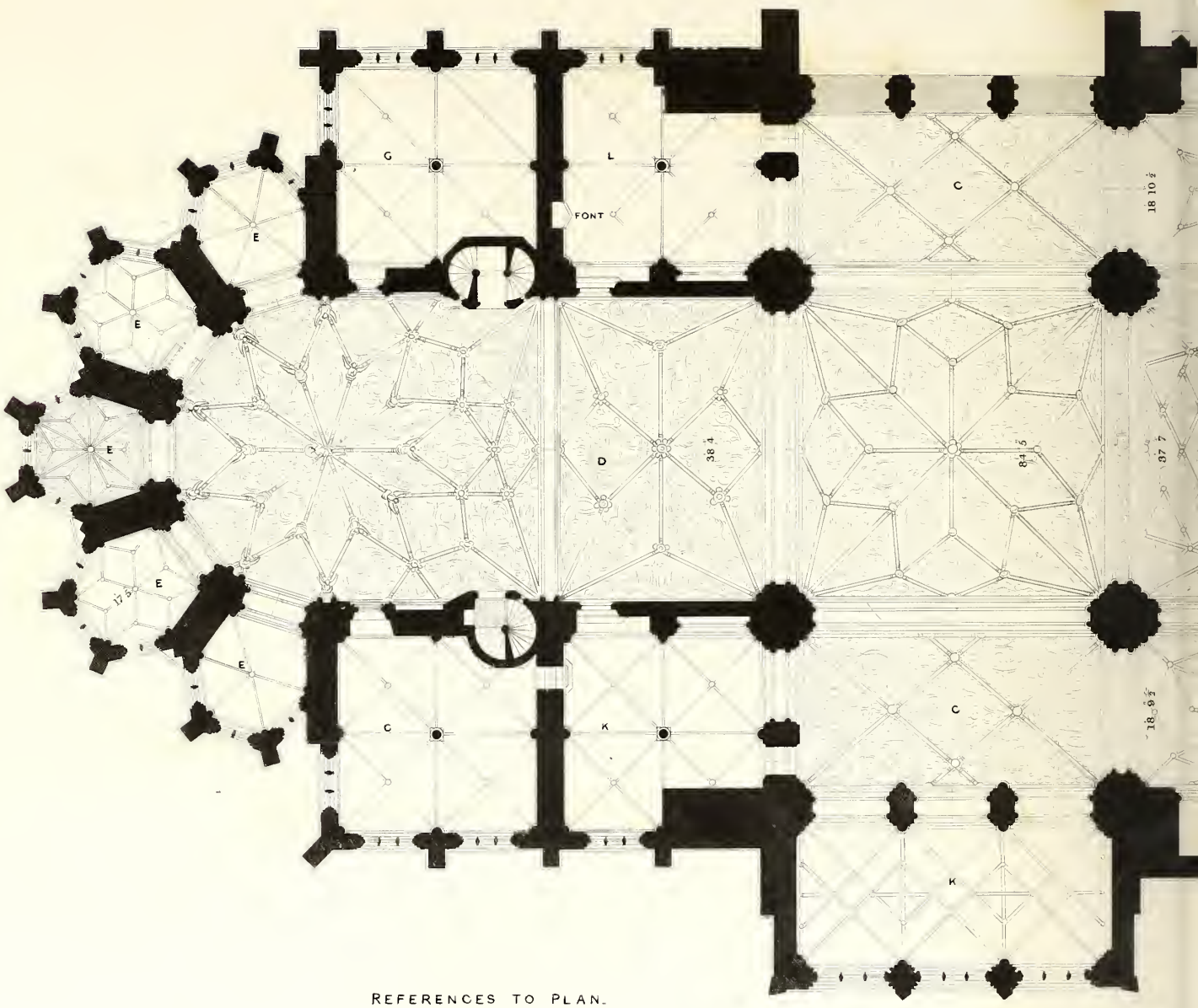
CHURCH OF ST. JAMES, AT LIÈGE.

Among the many very interesting churches in Belgium, particularly in the province of Liège, none perhaps is so striking in its character as that of the church of St. Jacques. Its magnificently embellished interior, its singularly curious and imposing effect, the many excellent details, and its magnitude, require of us many illustrations, and much of architectural delineation of detail, &c. The following memorandum of this church will be found in a work by the late Mr. Hope, entitled an Historical Essay on Architecture, in 2 vols. large 8vo.

"Liège—the much admired cathedral destroyed in the revolution; but St. Jacques in the transition style, from the pointed to the cinque cento, exists, and is most elegant: the arches are elegantly fringed; it possesses wide windows, elegantly mullioned; network screens; reeded pillars, branching into rich tracery, studded with numerous embossed ornaments, ornaments containing within them gay arabesques, modillions of saints, sovereigns, and prelates innumerable, all most gorgeously yet harmoniously painted and gilt."

For the present Part, and as an earnest of our intention, we subjoin a plan of this church, and in future Parts elaborately drawn plates will be given, particularly the curiously decorated coloured groined ceiling, which shall be coloured after the original, besides the enriched and beautiful specimens of painted glass of the eastern windows. In the whole, we hope to present to our readers from 20 to 25 illustrations of this edifice.

GENERAL PLAN OF



REFERENCES TO PLAN.

A.A.A — NAVE AND AISLES.

B.B.B — WEST TOWER &c.

C.C — TRANSEPTS.

D — CHOIR.

E.E.E — CHAPELS.

C.C — SACRISTY & TREASVRY.

L — ANCIENT BAPTISTERY.

K.K — CHAPELS.

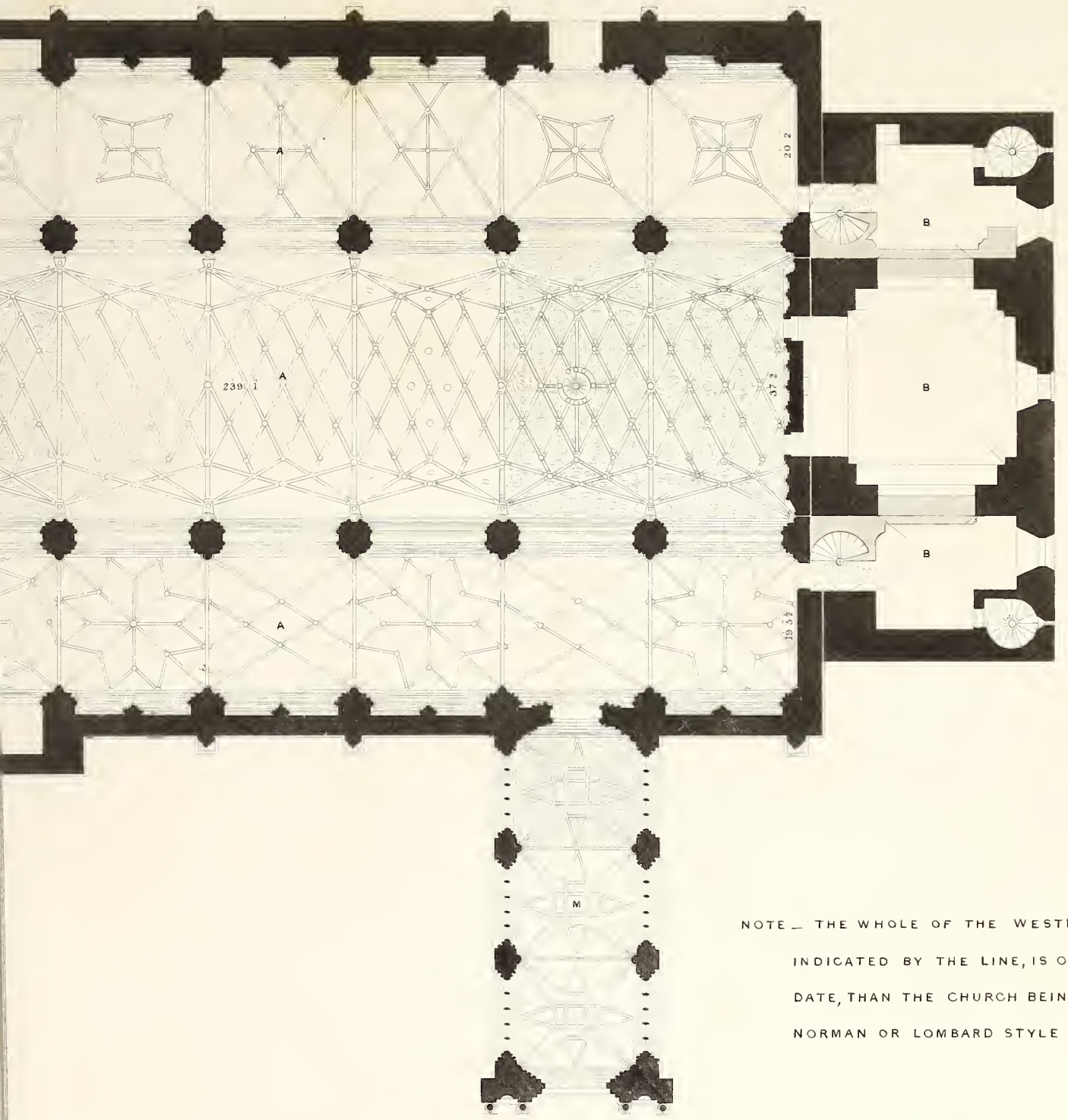
M — PORCH.

SCALE OF 10 5 0 10 20 30 40

DRAWN & MEASVRED BY F.J.RASTRICK ARCHITECT.

London. John Weale

ST JACQVES LIÈGE.



NOTE — THE WHOLE OF THE WESTERN TOWER INDICATED BY THE LINE, IS OF AN OLDER DATE, THAN THE CHURCH BEING OF THE NORMAN OR LOMBARD STYLE

60 70 80 90 100 FEET

ENGRAVED BY JOHN LE KEUX

Holborn Jon? 1.1841

NOTICES

OF

WORKS ON ARCHITECTURE,

PUBLISHED IN THE PRECEDING QUARTER.

Polygraphia Curiosa. The Book of Initial Letters and Ancient Alphabets for Ornamental Purposes, Numbers 1, 2, 3, and 4 in quarto, containing Four Plates in each number.—*Bogue.* This work is in the course of publication, and contains some useful and interesting specimens, some of which are Venetian, taken from a French work recently published in Paris.

Ecclesiologist. Numbers 25 and 26, in 8vo.—*Stevenson.*

Fonts. Illustrations of Baptismal Fonts, Parts I. II. and III., in 8vo.—*Van Voorst.* This is unquestionably a very useful work for Church Builders, and contains very pretty examples of Norman and early English decorated and perpendicular forms. Each Number contains 16 of Mr. Jewitt's admirably engraved Wood-cuts.

A Manual of Fresco and Encaustic Painting, containing ample instructions for executing works of these descriptions, &c., by W. B. Sarsfield Taylor, in 8vo. —*Chapman and Hall.*

Baronial Halls, Picturesque Edifices, and Ancient Churches of England, drawn in lithotint, by J. D. Harding, edited by S. C. Hall, large 4to, Parts I. and II., with three Plates and eight Wood-cuts.—*Chapman and Hall.* This is a work well executed in the style of the new lithotint drawing, and is an evidence of what can be done by this mode for picturesque subjects. The first part contains

COBHAM HALL, KENT.

COBHAM CHURCH INTERIOR.

WEST STOW HALL, SUFFOLK.

The work is intended, as far as we can at prescnt learn, to be devoted to the delineations of old English Baronial Halls, Mansions, Manor Houses, old Houses, Village Churches, &c., &c.

Ornamenten Buch, von Carl Botticher. Oblong 4to. No. 5.—*Berlin. Von Schenk.* This is a work of coloured designs for Ornamental Painters, Paper Stainers, and others employed in the decoration of rooms. It is extremely useful to Architects and Decorative Artists generally.

Abbildungen der Glasgemalde in der Pfarrkirche der Vorstadt Au Munchen. 3d Lieferung, folio.—*Munchen.* This is a magnificent work of Painted Glass, in the parish church of the district of Au, in Munich, and contains patterns for our artists in that glorious style of art.

Monographie de la Cathedrale de Bourges Vitraux.—*Paris. Hauser.* A very elegant work, enriched with beautiful examples of Stained Glass. The best copies are those sold for 30 francs each. The work is by a society of Jesuits, and comprises examples of a superlative kind in facsimiles of Painted Glass of the Cathedral of Bourges, and other similar ecclesiastical buildings.

Histoire de la Peinture sur Verre, par Ferdinand Lasteyrie.—*Paris.* This work we shall read: if we find that it adds to the necessary store of knowledge, we will translate it for the Papers.

It is intended shortly to publish a work illustrative of that beautiful Specimen of Domestic Architecture of the Tudor Period, Crosby Hall, as lately restored by John Davies, Esq., Architect. The Work will contain an Historic Memoir in Letter-press; Views of the Exterior, with Details and Perspective Views of the Interior; as also Geometrical Elevations of the several Fronts, Interiors, &c.

Architectural Illustrations of Kettering Church, Northamptonshire. This work consists of Twenty Engravings of Perspective Views, Plan, Elevation, Sections, and the detail of the Windows and Mouldings at large, with figured dimensions, forming a complete architectural representation of this interesting church. The Drawings are executed by Robert William Billings, Author of the Illustrations of Carlisle and Durham Cathedrals, and the Engravings by George Winter. They are accompanied by an Historical and Architectural description.

Illustrations of the Antiquities of the County of Durham, by Robert William Billings, Author of the Illustrations of Durham Cathedral. This Work will

consist of Sixty Engravings on Steel, representing the principal Churches, Castles, and other Antiquities, from careful Drawings made on the spot. These will be accompanied by Descriptive Accounts of each, from personal observation. It will be published (at intervals of two months) in Fifteen Parts, each with Four Plates and Letter-press Description, at Two Shillings in Medium Quarto ; and Four Shillings in Imperial Quarto, with Proofs of the Plates on India Paper. The whole expense will therefore be Thirty Shillings for the Medium Quarto size, and Three Pounds for the Proofs.

Denkmale der Baukunst des Mittelalten in Sachsen, von Dr. L. Puttrich, imperial 4to, achte und neunte liefcrung.—*Leipzig*, 1843. This is a very useful and neatly got up Work. It contains many excellent perspective views of the whole and parts of Churches, Abbeys, and Cathedrals of the Middle Ages, which makes it a work of interest to the Amateur; and containing also as many excellent details as determines its utility in a professional point of view. Parts I. and III. are already published. Parts II. IV. V. VI. and VII. are promised shortly.

The Monumental Effigies of the Temple Church, with an account of their Restoration in the year 1842, by Edward Richardson, Sculptor. Small folio.—*Longman and Co.* This work contains 11 Plates of the Monumental Effigies restored by the Author, which are lithographed with some spirit, but they would have been more pleasing if an effect had been given by a slight tint.

Skyring's Builder's Price Book, for 1844. With a Weekly Journal.—*Skyring.*

JOURNALS.

Art-Union for October, November, December, and January.

Alphabets, Numerals, and Devices of the Middle Ages, by Henry Shaw, F.S.A., Nos. 1, 2, 3, and 4.—*Pickering.* This is a very useful and beautiful work, several of the subjects are, however, taken from a French work published at Strasburg.