ARCHITECTURAL NOMENCLATURE

OF THE

MIDDLE AGES.

BY ROBERT WILLIS, M.A., F.R.S., &c.

JACKSONIAN PROFESSOR IN THE UNIVERSITY OF CAMBRIDGE.

WITH THREE PLATES.

CAMBRIDGE:
PRINTED AT THE UNIVERSITY PRESS.
PUBLISHED BY J. & J. J. DEIGHTON, AND T. STEVENSON;
JOHN W. PARKER, LONDON;
AND
J. H. PARKER, OXFORD.

M.DCCC.XLIV.
CAMBRIDGE ANTIQUARIAN SOCIETY.

PRESIDENT.

COUNCIL.
Charles Cardale Babington, M.A., F.L.S., F.G.S., St John's College, Treasurer.
The Rev. Professor Corrie, B.D., S. Catharine's Hall.
Sir Henry Dryden, Bart., M.A., Trinity College.
Charles Lestourgeon, M.A., Trinity College.
The Rev. John Lodge, M.A., University Librarian, Magdalene College.
James Packe, M.A., Vice-Provost of King's College.
John Power, B.A., Pembroke College, Secretary.
Frederic Thackeray, M.D., Emmanuel College.
The Rev. Thomas Samuel Woollaston, M.A., S. Peter's College.

AUDITORS.
The Rev. James Goodwin, B.D., Corpus Christi College.
TABLE OF CONTENTS.

INTRODUCTION ................................................. 1

CHAPTER I.
On the Nomenclature of Moldings ................................ 3

CHAPTER II.
Of Masonry, Walls, and Tablements ................................ 22

CHAPTER III.
Of Pillars, Arches, and Vaults ................................... 39

CHAPTER IV.
Of Windows ..................................................... 46
Note A. On Doorways ............................................. 60
Note B. On Fretwork and Diaper .................................. 61

CHAPTER V.
Of Pinnacles and Tabernacle Work' .............................. 63

APPENDIX.
No. I. Moldings of the Tower Pier of Radclyff Church .......... 78
No. II. Indenture for the Tomb of Ralph Greene at Luffwick .... 79
No. III. List of Documents and Books ............................ 80
ADDENDA ET CORRIGENDA.

P. 6, Margin, for Akermann's Camb. read Lyson's Cambridgeshire.

P. 24, Note 1, and p. 38, Note 2. It is hardly necessary to explain that these mistakes have arisen from a confusion of ideas between the mediæval styles of architecture and the classical styles. The context of Vitruvius shewed that the Cariatides and Atlantes were human figures in distorted positions, and so are gargoyles in the mediæval system. Epistylion again is by its etymology something upon the column, and as the mediæval column carries an arch instead of a beam, the capitol appeared to be the thing indicated. An excellent example of the danger of trusting to unassisted etymology.

P. 23, Exs. xxxvi. &c. These epithets may (some of them at least) be derived from the verb to sever, for the office of tables is to separate the different compartments or stories. Thus the word would be assimilated to the Lysis of antiquity (p. 15), and the old form of the participle present would give severende or severande, not severing.

P. 29, l. 6 from below, for 42 read 43.

P. 30, Note 2. Campher I suspect to be an error of the press in Holmes, for champher, as in p. 111; among the terms of Art used by free-masons, I find "champher is to take the square edge of a stone off bevile ways." (Ac. of Arm.)

P. 40, Ex. lxxx. Fleche is also a spire (D'Aviler), but in these examples is evidently used, not in that sense, but as synonymous with the shaft of an arrow. (Vide "Flechia" in Ducange.)

P. 41, Note 3. In Dallaway's Walpole (Vol. i. p. 28) is an extract in which there occurs "quandam petram ad supponendum pedibus unius imaginis beatæ Mariae:" (Claus. 45 H. III.) This phrase looks very much like a translation of footstall by a scribe who could not find a corresponding word in Latin.

P. 41, l. 6 from below, for is read ils.

P. 48, l. 15 from below, for interrasile read interrasili.

P. 58, l. 16. Tiraut. Vide "Tirant de fer" in D'Aviler. It is the usual French term for "an iron tie bar."

P. 65, Ex. cxi. The goron is probably goujon, "grosse cheville de fer, qu'on employe à tête et pointe perdue, pour retenir des colonnes entre leur Bases et Chapiteaux, des Balustres entre leurs socle et tablette et à d'autres usages." (D'Aviler 1691, tom. ii. p. 609.)
ON THE
ARCHITECTURAL NOMENCLATURE
OF THE
MIDDLE AGES.

My object in the following pages has been to draw up an account of the mediæval nomenclature of architecture, as far as it can be deduced from the remaining documents, and from the comparison of them with existing buildings. The words are principally to be found in indentures and accounts relating to the expenses of buildings and monuments, which are necessarily expressed in the language of workmen. Other terms, but not so strictly technical, may be picked out of the monastic chronicles and biographies. Several well-known collections of these terms have been already made, of which the first strictly architectural one was that of Mr Willson, appended to Pugin's "Examples of Gothic Architecture," in 1823, and which is a most admirable performance, to which I am under great obligations. But many documents have come to light since the appearance of this Glossary, and the subject has been more closely investigated. Also, the alphabetical form of these collections is not the best adapted for the illustration and comparison of terms like these, which are commonly of a strange and capricious kind, defying the usual processes of etymology, and some of whose meanings can only be deduced by collating every passage that contains the term, and comparing it with the entire nomenclature of the architectural member in question.

The scribes, appear to have been often unacquainted with the meaning of these words, and to have taken them down from the mouths of the workmen. They often latinize them, or couple them with the nearest Latin synonym that they think may explain them; and they spell them most capriciously even for that age of capricious orthography, and of course, under such circumstances, often disguise them. I have found great assistance from the technical vocabulary of French workmen, as
developed in the various works on "Arts and Métiers" in that language, and especially from the early writings of Delorme, of Felibien, and D'Aviler; for the greater part of the words in question were of French origin, and many of them remain to the present day in France.

Confining myself strictly to terms that belong to architectural members, and avoiding those of ritual arrangements, domestic and military buildings, and other general matters that are usually included in glossaries, I have endeavoured to draw forth the remains of this portion of ancient nomenclature that are to be found in the published documents; but I have no doubt that many more lie hidden in the manuscript stores of our ancient records.

I do not propose, however, to give a complete nomenclature, but merely to illustrate those terms which are peculiar to the mediæval styles, and which have either become obsolete, or have changed their meaning, or which modern writers have revived with a perversion of the original sense. Words that have become established in our language, so as to be found with a correct definition in the standard dictionaries, do not fall within my plan, although they would necessarily be included in an Architectural Glossary.

The quotations are numbered throughout with Roman numerals. Many of these may appear hackneyed, from their previous application by former glossary makers. This is inevitable, for we have all employed ourselves in dissecting the same documents, and each of us must be under obligations to his predecessors for pointing out sources of information, and passages of illustration.

While I make this general acknowledgment, I must add that I have always endeavoured to refer to the entire printed document so pointed out, and that my residence in Cambridge having given me the advantage of free access to libraries, I should have been guilty of inexcusable negligence if I had not done so. In the margin I always refer to the work in which such document is contained. The alphabetical index at the end of the paper will enable it to be used as a glossary, and I have also there given the titles at length of the works to which I have referred by abbreviated references.

I am indebted to the kindness of the Dean of Ely for a most valuable set of extracts from the unpublished sacrist rolls of that cathedral, which contain many new terms, and help to elucidate the old ones to a very great degree.
CHAPTER I.

ON THE NOMENCLATURE OF MOLDINGS.

1. The most complete specimen of the nomenclature of the mediæval moldings is that which has been preserved to us by William of Worcester, or Botoner, for he uses both names. This antiquary, who was born in Bristol in 1415, employed himself in travelling all over England, and in recording a variety of particulars relating to the churches, monasteries, and other objects of topographical interest, dealing, however, much more with dimensions and numbers, than with historical facts, and unfortunately, in most instances, recording his dimensions in his own steps, "steppys meos," as he calls them. The manuscript in the library of Corpus Christi College, Cambridge, is manifestly made up of his original note-books. Its general dimensions are twelve inches long and four inches broad—a convenient size for a mediæval pocket—and it contains at present 332 pages, numbered regularly in red chalk by its former possessor, Archbishop Parker, as was his usual custom. But most of these pages are of different sizes; some of them mere scraps of paper and backs of old documents; some bear marks of having been folded in the middle; and, in fact, the whole collection appears to have been a bundle of loose notes, and different memorandum-books, stitched together, probably for preservation, after the death of the writer. The writing varies too, as might be expected, from notes made at different times, and under different circumstances, being in some pages a mere minute and huddled scrawl, and in others very carefully executed. As this manuscript was printed by Nasmith, in 1778, under the title of "The Itinerarium of William of Worcester," it is unnecessary to say more respecting the general character of the work, than that this edition of it is in many respects imperfect, and that I have examined the original in the few cases in which technical words have been employed.

2. Amongst the other memoranda of which this journal is composed, two of its pages contain a list of technical words, which a little examination shews to be the names of moldings, and which by their titles belong, the one to the north door of St Stephen's church at Bristol, and the other to the west door of St Mary Redcliffe, also at Bristol. That
these lists relate to the moldings of the doors, everybody admits, but nobody, as far as I know, has yet taken the trouble to compare them with the doors themselves, both of which are in existence.

3. Nasmith has made a very important omission with respect to the first. For at the bottom of the same page which contains the list of moldings, there is an original drawing, in charcoal, representing the plan or horizontal section of the door-way in question, of which drawing this editor makes no mention whatever. In Plate II. fig. 1, is a fac-simile of this drawing, of the exact size of the original; and upon taking this to Bristol, I find that it agrees perfectly with the moldings of the south porch of the church in question. Engravings of the porch and of the noble tower of the church have been published in Lysons' Gloucestershire, and in Seyer's Bristol, to which I shall refer for the general arrangement of the building.

That the drawing in question is original, is shewn by the writing upon it: "This is the same mood of the porche dore yn the north syde of the chyrch of Seynt Stevyn," that is to say, the drawing of the same mold or series of moldings which have been above enumerated. But I will now give the entire page, with the addition only of letters of reference.

1 A mold, as will presently appear, is a general term for a group or series of moldings. I have ventured to restore the old spelling of these words.

I. "The moldings of the patrone which Master Pageny hath made."—Estimates for tomb of Henry VII.
II. De operacione artificiosa porticus borealis ecclesie Sancti Stephani
de operatione manuali Benet le freemason.

(A) A cors wythoute.
(B) A casement.
(C) A bowtele.
(D) A felet.
(E) A double ressaut.
(F) A boutel.
(G) A felet.
(H) A ressaut.
(I) A felet.
(K) A casement wyth Levys.
    A felet.
(L) A boutel.
    A felet.
(M) A ressaut.
(N) A felet.
(O) A casement wyth trayler of Le-rys.²
    A felet.
(P) A boutell.
    A filet.
(Q) A casement.
(R) A felet.
(S) A casement.
(T) A felet.
(U) Yn the myddes of the dore a boutelle.

² The edge of the paper has been torn off here, so that the last syllable is lost, but
I venture to restore it thus from comparison with the same word above at (K), and with
the porch itself. The two moldings (K) and (O) are identical, and have square leaves
in them of the usual form. For trayler, vide Index.
4. The title of the above is written in our author's usual Latin, and with a few abbreviations, which I have not thought it worth while to preserve. The list, however, is written in English, and with the sole abbreviation of the word *casement*. I infer in this case—as well as in the next—that the writer was not technically acquainted with the words, else he would have latinized the whole, but that he copied the list as a curiosity, either from one already written, or from dictation merely. I also suppose that it was furnished by a mason, who, still farther to illustrate it for him, himself drew the profile at the bottom of the page; for this profile is evidently sketched by a technical hand, and the drawing of moldings so correctly as this is done is a very difficult task, and one in which ordinary draughtsmen even now very generally fail.

5. This drawing is of its kind unique; for although several medi­eval sketches and working drawings of buildings have come down to us, as, for example, of the tomb of Henry VI., the tower of King's Col­lege, and the funeral ceremonies of Abbot Islip, and various specimens published in Germany by Moller, yet none of them contain an express profile of the moldings, their object being to display the general effect of the compositions, whereas the moldings belong strictly to the class of working drawings. Nevertheless, the moldings are delineated in some of the German plans on a small scale.

6. This door-way is described however as the north porch, whereas, at present, the porch which agrees perfectly with the drawing is on the south side, and there is no door on the north. Either then the author has written north for south, a kind of negligence of which he is frequently guilty, or else the porch has been removed from one side of the church to the other. In this instance I believe the latter to be the solution, for the mistake, if it be one, is committed twice in the page, in Latin and in English, which is unlikely; moreover, the porch in its present state shews symptoms of having been taken to pieces, and put together again; for one stone on each side of the porch, contain­ing one of the ornamental "levys," has plainly been turned wrong side upwards; and if these stones were to be counter-changed, the error would be corrected. This looks very much as if the porch had been moved by a workman who did not understand his business; for such a mistake was not likely to have been committed under the superintendence of Benet the freemason.

7. The only difference between the drawing of the moldings and those of the existing arch is, that in two instances (at F and P) the
little bowtels, or rounds, have been scraped clean off, so that a single broad fillet only remains, instead of the triple group described as “a fillet—a bowtel—a fillet.” These small moldings were probably weather-worn, and had partly fallen off from their excessive undercutting; an accident to which the mediæval moldings are very subject.

8. The archway, which is the subject of the above list, is the open entrance of the porch, and the porch is vaulted with a fan-vault. The drawing includes the inner moldings of the archway, as well as the outer ones, but the list is confined to the outer mold.

In fig. 3, I have repeated this part of the drawing, for the purpose of applying letters of reference to the moldings in order. Now if these letters be compared with those which I have prefixed to the names in the list, it will appear that the same name always falls opposite to the same molding throughout, and thus we learn the following names:

Felet, or Fillet, a flat narrow strip with parallel sides.
Bowtel, boutel, or bowtelle, the convex molding, D
Casement, the concave moulding. .............B or C Fig. 6.
Ressaunt, the inflected moulding ............. E

I will return to the other terms of this first list after examining the second one.

9. At page 197 of the Manuscript, this second list occurs, which applies to the west door of Radclyff church. This list is more copious, and is so curious, that I have given a fac-simile of the whole (in Plate 1.) Here we have unfortunately no drawing in the MSS., and the doorway of the church has suffered from mutilation and injudicious repairs, but still enough remains to show the consistency and accuracy of the list. As in the former example, the title is written in our author’s usual Latin; then follows English, but with an explanatory clause or two of Latin at the end. And, as before, I believe the English part to have been furnished to him by the mason.
RADCLYFF CHYRCH.

III. Dimencio sive proporcio artifiosissime de Fremasonworke in porta hostii occidentalis eeclesie Radclyff.

The west Dore fretted yn the hede wyth grete Genese and smale, And fylled wyth entayle, .wyth a Double moolde costley Dun and wrought.

Latitudo porte

7. pedes.  The square yn the dore (X)  A casement (K)
A chamfer (A)
A bowtelle (B)
A casement (C)
A fylet (D)
A bowtelle (E)
A fylet (F)
A casement (G)
A fylet (H)
A filet (I)

Altitudo porte

9. pedes.  A casement
A bowtelle
A fylet
A fylet
A grete bowtelle
A fylet
A casement
A filet

A. A grete bowtelle

Isti 4 proporciones sunt
in ambabus alis.

A champ ashler.
A cors wyth an arch buttant.
A boterasse
A body boterasse

Explicit proporcio.

1 I cannot make out this word. Nasmith omits it and the next without notice.
2 This may be champ or chamf’ for chamfer. The member itself is a chamfer. Now chamfer (chamfrain Fr.) was used in two senses: (1) for the flat slope or fillet, formed by paring off the edge of a stone or piece of timber (as A. Fig. 6); and this interpretation is given by the English dictionaries of Sherwood and Barret, and in the French of Felibien, D’Aviler, and de Virloys: (2) for a hollow channel or gutter, such as the flutting of a column, or the form B. fig. 6. This is termed chamfrain creux by Cotgrave and Nicot, but the distinctive epithet is not always applied.
However, in modern language it is better to use chamfer for the flattened edge A, and hollow chamfer for the edge B, and to abandon the general application of the term to flutes and channels in general.

To cypher off a square edge, is to make two edges for that one, according to the Joyner’s terms in R. Holmes’ “Academy of Armory,” p. 100.

3 These letters, A, b, were probably intended to indicate that the second column of the list follows the first in sequence.

10. I shall postpone the explanation of the preliminary clauses of this description, as well as of the last sentence, to another part of this paper, and shall confine myself at present to the list of moldings. I have stated that in the St Stephen's doorway some little bowtels have been scraped clean off. The west door of Radclyff church has undergone a much more severe discipline of this kind, technically termed, I believe, *skinning*, which was extensively practised during the restorations that took place under the direction of Mr Wyatt; as for example, at Durham cathedral, the whole exterior of which was skinned under his instructions. This process of restoration consists of scraping or chipping off the decayed surface of the stone, so as to get down to the sound part. If there be broken foliage in a hollow molding, as is often the case, this is scraped clean out. Small bowtels and ridges, which are apt to be very rough and weather-worn, are likewise destroyed, leaving a clear plain surface instead; and in this way all the delicate and expensive details are destroyed, and a bare and clumsy block remains.

11. The west door of Radclyff church is represented in fig. 8 in its present skinned condition. Fig. 7 shews the profile restored according to the above list; and upon comparing the two profiles it will be seen that they exactly correspond when due allowance is made for the scraping off of a single bowtel at A, E, and G, and for the conversion of a mass of bowtels and fillets at L into a single fillet. This mass being near the outside, and made up of small members, had probably suffered more than the other moldings. For want of room I have not put a separate letter of reference to each molding in these figures, but have merely divided them into groups, which will be sufficiently intelligible. The nomenclature in this example exactly corresponds to the last; the names “bowtel,” “fillet,” “casement,” and “ressant,” always agreeing with the respective contours already assigned to them.

12. But there are also some of these names which have distinctive epithets attached to them. These are enumerated below, and with references to fig. 6, where each is delineated, as far as I am able to ascertain the meaning by comparison of the lists with their respective archways.

<table>
<thead>
<tr>
<th>St Stephen's</th>
<th>Radclyff</th>
</tr>
</thead>
<tbody>
<tr>
<td>A double ressant .................. H.</td>
<td>A double ressant wyth a filet G.</td>
</tr>
<tr>
<td>A ressant lorymer .................. F.</td>
<td>A lowryng casement ...............</td>
</tr>
<tr>
<td>A grete bowtelle ...................</td>
<td></td>
</tr>
</tbody>
</table>

As to the lowryng casement, the present state of the original makes it
impossible to discover what peculiarity of contour entitled it to such an epithet. The word means *frowning*; but there seem to be other casements in the same profile that deserve the title as well. The *grete* bowtell of course differs from the others in magnitude alone. I shall not in this paper attempt to discuss the applicability of this nomenclature to our present wants in the description and restoration of mediæval art. This subject is so extensive as to require a separate essay. But I cannot help pointing out how imperfect a nomenclature must be which can make no stronger distinction between the combinations H and G than by calling one "a double ressant," and the other "a double ressant with a fillet." The universal molding F is a "ressant lorymer."

13. This nomenclature of moldings is confirmed by other examples; and although it has been finally driven out by the new terms brought in upon the revival of classical architecture, yet traces of it remained to the end of the last century. The following passages contain the same terms and some others relating to moldings:

IV. "In eche Isle shall be Wyndows of Freestone accordyng in all poynts unto the Wyndows of the said Quire sawf they shal no bowtelles haf at all."—Fotheringhay Contract.

V. A charge for "cleansing of 3 bowtelles . . . . and for the rounded bowtelles of the lintels."—Accounts for the Stalls of St George's Chapel, 18 E. IV.

VI. "A crest of entail with a bowtel roving on the crest."—Beau champ Contracts.

VII. "Vinettes running in casements."—Lydgate, Second Book of Troy.

VIII. "Either of the said long (brass) plates for writing shall be in breadth to fill justly the casements provided therefore . . . . and all the champes about

1 Vitruvius applies "supercilium" to the *scotia* of the Ionic base, and to one of the moldings over a door. L. 4. c. 3. c. 6; 1. 5. c. 7.

2 The meaning of this epithet *lorimer* is uncertain. Mr Willson derives it from the French *larmier*, with great probability. A *larmier* is any architectural member which projects, and is so molded beneath as to compel rain to drip from its edge instead of running down the face of the wall, as the eaves of a house, and the coping of a wall. This is the sense given both by Cotgrave and Felibien. And from its generality the word is probably mediæval, although it happened that at the Renaissance it was immediately applied to the corona of the classical cornice, in translation of the Italian term *gocciolario*. The Dutch render this *dropsteen*, and some of our own early writers, *dropstone*.—Hence, I presume, Mr Rickman took his *drips tone*. To undercut a projection so as thus to throw the water off, is now termed *throating*. It is clear that the molding in question (F, fig. 6), the Ressant lorymer, is of the proper form for this purpose, and it is very commonly employed for projecting tablets or string moldings, both horizontal and over arches. In the present instance it is not an exterior molding: W, fig. 9, shews the form of the latter above the arch. Still the name may have been given to it on account of its most usual function. A *lorimer* is a spurrier or worker in small iron, as nails, spurrees, &c. (Cotgrave). Is the name derived from the spur-point which the section exhibits? The Italians term the molding, (F, fig. 6), "*uovo rostrato*."
the letters to be abated and hatched curiously to set out the letters." Beauchamp Contracts.

IX. "Fynyals ryansant gabbletts," &c.—Indenture for the fynyals of King's Coll. 4 H. VIII.

X. "In 56 pedes de oggifs empt. 16s. 4d. pret. pede 4d."—Ely Sacrist Roll. 31 E. III.

XI. "Painting one lysta in the great Hall."—Wardrobe Acct. 5 E. I., also "laying gold on the lystar of the windows," and "the Linerssers of the tablements," both of St Stephen's Chapel. 35 E. III.

Boutel is usually supposed to be Boltel, the diminutive of Bolt, the shaft of an arrow; but the cotemporary terms in France and Italy were bozel, (probably from bouchel, a barrel), and bottacio, also a barrel; and our boutel is most likely of the same family.

The VIIth example exactly describes the favourite ornament which consists of a serpentine vine-branch, with its tendrils, grapes, and leaves, filling a hollow molding or casement. Example VIII. has "casement" in its more general sense, of a sinking for the reception or inlaying of a plate or other ornament.

14. Ressant has only been preserved to us in the above passages. The common term for the corresponding molding is ogee, and this is also applied in England to that form of the pointed arch whose sides are inflected. The oggifs (Ex. X.) occur amongst some other entries relating to the construction of two north windows "ad tria altaria," in the cathedral of Ely. Upon examination of the locality it appears that these can only be the two windows in the north aisle of the choir which are the fourth and fifth in order from the transept wall, and which are manifest insertions, replacing Early English windows. Now the silt-tablets of these windows are made up of ressants or ogee moldings, excepting one casement. Fig. 4 is the interior, and fig. 5 the exterior one; and the aggregate length of these tablets is 53 feet 1 inch, which, allowing for the difference of standards, is so near to 56 feet, that we can hardly doubt but that they are the oggifs in question.

15. Ogive, in France, is now applied to the pointed arch generally, and neither to our ogee arch, nor to moldings of any kind; but this does not seem to have been its original meaning. Delorme uses "croisée d'ogives" and "ogives" for the diagonal rib of a vault only, and it is defined in the same way in the dictionaries of Felibien and D'Aviler. It may have been so named from the ogee molding, which is its universal form. This, however, is just as applicable to the other ribs of the vault; and the same may be said of the pointed form. The Dutch
apply *odiif* to the hollow molding and the inflected molding indifferently."

16. The passages just quoted shew that W. of Worcester’s terms were in general use. In fact, with the exception of *ressant*, they were all applied to the classical moldings when these made their first appearance, and remained for a long period amongst workmen. In the library of Worcester College, Oxford, is a copy of Palladio’s Architecture, with copious manuscript notes by Inigo Jones. These are expressed in workmen’s terms throughout, and *boultel*, *casement*, *fillet*, are applied habitually to the respective Italian forms; but *wave* is employed for the *ogee*. The translator of Hans Blome’s Architecture, 1674, defines the classical terms as follows. "Torus, any *bottle*. Scotia, a hollow *casement*. Regula, any small *fillet*. Cimatum, that which some call in English an O. G." Evelyn, the translator of Chambray’s "Parallel," also alludes to the terms *boltei*, *casement*, *ogee*, "as our workmen barbarously term it." Other traces of the same nomenclature might be quoted from the writers of this period. Casement is even used by Sir W. Chambers, and fillet and *ogee* have survived to the present day.

17. In the Itinerarium, amongst other particulars relating to the Radclyff Church, we are told that each tower-pier contains 103 bowtells:

\[ \text{XII. Columna principalis quatuor columnarum qui portant turrim competentem coram hostium chori occidentalis ecclesie Radclyff continet 103 bowtells.} \]

Fig. 3 is a plan of one of these tower-piers. Upon writing down the series of moldings, according to the nomenclature of our author, I find the number exactly 103. This coincidence of the numbers seems to shew that I have applied the nomenclature correctly; but it must be supposed that the word *bowtell* is here understood to mean *molding* in general, or else that the word has been written instead of some other by a slip of the pen, of which our author is sometimes guilty.

The list of names explanatory of this figure will be found in the Appendix. It appears from this plan, however, that the only mode of describing the common compound molding, I. fig. 6 (or 45, 46, fig. 3), is by the double name, "a *ressant*, a casement."

18. Now the nomenclature above developed resolves a series of

---

1 The word has been derived from *auge*, a trough or channel; but is more probably from *auge* and *giver* (or *girer*), to twist about. (Cotgrave). *Givre* is also a serpent. Albert Durer’s name for the *ogee* molding is "schlangen lini."

2 These notes are all printed in the 3rd edition of Leoni’s Palladio. Fol. London. 1742.
medieval moldings into precisely the same elementary forms or constituent parts as those into which the classical moldings are divided, for the words bowtell, filet, ressant, and casement, apply themselves quite as well to the latter as to the former. It may seem strange, then, that the workmen, after the revival or “renaissance” of the classical style, should ever have abandoned these old names, since they had only to deal with new combinations of familiar elements. But as the names have been superseded, it will at least be supposed that they have been exchanged for the classical terms. This is by no means the case; and the history of the present nomenclature is so curious an example of its kind, that I shall trace it at some length.

19. The revival of classical architecture, which began in Italy simultaneously with the introduction of printing, and from thence spread in order into France, Holland, Germany, and England, was mainly assisted by the publication of Vitruvius and his commentators, and by translations of this author, as well as by various original treatises on the subject, which were also translated and widely circulated in all these countries, as may easily be shewn from the great number of editions of these works, in all languages, which have come down to us. The nomenclature of moldings that may be picked out of Vitruvius is by no means complete or generally intelligible; and, indeed, for this apparent reason, Alberti, the first original modern writer on this subject, invented a new one, which was never adopted. For the other Italian and French writers, themselves practical men, and writing for practical men, naturally made use of their own mediæval words, applying them to the classical moldings. And the translators of Vitruvius, and of these other writers, either adopt the terms they find in their author, or else they translate them. By these processes a quantity of synonyms have found their way into this country and others.

For example, Vitruvius, and the standard Italian authors, were introduced into our own language, partly through Dutch, and partly through French translations, and therefore it may be expected that a nomenclature so formed will prove somewhat impure upon examination. The fact is, that we at present employ a medley of Vitruvian and Italian terms, mixed up with Dutch and French translations of the latter; the Vitruvian words have been for the most part left untranslated. We have done little more than exchange our own mediæval nomenclature for the mediæval nomenclature of Italy. I will now examine this in detail, by tracing the history of the terms themselves.
20. Vitruvius has not written expressly upon moldings, he merely names them when they occur in the course of his description of other architectural members. But a name may in this way be given to a molding, either in the general sense, from the form of its section, as when he terms the hollow or casement a *scotia*, from the shadow which it holds; or the name may be assigned to the molding only from the peculiar function which it performs, or from some form which it derives from that function: as for example, the same scotia, when it occurs in the base of a column, is also termed in conjunction with its fillets *Trochilus*, the pulley; for it exactly resembles a pulley in this use of it, but not when it is straight. Now when we attempt to pick out a nomenclature from this author, we are often in doubt whether a given term be a *sectional* name or a *functional* name; and this distinction has not been sufficiently attended to. It will presently appear that the same functional name may be given to two different moldings, if they are each capable of performing the office to which the name alludes.

21. However *torus*, *astragalus*, and *scotia*, may be safely held to belong to the first class. *Torus*, "a great bowtell," is only used in the bases of classical architecture, but the *astragalus*, small bead or bowtell, and the *scotia*, or casement, occur in the text both as base moldings and as straight moldings. The *Echinus*, or quarter-round, may also be a sectional name.

22. As for the *ogee*-moldings, Vitruvius clearly applies *sima* to that large one which caps the cornice of the Ionic and Doric entablatures, adding, that the Greeks called such *sima* "epitithidas," or capping members. This phrase, however, only implies that a *sima* in this position was so called by the Greeks, and not that the *sima* was always a top member, although it happens that our author has not employed it elsewhere. In his description of the theatre, there occurs a parapet, or "pluteum," "cum *unda* et corona." This *unda*, or wave, from name and position is probably another general term for the same *ogee*. The

---

1 In classical architecture there are two names for the complete convex molding, according to its size, *Torus* and *Astragalus*; besides the *Echinus*, or quarter-round. In the medieval nomenclature one name seems to suffice. But the Italian *Bastone* belongs to the larger form, and the small form is indicated by the diminutive *Bastoncino*; whereas in English, bowtell seems to belong to the small form, for the large one is termed a "grete bowtelle." Scamozzi amongst the moderns has made the greatest use of diminutives and even augmentatives in naming moldings. We find in his work, for example, *golazza*, *gola*, *goletta*, *golettina*, where his predecessors are satisfied with *gola* and *goletta*. The table below shews that the Dutch apply their diminutives in *en* and *je* to these terms as freely as the Italians do.
word *cymatium* is also used by Vitruvius in many different passages. Thus, in the Ionic entablature he undertakes to assign to its different members their proportions. We have in order, reckoning from below upwards, the *architrave* and its *cymatium*, the *frieze* and its *cymatium*, the *denticulus* and its *cymatium*, the *corona* with its *cymatium*, and lastly the *sima*. Now when we examine the remains of ancient architecture, we find surmounting and separating each of the great members of the entablature a group of moldings, varying in different examples, in number, form, and arrangement. Whence it may fairly be concluded, that *cymatium* is a general term for a group of moldings, given without reference to their form or number, but merely defining their office of separating one great member of the entablature from another. And this interpretation is borne out by the other few passages in which the word occurs. Thus we find mention of the *cymatium Doricum*, and of the *cymatium Lesbium cum astragalo*; names given to peculiar arrangements of moldings—the latter being characterised by an *astragal*. If *cymatium* had been the name of an especial molding, it would not have been susceptible of these various distinctive epithets, which imply rather groups of moldings than a single one.

This interpretation was employed by most of the early writers, as Alberti, Serlio, Palladio, Vignola, and Scamozzi, by Mauclerc and Perrault. But another set of writers, Delorme, Chambray, D’Aviler, Felibien, and others, have boldly applied the term to the *ogee* molding. Evelyn, in his translation of Chambray, a very popular book in this country, introduced this view, which seems now to be general.

It appears to me, however, that the text, compared with existing buildings, and backed by the superior authority of the Italian writers, must prove the name to be merely a functional one. The same too may be said of *Lysis*, which is also pretty generally given to the *ogee* molding.

In enumerating the parts of a *podium* in order from below upwards, Vitruvius tells us that it consists of "quadra spira truncus corona *lysis.*"

---

2 Sima is usually derived from *συμα*, blunt-nosed; Cymatium, from *κυματον*, a little wave. Some moderns spell the first Cyma, wishing to derive it from *κυμα*, and thus to make cymatium its diminutive, for which there is no authority. Scamozzi proposes a derivation from *summa*.

3 In a very few ancient examples the *cymatium* of every member of the entablature is an *ogee*, as in the Doric of the theatre of Marcellus, and that at Albano. I should assign to the *cymatium* the office of a capping member, were it not that in 1. 4. e. 3, Vitruvius directs the Doric corona to have a *cymatium* below and another above. However, the lower one is in fact the *cymatium* of the frieze.

4 "*Cymatium quidem supremum cujusque particule lineamentum est.*" Alberti, 1. 7. c. 7.
A~UHITECTURAL NOMENCLATURE

As the latter is something above the corona, and as the sima generally occupies this position, the two words are commonly supposed identical. But does not the etymology rather indicate merely any molding that separates or distinguishes one great architectural member from another, as in this case the podium from the wall above it, and thus place the term amongst the functional ones?

24. The ogee molding, however, when employed horizontally, as it generally is in classical architecture, produces a different effect according as the convex or the concave half of it happens to be uppermost. In Gothic architecture this is not so obvious, except in string moldings. There appears no trace of such a difference in the terms of Vitruvius; but the writers of the Renaissance have all attempted to make the distinction. The crowning sima of the entablature, which always has the concave uppermost, is assumed to be the upright form, and the other position is taken for the inverted form. The French have a distinct name for each of the two positions, Doucine and Talon respectively. The Italian name is gola, and this is termed gola dritta and gola inversa. Our modern nomenclature is sima (or sima recta) and sima inversa, and is derived from Philander’s commentaries on Vitruvius.

25. Flat members have two names in William of Worcester, fillet and champ. The first is a narrow flat bounded by two parallel sides. The second a broader one. But the latter term is also a general one for the flat field, or ground, upon which any figures are delineated, without reference to its bounding lines or outlines. Thus in Ex. VIII. it is used for the ground of an inscription. It appears, too, that when an edge is formed by the meeting of two fillets, this must be described as “a fillet a fillet,” as for example, 7, 8, fig. 3. Vitruvius is more precise.

The fillet that bounds the scotia above and below in the Attic base (N, 3, fig. 6) he terms quadra, as showing a square edge. The same term he applies to the member (N, 5, fig. 6) below the spira, or set of base moldings, when it occurs in the podium. But when below a column, the same is named a plinth, or square tile. This is a functional name, and the resemblance being lost when the same member is carried along the podium, the above sectional name quadra is substituted. Vitru-

---

1 From λύω, to loose or separate.
2 The lista, &c., in Ex. XI. p. 11, seems also to be a flat member or bordering fillet. Examples of the use of this term occur below. Smith derives lysur from listère, “the list of cloth—the edge or hem of a garment,” as Cotgrave renders it. The Promptorium Parvulorum has “Lyssr of clothe. Forago. Lyssr or lysure. Strophium,” p. 307. Vide also Forago in Ducange.
of the middle ages.

...
their original terms. Albert Durer\(^1\) employs a nomenclature marked (D), which may be either old or of his own invention. Some of the other German words have a very mediæval air, as *glockenleisten*, the bell-molding. A. Durer's words for the flat moldings are, *eck*, an edge; *winkell*, a nook; and *fassen*, a fascia. The nook is not provided for in any other system.

28. The first work in our language in which classical architecture appears, is the treatise of John Shute (1563). The author was sent into Italy in 1550, at the expence of the Duke of Northumberland, to study architecture; and his work is an original one, although mainly derived from Serlio and Philander, as he confesses in his preface. Next follows a translation of part of Colonna's romance of the "Hypnerotomachia," which appeared in 1592, under the title of the "Strife of Love in a Dreame." This translation is direct from the Italian, but the writer was unacquainted with the classical styles, and his work abounds with technical blunders, and is valuable to us only as preserving one or two English terms. Haydockes' translation of Lomatius (1598) contains a treatise on the proportions of the Orders of Architecture, with plates added by himself.

These works were all published during the reign of Elizabeth, and are all direct from the Italian. But in 1611 Sebastian Serlio appeared, translated from the Italian into the Dutch, and from the Dutch into English, and in 1624, the original Essay of Sir H. Wotton. The Masques for which Inigo Jones supplied the architectural descriptions, were produced during the reigns of James I. and Charles I. These are all the works that were published before the Great Rebellion. After the Restoration, Richards translated Palladio's first book, in 1662. But this is partly derived from the Italian, and partly from the French translation of Le Muet, which it imitates in form and in frontispiece, and in which many additions and alterations were made to the original author.

Evelyn translated Chambray's Parallel from the French, (1664), and thus introduced into our language the names and methods, but not the writings, of Alberti, Delorme, Vignola, Barbaro, Scamozzi, Cataneo, Viola and Bullant, together with those of Serlio and Palladio, which had been published before. Leeke's Vignola (1669) is the complete work, and direct from the Italian, but the only appearance of Scamozzi,

\(^1\) Opera, G. V. Arnheim, 1604. Originally published in 1525.
in an English dress, is in a short abridgement and remodelling of his
rules, published for the use of workmen, by W. Fisher, (about 1685),
under the title of "A Mirror of Architecture," and literally translated
from the Dutch.

29. It appears, then, that during these two centuries, our language
had but imperfectly received the great masters of the art, Vignola
being the only one who was completely and directly translated from
the original, and the others coming in a garbled and mutilated form
and after passing through the Dutch or French. Leoni afterwards
published complete translations of Palladio (1715) and Alberti (1725);
but the first English Vitruvius was that of Castello (1730). In the
mean time some French authors had been translated, as Le Muet's "Art
of fair Building," 1670, and Maucere's Architecture, in 1669.

Moxon wrote and published various workmen's books, as his own
"Mechanical Exercises," in 1677, and a duodecimo translation of Le
Muet's Vignola, with Perrault's abbreviation of Vitruvius, about 1655.

30. This history, however, is sufficient to shew through what tor-
tuous channels the nomenclature of the Renaissance was brought into
our language. To shew its present unsettled state, we cannot do better
than quote two modern writers of authority, Sir William Chambers and
Nicholson.

Sir W. Chambers reckons eight regular moldings, and gives several
names to each—"ovolo, echinus, or quarter-round—talon, ogee, or
reversed cyma—cyma, cyma-recta, cymatium—cavetto, mouth, or hollow
—torus, or tore—astragal, bead, or baguette—scotia, or trochilos—
fillet, listel, or annulet."

Nicholson, who wrote for workmen, uses "fillet—Roman (and
Grecian) ovolo, or echinus—cavetto, or hollow (equal to or less than a
quadrant)—bead (a molding whose contour is simply a convex semicircle)
—torus (a bead with a fillet, and distinguished from a bead by its
convex part being much greater)—scotia (a concave semi-ellipsis).
Cimatium is the general name for the partly concave and partly convex
countours, of which, when the concave part projects beyond the convex,
the cimatium is termed a cima-recta, and when the reverse, a cima-
reversa, or ogee."

31. Bead is derived from the common practice of carving this
member into the resemblance of a string of beads, but the name is
now applied to it in its plain state. Its history or genealogy may be

2 D'Aviler and most modern authors use in this way scotia for the deep elliptical base
hollow, and cavetto for the shallow quadrantal hollow.
exhibited as follows. Fusaruolo (Italian), Patenôtres (French), Paternosterken (Dutch), Bead-string, or Bead-molding (English).

32. It would lead me too far if I were to pursue the history of each word at length, and I have therefore drawn up the following Table, which exhibits a general picture of the nomenclature of moldings as it spread from Italy and amalgamated itself with the previous terms in each country. I have derived it from a careful examination of the early architectural literature of the Renaissance. It would have required much greater space to have referred under each word, to the authors who use it. The great difficulty is to decide in each case whether a translator who supplies a word that seems to be the direct translation of the one employed by his author, is merely coining a word for momentary illustration, or using a well-known one, or at least one which he intends to recommend for use. I have rejected several which seem to fall under this explanation, and have endeavoured to avoid this source of error as much as possible. The Latin nomenclature of Alberti, which will be found in the first column, (marked A), is an invention of his own, and this I believe is, at least partly, the case with that of Albert Durer, (marked D) in the German column. The principle of arrangement of the Table is to place upon the same horizontal line the words that have a common origin, or are derived one from the other by translation or affiliation. Isolated words are placed between brackets. I am aware that the Table must be very imperfect, but it will serve to shew the manner in which the present nomenclature of each country has arisen, if it fail in some of the particulars. There are also some peculiarities of application in some of the terms which it would require many notes to point out, but which do not affect the general history which I am endeavouring to illustrate.

1 This author affects throughout to call every thing by a new name. Thus the echinus of the Doric capital is "lanx" (a scale-pan) the abacus is "operculum," the pedestal "ara," and so on. For the sake of uniformity he adds to the classical "torus" (rope), a "cable," and a "packthread." But this nomenclature is only to be found in the original Latin text (Flor. 1487. and Par. 1512); for his translators, both Italian and French, substitute the ordinary names throughout.
OF THE MIDDLE AGES.

THE NOMENCLATURE OF MOLDINGS.

<table>
<thead>
<tr>
<th>VITRUVIUS (and Alberti.)</th>
<th>ITALIAN.</th>
<th>FRENCH.</th>
<th>DUTCH.</th>
<th>ENGLISH.</th>
<th>GERMAN.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TORUS (Thorius A.)</td>
<td>Bottaccio</td>
<td>Bozel</td>
<td>Stock</td>
<td>Bowtell</td>
<td>(Wellen. D.)</td>
</tr>
<tr>
<td></td>
<td>Bastone</td>
<td>Baston</td>
<td>Rond</td>
<td>Round</td>
<td>Stab</td>
</tr>
<tr>
<td></td>
<td>Tondino</td>
<td>Rond</td>
<td>Halfondt</td>
<td>Thorus. Bedde</td>
<td>Torus (Bead)</td>
</tr>
<tr>
<td></td>
<td>Toro</td>
<td>Thore</td>
<td>Stockjen</td>
<td>Baguette</td>
<td>Torus Pfuhl</td>
</tr>
<tr>
<td></td>
<td>(Mazzocchio)</td>
<td>(Boudin)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASTRAGALUS (Funiculus A.)</td>
<td>Bastonecino</td>
<td>(Petit bâton)</td>
<td>(Casement)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tondino</td>
<td>(Petit membre rond)</td>
<td>(Cavetto)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Astragalo</td>
<td>(Rondeau)</td>
<td>Hol. holletje</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Astragalle</td>
<td>Holrondt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECHINUS (Rudens A.)</td>
<td>Uovolo</td>
<td>Ove...Ovale...Oeuf.</td>
<td>(Vovolo)</td>
<td></td>
<td>(Wulst)</td>
</tr>
<tr>
<td></td>
<td>Echino</td>
<td>Echino</td>
<td>Quart de rond</td>
<td>Quarter round</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eschine</td>
<td>{Voylo Eyrtjen Eyrendt}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCOTIA (Canaliculus A.)</td>
<td>Cavetto</td>
<td>(Nasselle)</td>
<td>(Casement)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Guscio)</td>
<td>(Cavet)</td>
<td>Cavetto</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scotia.</td>
<td>(Creux)</td>
<td>Hol. holletje</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gota</td>
<td>Rondereux</td>
<td>Holrondt</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canale.</td>
<td>(Demierceuks)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sctia.</td>
<td>Scotia</td>
<td>Groove. Groefjen</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canaletto</td>
<td>Scotia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIMA (Undula, gulula A.)</td>
<td>Gola</td>
<td>(Doulcine)</td>
<td>(Ressant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scima.</td>
<td>Ogive</td>
<td>Odiif, Odýf</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gueule</td>
<td>Keel. Keeltjen</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cime</td>
<td>Seima. Kim</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scima.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Onda</td>
<td>(Talon)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TENIA (Fasceola, nextrum A.)</td>
<td>Listello</td>
<td>Filet</td>
<td>Fillet</td>
<td>Band</td>
<td>(Riemen)</td>
</tr>
<tr>
<td></td>
<td>Tenia</td>
<td>Liste, liscaan</td>
<td>Liiistjen</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tenie</td>
<td>Liiistjen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QUADRA</td>
<td>Gradetto</td>
<td>Quarré</td>
<td>Kant. Kantken</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Filet quarré)</td>
<td></td>
<td>Square</td>
<td>Eck. D.</td>
<td></td>
</tr>
<tr>
<td>Gradus A</td>
<td>Regolo</td>
<td>Reigele, Reiglet</td>
<td>Regula</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REGULA</td>
<td></td>
<td>Regolo</td>
<td>Regela. Regelen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Pasceola, nextrum A.)</td>
<td></td>
<td>Regolo</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Workmen have a natural tendency to name the things they deal with metaphorically. The Table furnishes curious examples of this habit; thus the Torus is compared to a rope, a bottle, a barrel, a staff, a bed, a bolster, a wave, and a pudding; and the practice is easily accounted for, since these men, being unlearned, have more acquaintance with things than with the combinations and derivations of words.
CHAPTER II.

ON THE NOMENCLATURE OF MASONRY, WALLS, AND TABLEMENTS.

33. Masons employ, as guides in shaping their stones, patterns, or *molds*, as they call them, cut out of thin boards or sheet metal\(^1\), to the exact shape of the sides, ends, or beds of the blocks, or having the exact form of the moldings. After the block has had one or more flat surfaces worked upon it, the mold is laid upon the surface, and its outline traced as a guide for the further shaping of the stone. The art of drawing these molds, and of applying them to the stones, is termed the "Coupe des Pierres;" and I have elsewhere shewn how it was employed by the medieval masons, and that the traces of these patterns may still be seen upon their masonry. My present business is with the nomenclature. Charges for boards for these *molds*, and for drawing and making them, frequently occur, as in the following examples:

---

xiii. Of William of Sens it is said that amongst other preparations for rebuilding Canterbury choir in 1175, "*Formas quoque ad lapides formandos his qui convenerant sculptoribus tradidit et alia in hunc modum sollicita preparavit.*"

xiv. In the first year of the building of the central octagon at Ely, (16 E. II.), we have "*bordis empt. pro moldis cementariorurum faciendum*" and "*crombis ferreis pro moldis cementariorum.*" Also a payment in 33 E. III. to Thomas the mason for making "*moldes*\(^2\)."

xv. To Master Thomas the mason coming first to Westminster, and beginning there upon the new Chapel of St Stephen, "*et intrasura super moldas operanti.*" Also to Master Thomas of Canterbury, master-mason, working "*et tractanti super trasuram ;*" and again, "*operanti intrasura et moldas de nova reparanti.*" 4 E. III. There are also charges for two oak-boards for moulds for the masons, the length of each twelve feet, and for three oak-boards, called *lidholts*, for the said molds.

---

\(^1\) Of copper, wood, tin, and pasteboard, according to Delorme (p. 56). Sheet zinc is now used in the best works.

\(^2\) In the painter’s expenses we find "*canevas et pergamena empt’ pro moldis.*" Ely Sacrist Roll, 10 E. III. These molds were pricked or pierced patterns, *stenciles* as they are now called, by which the outline was transferred to the wall. From the Westminster Rolls tin plate appears to have been employed by the painters at St Stephen’s Chapel.
OF THE MIDDLE AGES.

xvi. "First he caused the draughts to be drawn upon Eastland boards, and made Britton, the carpenters to carve them according to the draughts thereon, and then gave them for patterns to the masons, that they might thereby cut the like in stone." MS. History of Roslyn Chapel, 1446.

xvii. "Et (les ditz Masons) ferront la dite Table (tablet or stringcourse) selonc le Rymeri Purport une fourme et molde faitz par conseil de Mestre Henri Zeneley, 7, 794. deliverez as ditz Masons par Watkin Waldon son Wardein." Indenture for the alterations of Westminster Hall, A.D. 1395.

xviii. "416 feet of legement table—clene apparaillé in the form that is called Britton, caisse pce, according to a mould to them (the masons) delivered," (by the clerk of works). Accounts of Eton College, 1441. MS. in Brit. Mus.

34. The use and name of these molds are thus shewn to have been alike derived from the workmen of old. They are sometimes called templets and "temple molds," and are distinguished into face-molds, end-molds, sill-molds, mullion-molds, &c., according to the piece to which they belong. In France they are molds only when employed for moldings, and "panneaux" when used for shaping the simpler forms of the stones. They are then termed "panneaux de teste," "panneaux de joint," &c.

The "trasura" and "intrasura" of Example XV. is usually explained to mean the drawing upon the boards previous to cutting them out. The "crombis ferreis" of Example XIV. may have been hooks to hang them upon; for as they are very easily injured in a workshop, they are carefully hung up out of the way when not in use.

35. Besides molds, we find allusions to patterns, platts, &c., which seem to have been the designs of the original architects, and sometimes models, from the manner in which they are mentioned. These occur in the contracts relating to the tomb of Richard II. and his Queen, and to that of Henry VII., and in some other examples. But they belong rather to the history than to the nomenclature of art.

xix. "In crestes et parpent asshlers. empt. 20s." Ely Sacrist Roll, 19 E. III.

xx. "In 90. ped. de parpent assheler empt. 45s. pro pede 6d." Ely Sacrist Roll, 45 E. III.

xxi. "pro xxxvij ulnis de parpent'achillar' . . . . pro factura lv. ulnarum de parapent achillari et crestes." Accounts of Pyttyngton Hall, 1450.

xxii. "A stone, which beeing smoothed on both sides is just and even with the thicknes of the wal; or a stone that goeth through the wal, and is scene on both sides thereof: a perpender, or parpent stone." Higins' Junius, 201.

3 This article will be explained below.
These passages give the explanation of a word which, as I am informed by Mr Basevi, is still in use in Gloucestershire and Yorkshire; *Perpin ashlar* being applied in both counties to a wall built of single stones faced on both sides, and a *perpin* being used in Gloucestershire for what in Yorkshire is called a *through stone*, namely, any stone of a thick wall which shows both ends.

As a parapet-wall is necessarily of this construction, the term is probably of the same family. In two of the above examples "crestes" are joined with "parpent asshlers," indicating that a parapet-wall was in construction.

*Perpeyn walls* occur in the Fotheringham contract for the short walls from which the pier-arches spring at each end. Whether these are constructed as above, I cannot tell, but probably they are too thick. The epithet may be intended to apply only to the front edge of the wall which carries the shaft and side moldings.

A coin or quoin for the corner stone or stones at the external angles of a building is so common a term, that it needs no illustration. It occurs, however, in the old documents, as

xxiv. "In 60 pet' vocat. cunes empt. 7s. 6d." Ely Sacrist Roll, 42 E. III.

*Arris*, for the edge of a stone, is derived from Arête, which is used by Delorme (in the old form Aireste and Areste), and the French masons, precisely as *Arris* is by ours.

36. Various terms for stones are to be found in the accounts of

---

1 Cotgrave renders *parpaigne* "A pillar, buttresse, or supporter of stone-works, serving to bear up a beam or summer in a wall." Here however we have an example of the way in which we may be misled by dictionary makers in their attempts to explain technical terms which they do not understand; for the same word in Nicot’s dictionary, whom he copies, is illustrated by a quotation from the *Coustumes de Paris*, thus: “Parpaigne, au cha. vi. art. 11, des Coust. de Par. N’est loisible à un voisin mettre poultres dedans le mur moitoyen sans y mettre iambes parpaignes ou dossorases chines et corbaux de pierre de taille suffissans pour les porter.” Now this is quite consistent with the proper definition of the word, and yet it is easy to see how a mere literary man might translate it as Cotgrave has done, so as entirely to pervert its meaning. Examples of this kind are continually occurring, and make it necessary to use these early dictionaries with the greatest caution, and to check them as much as possible by the architectural treatises. Junius renders “Epistylium” *Capitulum*. “The head or chapter of a pillar,” (Higins, 204), and this mistake has found its way into some modern dictionaries.

expences, such as "gobetts, urnell, rag, grofts, sextefothers, doubles," &c., which are plainly local, and apply to the quarries whence they are brought, or to the rough shapes of them, rather than to their office in the structures, and do not therefore fall under my present plan. The two latter words occur throughout the Ely Sacrist Rolls. Ashler, variously spelt, is to be found in all the documents; and as it is still in common use, and its derivation unknown, I shall only give one quotation which I have selected because it contains a definition.

xxv. In the Indenture for the construction of the dormitory at Durham, 1398, the mason engages that a certain wall shall be "exterior de puro lapide vocato achiler plane incisso, interius vero de fracto lapide vocato rogh-wall;" and a similar phrase is repeated twice in the same document, and there is added, "Et erit le beddyng cujuslibet achiler ponendi in isto opere longitudinis unius pedis de assisa vel longioris."

37. The face of a mediaeval wall is ornamented with horizontal moldings at different levels, which form basements, separate the stories of the building, and crown its upper portions. The general terms for these moldings were table, tablement, or tabling; sometimes with the addition of various distinctive epithets. These terms are either derived from the Latin tabulatum, a floor or story of a building, whence we easily pass to those moldings which indicate on the outside of the building the position of the floors and roof; or else from the nature of these moldings, which are wrought on the edge of thin and tabular stones.

Tabulatum occurs in its proper sense in the monastic writers, thus: Gervase tells us, in comparing the new work at Canterbury with the old, "quod novum opus altius est veteri quantum superiores fenestrae tam corporis chori quam laterum ejus a tabulatu marmoreo in altum porriguntur;" and the stone work of the octagon at Ely was finished "usque ad superiorem tabulatum in 1328."

From accounts and indentures the following passages may be taken:

xxvi. Bere stone, bought "pro tabulamentis et gargol," of the new tower.

xxvii. In the Indenture for altering Westminster Hall (1395), the masons engage to make "toute la Table des mures de la grand sale." "La quête table surmountera l'ancien mure deux pecs d'assise parmy la dite mure." "Et ferront la dite table selone le purport d'une sounne et mobil." (Vide Ex. xvii. p. 23.)

3 For example: ashelar, ashlar (Westminster, in Brayley, 187), assheler (Fotheringhay), achelor (Burnley), achiler (Durham dormitory), hastler (Ely, 13 E. III.).

4 Mr Willson defines table, "any surface or flat member in architecture." I fear that the examples are all at variance with this definition. The architectural table is the edge, and not the surface of the slab. "Tablatura" and "tabula" are however applied to the reredos of an altar. Vide Exeter Fabric Rolls, 1318 to 1322. Monasticon, v. App. xvii. Vol. iii. p. 162. Will of Henry VII.
In these examples the term in question occurs without a distinctive epithet, but the context in most of them indicates differences of position, the tables being described as crowning the walls, surmounting the buttresses, or being placed next the ground.

38. Now the distinctive epithets that are applied to the tablings are, Ground, Earth or Grass tables, Ledgeinent tables, Bench tables, Second tables, Corbel tables, Crest tables, Skew tables, Water tables, King tables, Fraeetables, Foot tables, and so on; the meaning of which I shall endeavour to pick out in order from the examples.

Now the usual distribution of the table-moldings of a gothic base is represented in fig. 10, Plate III. A plain slope B is the first (reckoning from below upwards), then a flat surface C corresponding to the truncus or dado of the classical stereobate, then a projecting molding D. This is the basement of Fotheringhay church, and the common arrangement of the simpler buildings. In more elaborate structures the number of these base tables and intermediate "champs," or "fasciae," is increased, and the latter are often carved in panels, &c. Fig. 11, is the basement of Eton College Chapel, in which a second table F is introduced.

The ground table, grass table, or earth table, "le table versus et
prope terram," must be the first slope B; and I believe that the remaining base tables, whatever may be their number, were termed the legement tables.

39. The word *legement* simply implies lying or horizontality; but as all tables are horizontal the epithet cannot be in this case applied in its general sense, but may fairly be taken in the more limited one of a basement, the whole mass of which lies on the ground below the wall; and this is confirmed by the two examples of Fotheringhay and Eton, in which, as I shall shew, the basement moldings are described under this epithet.

At the end of the Fotheringhay Contract it is covenanted that the mason, W. Horwode, shall be paid by instalments as the work rises, thus, to begin, "when he hath hewyn and set his ground table stones and his ligements, and the wall thereto wythyn and without as it ought to be well and duly made, then he shal haf vij xiij iiiij." The directions for these members in the body of the contract are unfortunately interrupted by an illegible portion, which I shall venture to supply as follows:

xxxiii. "The ground of the same body and isles to be maad within the erthe under the ground-table-stones with rough stone; and fro the ground-table-stone (to the legemen-)ments, and alle the remanent of the said body and isles unto the full hight of the said Quire, with clene hewen Asshler altogedir in the outer side unto the full hight of the said Quire; and all the inner side of rough stone except the bench-table-stones," &c.

This passage shews that the legement table was immediately above the ground table, and we may therefore assign B, fig. 10, to the ground table, and D to the legement table.

* The word *ledger* is still used by masons for any horizontal slab of stone*, such as the covering slab of an altar-tomb, and in this sense we find it in various ancient documents, e. g. "100 foote of blacke touchestone is sufficient for the legger and the base of the saide tombe," (of H. VII.). Also the height of the tombe of Ralph Greene, at Luffwick co. Northampton, is covenanted to be "avec le legement trois peces d'assise."

5 This contract has been preserved to us by Dugdale in the Monasticon (iii. 162), where it is printed in black letter; the original is lost. The above quotation is a literal transcript, with the exception of the following portion, which runs thus in Dugdale, "within the ende under the ground-table-stones with rough stone; and fro the ground-table-stone bo . . . . . . mens; and alle" &c.

* Ledgers are also those horizontal bars of a scaffold which lie parallel to the wall, those that are perpendicular to it being the *putlogs*, and the vertical poles the *standards*. *Leggen*, for lying, remained to the time of Chaucer, &c. W. Cannynge of Bristol, by his will in 1474, leaves two service-books, called *Liggers*, to the choir for his chantry priests. Great books of accounts are still called ledgers.
ARCHITECTURAL NOMENCLATURE

XXXIV. The works of Eton College began July 3, 1441, and in 1442 we find an indenture with certain masons, who engage to deliver at Eton by Whitsuntide (May 20), 416 feet of "legement table, being full joints, at the least iii jynches or more, elene appareiled in the form that is called casshe pece, according to a mould to them delivered" by the clerk of works; also by Midsummer "1024 feet of tweyne legement tables full joints of iii yncches or more; with poyns after a mould delivered with xii coynes iii skouchon\(^1\) anglers and viij square anglers to the said first legement table." MS. in Brit. Mus. as quoted in Britton, A. A. 2. 89.

These legement tables were required within the first year of the work, and may therefore be supposed near the ground, and it must also be presumed that the chapel was the portion of work which was first begun. Fig. 11 is the basement profile of the chapel in which B is the ground table, then occurs an unusually high plain portion of wall C, and then the first legement table F. Now the explanation which I offer of the above entry is this: the 416 feet of "legement table, in the form that is called cashe pece," is a part of the table F, which is worked with a casement. Casshe is a misreading for casement, probably written with a contraction. The "1024 feet of tweyne legement table" includes the remainder of F and the whole of D; and the basement is said to have a tweyne or double legement table, because there are two, F and D.

XXXV. In xxiii pet'. pro tablis et leggemene empt. 3s. 9d. pret ped. 2\(\frac{1}{4}\)d. Ely Sacrist Roll. 13. E. III.

No context here explains the term, which occurs amongst other entries for the purchase of stone, and it may therefore either be for base moldings or slabs—"leggers."

40. Bench table only occurs in the above passage, (Ex. XXXIII.) and must mean the stone seat that runs all round the inside of the wall of this church, as in a great many others.

Katrik contract.


Hearne's Glastonbury, 287.

XXXVI. In the Katrik contract the mason "sall make tablyng of the endes of the forsaide Kirke of a Katrik with severonne tabill."

XXXVII. "Custus latamorum. Et Johanni Thomson . . . pro factura xxxv ulnarum tabulæ . . . . pro xxxvij ulnis de perpem' achillar . . . . pro factura xij corbels . . . . pro factura xxiiiij ulnarum de severans . . . . pro factura lv ulnarum de paraperl achillari et crestes . . . ." Expences of Hall at Pyttyngton, 1450.

XXXVIII. "Md cemenawnyd and agreed with Wyllm Est for vy" and iii" footes off crese table and severall' table att iiijd. the foote, hytt to be made off the stone off taynton, &c. . . . " Expences of the foundation of Corpus Christi, Oxford, 1517.

\(^1\) Vide Index.
41. Mr Raine, commenting upon the first example only, refers the epithet to the old French *severonde*, the eaves of a house. The original gables of the aisles and chancel of Katrik church have been destroyed, so that we are left to guess. The other examples confirm this derivation, for this table is coupled with parpents, corbels and creastes, all shewing that the upper finishing of walls was in hand. The term therefore may belong to the common gable-coping represented in fig. 12.

42. By Henry the VIth's will the cloister of King's College is to be in height “xx feet to the corbill table,” and a tower to be in height “120 fete to the corbyl table.” The corbell table also occurs in the Accounts of the repairs of the Tower of London; and 6½ feet of stone for corbel tables in the Westminster Accounts.

The two first examples prove that this corbel table was at or near the summit of the building, and in the Ely Rolls (Exs. xxxix, xl) it is joined with gargoyles, creastes, and parpents, all belonging to upper works. Now corbels are known to be ornamental brackets which project from a wall for the purpose of carrying a weight. There is no difficulty in granting the usual interpretation, that this is the upper table below the battlements, and derives its name from the sculptured flowers or knots at equal distances, with which it is commonly decorated.

The phrase however is more descriptive of the Norman corbel table, which is really supported by the corbels, than that of the later examples, to which the above quotations refer, and in which the corbels, or rather bosses, are inserted amongst the moldings of the tabling, and do not appear to support it. The word probably remained from the old time after the arrangement had changed.


xl. “Custus novi operis. In 90ft. de parpent assheler empt. 45s. pro pede 6d. 300 de sextfother empt. 4d. In 8 petris empt. pro gargoyles 16s. pro pet. 2s. In 40 ped. de creastes magnis empt. 33s. 4d. pro ped. 7d. In 20 ped. de corbel tables empt. 18’. 4d. pro ped. 11d. In 8 skochon creastes magnis empt. 8s. pro pet. 12d.” Ely Sacrist Roll. 45 E. III.

42. To understand the epithets *crest table* and *skew table*, it will be necessary to compare them with other terms that belong to the upper finishing of the wall.

This commonly consisted either of a plain parapet, or of a *battlement*, a well-known indented form originally borrowed from fortification, but afterwards adopted largely in decorative architecture. The word is so
well established, that it is unnecessary to multiply quotations concerning it. It occurs perpetually; thus in the will of Henry VI. the battle-
ment of the quier is mentioned. In the Burnley contract, "the hylings
(aisles) are to be battled\(^1\) after the form of a battling of the chapel," and in the Fotheringhay contract, a square embattlement is agreed upon.

44. The specifications of works to be done at the Tower of London,
28 Henry VIII. contain many terms for the upper works. A general
survey and repair of the walls is ordered, and the walls are to be embattyled, garytted, tabled, centyd, lopyd, copydes and crestydes with Cane stone; which phrases are repeated over and over again in application to the several walls and towers in order, with the occasional omission of one or more of the words. Then again we have such phrases as the following:

xli. "The compass of the same walle with Cane (Caen stone,) a skew and creystyd . . . . quynys (quoins) in Cane asheler, and more in skew and crests to the same spaceys on the west side . . . . Item at the Juell Hows doore iiij spaces covered with skew\(^2\) and crest."

45. Now there can be no difficulty in supposing that the skew and crest, which surmounts the walls, is the common form of coping (fig. 13) consisting of a sloping face or skew B topped by a roll moulding or bowtel C which forms the crest, and thus we have an excellent phrase for this architectural member. Cresse table (i.e. crest table,) has already occurred (Ex. xxxviii) and in the Westminster contracts we find

xlii. "22 pieces of Caen stone wrought for scutables (skew tables) for the new alura," and again, "13 feet of Caen stone for sencrestes for the new alura," (sencreste I presume to be an abbreviation of the phrase skew and crest.)

The flying buttresses of Fotheringhay are to be made "according to the arches of the quere both yn tablestones and crestis, with a square embattlement therupon." As the drawing shews them to be of the simplest form, with a mere chamfer on the lower edges, and capped with the above-mentioned skew and crest molding, while the clerestory wall is surmounted by a square embattlement, I interpret the passage by supposing the table stones to mean the said skew, the crestis to be the roll molding, and the embattlement thereupon to allude to the entire range of the buttresses, which may be said to be surmounted

\(^1\) "Bastilles": Fortifie avec des tours et des crêneaux." (Roquefort).
\(^2\) "Skew is a common word with workmen. "Skew or Campher is the cutting off a corner of a wall." R. Holmes.
by the battlement of the clerestory, and not to mean that each buttress is to have a square embattlement, which is a very unlikely decoration.

Crest is, however, a general term for any ornamental upper finishing.

Of the Middle Ages. 31

Crest has already been quoted from the Ely Rolls, Ex. XI., in connection with other entries relating to upper works, and the walls of Catterick Church are finished with "a course of ashelere (A), and a course of creste," (B), fig. 13.

"Crest" is even applied to the cornice of the classical entablature in the earliest English document that alludes to this style, namely, the agreement with Torrysany for the monument of Henry VII., "a vault with architraves, and frese, and creste." "Basements of white marble squared with levys and crests," also occur in the same document, and "a creste of copper gilt rounde aboute the worke squared wyth portcullies and fflooredelis."

Crest of a house, coupé de la maison." Palsgrave, Éclaircissement de la Langue François, 1530.

3 A projecting course of tiles with which modern bricklayers are wont to ornament the top of a wall below the coping bricks, is called tile creasing, evidently cresting, as above.

4 I quote the following from a note of Mr Way, in page 102 of his recent edition of the Promptorium Parvulorum: "The finishing which surmounts a screen, roof, or other ornamented part of a structure, was called a crest, such as is seen at Exeter Cathedral, on the high-ridged roof. The Stat. 17 E. IV. c. 4, comprises an enactment respecting the manufacture and dimensions 'de teule, appellez pleintile, autrement noemnez thaktile, rofile, ou crestile,' the prescribed length of the last being 13in., the thickness five-eighths, with convenient deepness accordyng. Crest tiles, pierced with an ornamental open pattern, were to be seen on the roof of the ancient hall of the templars at Temple Balsall, Warwickshire. In Hall's Chronicle are described, 'crestes, karued wyth vinettes and trailes of sauage worke,' which ornamented the banquetting house prepared at Greenwich in 1527. Reprint, pp. 606, 722. 'Crest of a house, coupé de la maison.' Palsgrave, Éclaircissement de la Langue François, 1530."
“Crists,” says Randle Holmes, “are wrought stones either half-round or
with bottles (bowtellis) or triangular to lay on brick or stone walls
to secure them from weather. Some call them top stones.”

“Et Willielmo Hykkedon .... ad doland. et perficiend. le crest super
cancellum prioratus ibidem xxiv sol, &c.” Accounts of Prior of Bur­
chester, 3 H. VI.

“Cristam .... pretiosissimam super feretrum gloriosi martirisÆdmundi.”
Cronica Jocelini de Brakelonda, 1198.

46. The slits or spaces between the rising parts of the battle­
ment are termed the *crenels* 1 in the medieæval documents, but were
sometimes simply called the *spaces*, as in Art. 44. The rising parts
are the *cops*.

Randle Holmes describes a battlement as made with “wheelers”
and “kneelers,” which he thus defines: “A wheeler, are wrought stones
that ly levell and streight, yet make outward angles when other stones
are ioyned to them...A kneeler, are stones that stand upright, that makes
a square outward aboue, and inward below.”

This application of “crest” to the rising parts or cops, is shewn
to be erroneous by the preceding explanation, for the crest is the
stone coping or molding on the top of the cop.

The *square* embattaillement (of Fotheringhay) must mean that the
crenels and the cops are alike squares in their outline, in contradis-

1 “*Crenœux*, dont le singulier est *Crenel* inusité, sont ces dentelures quarrées inter­
vallées de pleins égaux, qui sont au haut des murailles d’une ville, tour ou forteresse.”

*Dict. de Nicola.* The word is variously spelt “kyrnells,” “cornelles,” &c. in the old
romances. Licences to erect fortifications contain permission “batellare et
*kirnellare.*” The garytte of Art. 44 is a term of fortification, a “guerite,” watch-tower, or look-out
place on the roof. (Vide note in Prompt. Parv. ed. 1843, p. 187.) A loop is a narrow
tion to another form of battailment, in which the crenel is a narrow slit.

48. The bretissemanta of Example LVIII. (below), seems to be a general term for the upper finishing or parapet of the wall, for it is there specified that it is to be battleled.

LV. "And every towre bretexed was so cleane,
   Of chose stone that were not ferre a sonder."
   Lydgate’s Troy, ii. c. 11.

LV. "On the height of the same cover, from end to end was a most fine brattishing of carved work."—Rites of Durham.

LVI. "Betrax of a walle (bretase...bretays) Propugnaculum?" Prompt. Parv. p. 50.

49. In the Catterick contract the word aloryng occurs with various spelling. Mr Raine has successfully shewn, by comparing the different passages, that this is the parapet-wall; but, as he observes, “the word is, however, in strictness of speech, more properly applicable to the gutter or horizontal foot and water path, which the parapet supported and protected, than to the parapet,” and this interpretation is confirmed by the often-quoted passage of Robert of Gloucester’s Chronicle.

LVII. "Up the alturs of the castle the laydes thanne stode,
   And byhelde this noble game, and wyche knyghts were god."
   Rob. of Gl. i. 152.

LVIII. "Et desuper istam historiam fenestralum erunt honesta alours et bretis-
   montz batellata et kirmellata; que quidem alours et bretismentz
   erunt de puro achiler et plane inciso quam interius"
   "et sowtgavill...cum latitudine spissitudine bretismentz et alours,
   muris antedictis correspondens." "Et supra ipsae fenestras superiores p. cixviii.
   faciet in utroque muro alours et bretissementa batellata, de puro
   achiler." Contracts for Dormitory, Durham.

LIX. Randle Holmes, describing a tower with a plain battlement (rather parapet,) Acad. of
   Arm. ii. 470.

In Mr Way’s note to this article, he shews that the word was applied rather indefinitely, to denote the various appliances of ancient fortification, but that it more properly signified the “battlements.” Randle Holmes draws a distinction between bretessing and battenning, which is purely heraldic.

3 In the first place a buttress is spoken of as rising into the table that shall bear the aloring. The aloring was, therefore, something above the table or cornice. Secondly, the choir-wall was to be twenty feet high with a watutoryng above, that is to say, with a course of ashler and a course of crest. Again, (3) the south aile was to be alourde like the quire, and the north aile alourde (4) like the south aile, and the aloryngs (5), and the aloryng (6), were, by the contract, the last parts of the building to be finished.

Here, therefore, the word aloring, as understood by the contracting parties, must imply the parapet-wall, and the best proof of this, in addition to the above, is, that the actual parapet consists of a course of ashlar and a course of crest, (Fig. 13), as was required.” (Raine’s Catterick.)
but is straight and even in (with?) the walk of the wall." (Vide Art. 46.)

"ALURE, or alurus of a towre or stepylle. Canal, grunda." Prompt. Parv. 10.

This is only one application of the word alura, which occurs so frequently in the sense of a passage or gangway—the allorium of Du Cange.

In the following examples of the uses of the word, LXII. LXIII. shew that it was applied to the upper passages of a church, commonly called clerestory and triforium galleries. In LXIV. LXV. and LXVI. it is employed for other passages or galleries, and in LXVII. to the covered ways at the sides of streets, which are still to be seen in Chester, and in continental cities, especially in Italy.

1 "Grunda, tecti prominentia. Italis gronda sunt colliquie, nostris Gouttiere." (Du Cange.)

2 M. de Caumont has shewn that wooden galleries were frequently carried round the tops of towers on the outside of the walls. In the twelfth century, stone machicolated galleries were contrived, but these did not always supersede the former. He also remarks, that these galleries were not always at the extreme height of the tower, for another story often rose above them before the roof was put on. Examples of these constructions may be seen in the plates of Mr Johnes' translation of Froissart. The second peculiarity seems to have been imitated in some ecclesiastical towers, as for example, the west tower of Ely, and the angle turrets of King's College, Cambridge. The vamure of the following examples was probably the parapet-walk. In the repair of the upper part of a wall in the Tower of London, we have "the walke under fote called the vamur to be repayred with can stone by the masons." (Works to be done at the Tower, 23 Henry VIII.) A goodly mount with towers and vamures, al gilt, with all things necessary for a forteresse." (Hall's Chronicle.)

3 "Triforum" is by modern writers applied to the gallery or galleries immediately over the pier arches of a church, but not to the upper gallery, which they term the clerestory gallery.

The only ancient writer who uses the word is Gervase, in whose account of Canterbury cathedral it occurs many times, and is plainly employed for the clerestory gallery as well as for the lower one, and for one in the side aisle wall.

Thus comparing the old choir with the new, he says "Ibi triforium unum, hic duo in choro et in ala ecclesie tercium." These three galleries are very clearly shewn in a section (pl. v.) in Britton's Canterbury cathedral.

The word seems to be synonymous with alura, as a passage or thoroughfare. Sommer indeed derives it from the latter word. Perhaps it was confined to covered passages, but it certainly was not to passages in the thickness of the wall, because the lower triforium of Canterbury is not so constructed, but passes over the side aisle vaults. "Triforium" is also a kind of pierced or open work in embroidery or metal; for which see "Tracery" below, and the word itself in Ducange, who tries to connect the two meanings.
OF THE MIDDLE AGES.

LXII. "Pro sexdecim fenestris factis de novo in superrioribus alturis ecclesie,
12l. 16s." Ely Sacrist Roll, 21 E. I.

LXIII. "16 loads of Rygate stone for the alura of the upper chapel" (of St Smith, 191.
Stephen.) 26 E. III.

LXIV. "For timber for the new alur' between the king's chamber and the said
Brayley's
chapel." 19 E. II.

LXV. "2 pair of hinges for hanging two doors in the new alura."

LXVI. "Alura quæ duæt a coquina conventus, usque ad cameram prioris."

LXVII. "And through the town n w' crafty purveyance
By grete arise and discrete ordenaunce,
By compase cast and squared out by squyers
Of pullished marble upon strong pylers
Devised were longe, large, and wyde,
Of every strete in the fronter syde
Fresh alures, with lusty hye pynacles,
And moonstryng outward costly tabernacles
Vaueted above lyke to rechynatoryes
That called were deambulatoryes,
Men to walke togithers twaine and twaine
To kepe them drye when it happed to rayne,
Or them to save fro tempest wind or thundre,
If that them lyst shroude theselyf there under."

Lydgate, Troy Boke, c. xi.

50. Water-table occurs in Hall: "from the first water-table to the raysyng or resun pieces, was bay windowes on every side." Holmes uses the epithet water-tables, and says, the French heralds do generally "make their round towers not with any water-tables, as we usually draw them." By his figure this is the plain slope or earth-table. It is also to be found in Moxon's "Mechanical Exercises" in the same sense. Leyburn defines a water-table in brick-work to be "where the thickness of the walls are abated (or taken in) on either side the thickness of a brick, namely, two inches and a half.

In fact, it may be defined to be a plain projection or set off, one that allows the water to trickle down the wall, in opposition to the larmier or throated table, which throws the water off. The word is still in use.

51. In the Ely Rolls, we have "38 ped. de kyngestabl," 8 E. III.

4 Warton was the first who drew the attention of antiquaries to the passages of our poets which illustrate the nomenclature of ancient architecture. He was one of the writers who contributed to revive a taste for Gothic architecture, and in his History of Poetry, and Notes on the Fairy Queen, may be found most of the passages which have since been so frequently copied by glossary writers. The above he has not printed at length, and therefore I have done so.

5 "Raising piece, are such pieces that lie under the ends of beams and summers upon brick and stone work, or upon timber wall-plats by the sides of houses." (R. Holmes, iii. 111.)
and "60 ped. kynges tables," 19 E. III. But the second entry is joined with others, as follows, which serve to explain its position.

LXVIII. "Custus novi operis. In 100 pet. vocat sextefother 12s. In 16 formepecys empt. 8s. In crestes et parpent asshlers empt. 20s. In 72 forme-pecys empt. In 60 ped. kyngestables et 40 ped. crestes 67s." Ely Sacrist Roll, 19 E. III.

These entries I believe to belong to the upper works of the stone octagon at Ely, which were never quite finished, although enough remains to shew what was intended. These consist of a parapet, or brattishing of open tracery-work, surmounted by a bold crest of leaves connected by inverted arches and foliation. "Form-pecys" I shall shew below to be the stones that constitute tracery; and the other items, crests and parpent asshlers plainly belong to work of this kind. Beneath the parapet, instead of a corbel-table, there is a deep hollow occupied by running leaves, and having small ball-flowers at intervals. The form and arrangement so nearly resembles the ornament beneath the seat of the royal throne in the great seals of Henry III. and the two first Edwards, that I conjecture that it derived the name of King's table from this imitation.

52. "Fractable" (fract or broken table) "are the wrought stones that run up the gable ends or dormant windows," according to Randle Holmes 1; and he thus explains its several parts:—Fig. 14. "is termed a gable end, the fractable wrought into a foot-table (A), bottle (bowtell) (B), square (C), and top or crown bottle (D)."

Fractable will of course apply to that kind of battlement in which the table mitres and runs down the sides of the cops, instead of being placed only on the horizontal parts of the cops and crenels.

53. Lastly, from the mediaeval tablement has been derived the word entablature, now universally employed for the combination of architrave, frieze, and cornice, which rests on the classical columns. Vitruvius has no single term to express the group, and uses therefore a circumlo-

---

1 The "Academy of Armory" of this author, (Chester, 1658,) is a vast collection of technical words from all arts and sciences, gathered principally from books; as for example, his workmen's words in the building arts are for the most part drawn from Moxon. But many of them were obtained by himself from workmen, and thus he has preserved to us several, which will be found in their proper places in the course of this paper. This appears from his complaint of a shoemaker, who gave him the terms of his craft "so mincingly, as if he had been afraid I should have robbed him of his Art, in which I did rest satisfied till a more Ingenious person informed me of the whole." Of the masons, he says, "I cannot but Honor the Fellowshep because of its Antiquity, and the more as being a Member of that Society called Freemasons. In being conversant amongst them, I have observed the use of these several tools following, &c."
OF THE MIDDLE AGES.
37

cution. He speaks of "membra quae supra columnas imponentur," and of "epistylia et ornamenta columnarum."

Philander, however, invents the word "trabeatio," which John Shute, who copies much from him, calls "trabeations, in inglishe called architrave, frise, and cornish." The Italians, and most of the other writers of the Renaissance, commonly employ the triple expression, "architrave, frieze, and cornice."

In Delorme, however, we find entablement in the mediæval sense as a mural cornice, but by no means in the modern sense. But Chambray is, I believe, the first writer who so employed it; and Evelyn, his translator, (in 1664), who renders it entablature, was the first to introduce it into this country.

54. An obtuse external angle was called a scutcheon.

lxix. "xij coynes, iiiij skouchons anglers, and viij square anglers to the said Britton. legement table."

2 In the Athenian inscription, however, the three members of the entablature are included in the term entortura, according to Wilkins ("Prolusiones Architectonicæ," p. 59.)

3 This general triple division, universally adopted throughout the literature of the Renaissance, is not to be found in Vitruvius. In this author the great members of the entablature are Epistylium, zophorus, denticulus, corona, sima. Alberti apparently invented the term coronix by which to designate the whole group of members above the zophorus, or frieze. "Coronices appellamus partes eos supremas, quæ supra tignum prominent." The manifest convenience of this generalization has introduced the word, without alteration, into all languages, (cornice Italian, corniche French, cornice English, cornija Spanish, kanniss German.)

As I am upon the subject of these additions to the classical terms, I may as well mention another word, which although English, and confined for a long while to the workmen, has now assumed the place and resemblance of a good classical term—I mean Pediment, which we now universally apply to the triangular gable of classical architecture, the "Fastigium" of Vitruvius and of the Italians, who also, together with the French and English writers, employ Frontispicio—Frontispice—Fronton—Frontispiece, respectively. Evelyn says, "those roofs which exalted themselves above the cornices had usually in face a triangular plain or gable within the moldings (that when our workmen make not so acute and pointed they call a Pedament,) which the ancients named Tympanum." Evelyn's "Account of Architects and Architecture," 50. The earliest example of the word that I have been able to discover, is in the English translation of the Hypnerotomachia, "the Strife of Love in a Dreame," 1592. The original passage, describing the façade of a temple, "Al frontispicio overo fastigio," &c. is translated (and with the marginal note) as follows:

"And to return to the view of the whole frame, in the disposing thereof as aforesaid, the Coronices by a perpendicular lyne were correspondent and agreeing with the falling out of the whol worke, the Stilliced or Perimeter, or vter part of the uppemost Coro-

nice, onely except," (p. 22,) ("il' stillicidio della suprema cornice.") The "stillicidio" is generally "gocciolatoio" in Italian. The insertion of the word Perimeter seems to show that this writer derived Perimient from it, as a space surrounded or bounded by a perimeter of moldings. Pedamento in Italian is used by Scamozzi for the Stereobate.
ARCHITECTURAL NOMENCLATURE

LXX. "In 8 skochoncrestes magnis," (vide Ex. xl.), Ely Sacr. Roll, 45, E. III.

LXXI. "And when the said steppill cometh to the hight of the said body, then hit shall be chaungid and turnyd in viij panes, and at every scouchon a boutrasse fynysht with finial." Fotheringhay Contract.

LXXII. "Tholus. The knop in the middle of a timber vault, where the ends of the postes doe meet. Some call it a scutchin." Higgins, 212.

Ex. LXIX. specifies twelve "coins," of which eight are to have right angles, and the other four, obtuse angles, or "scutcheons!." The latter pieces seem to be intended to carry the legement table round semi-octagon turrets; and the scochon crestes of the next example are also crestes mitering round the angles of octagonal turrets. Example LXXI. clearly refers to the obtuse angles of the lanthorn, which still crowns the tower of the church; and example LXXII. apparently describes the octagonal post which receives the principal rafters of an octagonal roof.

55. Gargoyle, a water-spout, as an old and an established French word, need not detain us beyond the statement that it is used also by our own early writers, as in Exs. xxvi. xxxii. xxxix. xl. Gutters also frequently occur; but the earliest mention that I have met with of an arrangement for the conveyance of the rain-water down to the ground, instead of allowing it to pour from the gargoyles, is the following order for the repair of the White Tower of London, in 1241, which not only directs the rain-water spouts to be carried down, but also points out the reason, namely, that the newly whitewashed walls may not be damaged.

This improvement was very sparingly introduced; traces of it are to be found in a very few buildings: Kettering church, for example, and King's College Chapel. Lydgate vaunts it as an unusual practice.

Can this word be a corruption of "skew coin"?

"Gargles of men's figure, Telamontes, Atlantes. Gargles of women's figure, Caria­tides," from Withal's Dictionary, may serve to shew the technical errors of the early Lexicographers. Horman says "Make me a trusse standyng out upon gargellys that I may se about" (Vulgaria, 241), confounding them with corbels.
CHAPTER III.

ON PILLARS, ARCHES, AND VAULTS.

56. The English word for the pier or column on which the arches rest, was universally pillar. Of this, besides its use in documents, we have the direct evidence of an early and of a late writer. Gervase has "columnae enim ecclesiae quae vulgo pilarii dicuntur." And Sir Henry Wotton, in 1624, says, "Pillers, (which we may likewise call columnes, for the word among artificers is almost naturalised)." The Latin writers, however, generally use columna and sometimes its diminutive, columnella for the smaller shafts.

57. Bases and capitals are also mentioned. But the English word for the latter is always chapiter, or its diminutive, chapitel (chapitel, Roquefort). The term Capital was brought in by the writers of the Renaissance, in imitation of the "Capitello," and "Capitulum."

3 Sir Christopher Wren describes the "marble shafts" at Salisbury, adding, "I cannot Parentalia, call them pillars, because they are so small and slender, and generally bear nothing, but are only added for ornament to the outside of the great pillars, and decently fastened with brass." And he uses "pillar" constantly in describing both Gothic and Roman buildings. Randle Holmes tells us that "amongst workmen of the free-masons' science, a column is ever round, and the pillar with its capital and pedestal square."

"Pier (per. Ang. Sax.) a peer, pillar, or foot of a bridge." Somner. (Spelman quotes pera in the latter sense.) The Norman pillar seems to have driven the Saxon pier out of decorative architecture, for it never occurs in the medieval documents. It makes its appearance again in the workmen's books of the seventeenth century, (as, for example, in Moxon, 1683), "Bricklayers' Work," pillars or piers; and Rickman applied it to the pillars of a gothic church. But I am inclined to think that the word belongs more to mechanical construction than to decoration. A pillar is a decorative member of architecture, having a base, capital, and other conventional appendages, but a pier is any isolated mass of construction, such as the wall between two windows.

4 The spelling was not settled at first: "capitell," "capitel," are used by Haydocks.
LXXVIII. "Ad bases pilariorum murus erat' (Gervase). "Basis cum capitellis et columna." (Exeter Fabric Roll, 1331). "A transmarinis partibus deferebantur columnae et bases marmoreae." (G. de' Coldingham.) "The pillars and chapiterles that the arches and pendants shall rest upon." (Fotheringhay Contracts.)

LXXXIX. "In uno corda longa empta pro le chapitres deaurandis et columnis depingendis, 8d." Ely Sacrist Roll, 10 E. Ill. The rope of course was to suspend the painter during his operations instead of a scaffold.

Chapitrell, bases, pilers, rones and quar, occur in the particulars of the wax herce of queen Anne, described below. "120 Chapitrielles and baces," in the stall-work of St George's Chapel, "The head or Chapter of the piller," (Higins, 204). "Chapiter" is preserved in our authorised version of the Bible, and the word survived to the time of Moxon, aB. who, in 1677, tells us we may "add a keystone and chaptrels to an arch;" meaning, however, the impost moldings.

58. The shafts of the pillars were sometimes called verges. Thus Lydgate, "the fresh embowing with verges right as lynes," where the "embowing" expresses the groups of curved vault-ribs, and the "verges" the shafts from whose chapitrels they spring. So the canopy of Hector's tomb is described by the same author, "with crafty arches raised wonder clene, embowed over." The shaft of a classical column is termed the "Verge de la colonne," by some of the early French writers, as Bullant and Mauclerc. In the roll of payments for the Eleanor crosses, lately published by the Roxburghe Club, several entries occur, of which the following are specimens:—

LXXX. In 1292. "Roberto de Corf, in partem solutionis pro iij flechiis iij capitiibus et iij agnis de marmore ad Cruces de Lyncolnia, Norhamton et Wau­tham."

1293. "Willielmo de Bernak, cementario . . . pro cariagio quatuor imaginum ad crucem Norhamtone, et pro cariagio capitis et lanceae ejusdem crucis de Londonia usque Norhamtonam."

Will de Hibernia (imaginatori) cementario pro factura virgæ capitis-anuli et imaginum crucis Norhamtonae."

"Johanni de Bello," for a scaffold at Northampton, and "pro virga capite et imaginibus ejusdem crucis ibidem assidendis."

and Evelyn. Randle Holmes says, that "the capitall is the top of the pillar, and the chapiter the ball, or any other kind of work that is made to adorn the capitall." 3, 459, "he made also iij pilers of the trees of sechym, whiche pilers withe the heedis he over­gildide and setide the silvre foundamentis of tho." Exodus xxxvi. 36. Wicliffes version. "Forynge or fundament, fundamentum" and "erownde of byggyrynge, or fundament of a byldyng." Promp. Parv. pp. 174, 216. The first courses in a foundation are still called the footings. In Coverdale's version we find "pilers with their knoppes."

1 "The pilers of that cloistre alle—Beth iturned of cristale—with harlas (?) and capital—of grene jaspe and red coral.” Vide Warton, i. 9.
OF THE MIDDLE AGES.

We have here the complete history of a kind of pillar which appears to be indifferently termed virga, flèche, lancea, which is made of Purbeck marble from Corfe, and is accompanied by a capital. The rough form seems to have been sent by Robert de Corf, conveyed to Northampton by William de Bernak, wrought and finished by William de Hibernia, and fixed in its place by John de Bello. I conjecture from these entries that the cross was surmounted by a shaft and capital, upon which stood an Agnus Dei, the "agnus" of the first paragraph, and the "anulus" or rather *agnulus* of the others.

Ex. iv. (p. 10), shews that the shaft was sometimes called a bowtell, but rather as a molding, than as a diminutive pillar or columnell.

59. A pair of shafts attached either to two opposite piers, (or to a wall and a pier), for the purpose of supporting an arch or rib, are termed *responds* in the will of Henry VI., who assigns the breadth both of the quire and of the aisles of Eton chapel, "within the responds—responders—or from respond to respond;" and the piers of Fotheringhay church are termed "mighty pillars, with four responds." Gervase Gerv. 1294. simply terms them "*semipilarii*."

60. Below the base moldings of a pillar are placed certain blocks, analogous to the pedestal or stylobate of antiquity. A charge for four columns, with bases, *sub-bases*, and capitals, occurs in the Exeter Fabric Rolls of 1318-19. But the medieval term for this sub-basis seems to have been *Patin*, both in France and England; for that we had the word *Patin*, is shewn by the Beauchamp contracts, where it occurs, (but in the carpenters' sense of the lower rails of a frame). At present we only retain the word in the sense of a *pair of pattens*. The following quotations will illustrate its meaning.

LXXXI. "*Stylobata*. . . Le patin ou la pate d'une colonne. The footestal of *Higins*, 203. a piller, or that which beareth up a piller, and whercon it standeth on ende . . . Basis, the foote or base of a piller." *Higins*, 203. "*Patin*. A pattin or clog, also the footstall of a pillar. *Cotgrave*."

1 Entries also occur for the same appendage (of *virga, caput* and *anulus*) to each of the crosses of Waltham, S. Alban's, Dunstable, and Stratford.

2 It must be admitted, however, that the *flèche* above quoted is in favour of Mr William's opinion, that bowtell or boltel is the diminutive of bolt, the shaft of a javelin.

3 "*Les patins* sont des especes de plinthes de trois pouces de haut sur presque autant d'épaisseur qui servent de base à tout l'ouvrage; ils regnent de toute la longueur des stalles," &c. This explains the "*patand*" of the Beauchamp contract.

Stalium, Stallo, Feslal, Stall, are medieval words, as a seat, (in a quire for example), or a table upon which goods are exposed to sale, but whether Pied'estal and Footstall were used in France and England before the period of the Renaissance, or were then derived from the Italian "*Piedestallo*," I have no evidence to decide.

6
42 ARCHITECTURAL NOMENCLATURE

61. There are two words belonging to vaults, which are so much alike, that it is necessary to point out the difference between them. "Voussure," is a vault or vaulting in general. "voussoir," is one of the wedge-shaped stones of which arches are constituted. The latter, as a mediaeval word, only occurs in the Ely rolls.

Ely Sacrist Roll. LXXXII. "In 120 ped. de vousoirs emp' 40s. pret. ped. 4d. . . . In 60 ped. Burwell de vousoirs empt.' 10s. 33 E. III. Item 20s. pro petris de Borewell videlicet vousoires. 42 E. III."

The former word, under various spellings, is more common.


LXXXIII. "Indentura . . . de fousura capelle Sancti Stephani Westm."


LXXXV. "timber ready prepared for the upper voussura of the chapel of S. Stephen."

4 E. III. Also "vesura . . . vvsure . . . voussure."

62. For a vault, however, the monastic writers either use fornix and testudo, or more commonly "volta," (from the French voute), sometimes with an apology, as "Arcus lapideos quos vulgo dicimus voltas," or, "quie vulgariter avolta dicitur." Archu111 anglice unum vowt."

63. Each compartment of the vaulting was termed a severy. Thus in the contracts for King’s College chapel vault, each severy is to cost £100, and arrangements are made for the payments by instalments, "from tyne to tyne, until all the seid 12 severys be fully and perfyttly made and performed." 4 H. VIII.

Nasmith, 344.

LXXXVI. Memorandum de le severee duarum fenestrarum unius ex opposito alterius inter duas columnnas continet apud ecclesiam Radclyff 22 pedes, et in longitudine 26 pedes. W. de Worcestr. 1 "Voulsure, voule cave, voûte, lieut souterrain." Roquefort, Glossaire de la langue Romaine. "Vausing, is to make the jaumes (of a window,) to overase the Mullions, and that is wrought into severall kind of mouldings, and adorned with other works as the master pleaseth to put on." Randle Holmes. A sailing course for a projecting course of bricks is still used.

2 In Inigo Jones' notes to Palladio already mentioned, I find gimal used for voussoir. "The gimals and keystone of the arch." In the English Serlio, "translated out of Italian into Dutch, and out of Dutch into English," 1611, "the cunei or pennants of the arch" continually occur; but I believe the translator has merely taken the Dutch "penanten" for want of knowing the corresponding English word. However, Evelyn also employs it. In describing the form of arches, the ryasant gablets (Ex. IX. p. 11) of the King’s College Contract shews that the ancients applied to arches, the terms of moldings, as we do now. The outline of these gablets, shewn at A fig. 15, is the ogee or ressant-shaped arch. Randle Holmes' "crown bottle," &c. (Art. 52) is another example.

3 Spelt vensura, vonsura, &c., in Smith's text.
By Gervase, however, ciborium is used in this sense. Now the ciborium is properly the canopy of the high altar, which is supported upon four pillars, and which is usually vaulted in one compartment. Thus each compartment of a vault resembles a ciborium, and may be so called.

"Duo quoque ciboria hinc et inde ante hiemem facta sunt." Severey

and civery are apparently therefore corruptions of ciborium.

64. William of Worcester applies the term "fretted vault" to that of St Mary, Redcliffe, which is of the class which I have called lerne vaults. The epithet fretted applies to the foliation of the compartments; for he also uses it for the west door of Radcliff, which he says is "fretted" in the head. The passage is erroneously printed in Nasmith, and runs thus in the manuscript:


-cofrete vowted" occurs again in reference to St John’s Chapel, Bristol. Nasmith, p. 216.

65. The great stones which are placed at the intersection of the ribs, and which are usually decorated with sculpture, are Keys, Bosses, and Knottes. Thus,

LXXXIX. Gervase describing the progress of the works at Canterbury, relates how certain compartments or "ciboria" of the vaults were completed. These, putting a part for the whole, he calls claves, and explains Gervase, "claven pro todo pono ciboria, co quod clavis in medio posita partes undeque venientes clandere et confirmare videtur."

"In quibus (piliariis) appositis clavibus et fornico facta."

"The principal keys of the said vault, shall be wrought more pendant Nash, Windsor Castle, and hollower than the keys of the body of the chapel, and all the other lesser keys to be wrought more pendant and hollower than the keys in the body of the said chapel." Indenture for the Roof of St George’s Chapel, Windsor, 5 June, 1505.

"Et ferrent les dits kervers un arche d’alabastre amounte tout la dite Halstead’s tombbe en longure et largure avec pendants et knottes." Indenture for tomb of Ralph Greene. p. 181.

This article relating to Norwich cloister is written in a different and later hand and ink from the rest of the MSS. Nasmith has not noticed this, and has printed civers for civerys in the first of the above passages.

In Auvergne cibory is used for a vaulted tomb. (Ducange). A compartment is also termed a Bay. Vide Contracts in Chandler’s Life of Waynflete, p. 398.

Vide Art. 79, p. 54, below.
ARCHITECTURAL NOMENCLATURE


"Carpenters carving the bosses of the upper chapel." (twice.) St Stephen's Chapel, 21 E. III.

"Solut. Magistro Will. Schank pro dicta volta depingenda cum le chapitres et boces deaurandis ex conventione in grosso. 10L." Ely Sacrist Roll. 10 E. III.


"In duobus lapidibus vocatis keyes, emp. 3s." Ely Sacrist Roll, 31 E. III.

The latter entries relate to the wooden vault of the central octagon at Ely, which is arranged in imitation of a stone vault. Ex. xcvi. belongs to the lower vault, and Ex. xcvii. to the small upper vault of the lantern. The work of John of Burwell still remains in the center, and has acquired great additional interest from the discovery of its history, but the remaining keyes of this vault have been destroyed.

66. For the ribs of the vault we have only the nomenclature of Delorme. He calls mediaeval architecture modern work, and says, “Au­ iourd’huy ceux qui ont quelque cognoissance de la vraye architecture ne suivent plus ceste fagon de voute appellee entre les ouvriers La mode Francoise laquelle veritablement je ne veu despriser, ains plutost confesser qu’on a faict et practique de fort bons traicts et difficiles.” The ribs according to him were branches, and were termed according to their position, croisée d’ogives (AB fig. 16), Liernes (DH. CG) Tiercerons (AC, AD, &c.);Formerets (AF. EB), which lie next to the wall, and are only half the size of the others; Arcs doubleaux (AE. FB), which separate the compartments of the vault, and are thicker than the others.

The solid block of masonry which projects from the wall, and upon which the ribs rest, is the tas de charge, or rather, stat de charge. This is usually carried up to about half the height of the vault, as I have shewn elsewhere.

1 Thomas Shank occurs in the St Stephen’s Accounts, 26 E. III., as a gilder and decorator, “ making pryntes and placing them in the same chapel.”

2 “On the ynysde was the whole house of Ceder, with throwne knoppes and flouris, so that there was no stone sene.” (Coverdale’s Bible. Kings iii. vi.) A turner was an­ ciently called a thrower. (Holmes).
67. The thin vaulting, or voussoir, which rests upon the ribs, and which is usually constructed of the lightest material, is termed by French writers the "pendentif." This word requires attention, because at present, **pendant**, its English equivalent, has been misapplied to the **keys** of the vault. The term merely means that the surface in question hangs over, and not that it hangs down. It occurs in Ex. xcv. which is extracted from an indenture for the construction of the monument of Ralph Greene, at Luffwick, in Northamptonshire, (6 H. VI.). This monument still exists, but its canopy has been unfortunately destroyed for many years. A drawing, for which I am indebted to the courtesy of E. Blore, Esq., shews the monument in the same state as when it was engraved for Halstead’s Genealogies, in 1685. It is an altar tomb, very similar to that of Thomas Fitz Alan, earl of Arundel, 1415. But it has once had in addition a vaulted canopy, the stumps of whose pillars only remain. This vault is described in the indenture as "un arche d’alabastre amounte tout la dite toumbe en longure et largure avec pendants et knottes." In which passage the **arche** means probably the external archwork. The **pendants** are the vaulting surfaces below, and the **knottes** the keys or bosses of the vault.

The following entry seems to refer to stone for building the pendentives, or else to the **voussoirs**, which were called "Pennants."

xex. "In cariagio et excisione petr’ empt’ apud Swaffham quae vocatur pendaunt." Ely Sacrist Roll, 1322.

* Vide note to Art. 61, above.*
CHAPTER IV.

ON WINDOWS.

68. According to the nomenclature and orthography at present employed for the parts of windows in Gothic architecture, the upright sides are called *jams*, the horizontal base is the *sill*, the vertical bars of stone that divide the openings are *mullions*, and the horizontal bars, if there be any, are *transoms*. The openings or light-spaces between these are termed the *lights*, and the complicated frame-work above is *tracery*; when the window is square-headed the upper piece is called the *lintel*.

These are nearly all mediaeval English words, and I shall exemplify them in turn.

69. The following passages contain *mullion*, with varying orthography.

---

1 Godfrey Richards, in 1662, has “the soiles—the jaumes—and the transoms or crosse pieces of windowes.” In Moxon’s Mechanick Exercises, 1677, are “Jaume—soils or sells—lintel and lintol—transom (defined, the piece that is framed across a double-light window); and munnion (defined, the upright post that divides the several lights in a window-frame);” and Halfpenny, even in 1725, writes “jaums.”
mendyng of the rabetts of the wyndowes, the olde monyalle of them
new stopped with tymber," &c. "The postes or monyalle of every wyndowe was gilt;" also "monelles." Reprint, 605, Hall's Chronicle.

From these examples it is evident that the original form of the word
is monial, which I shall venture to employ in future. I conceive it to
be derived from the French "moyen, qui est au milieu;" the old form
of which is meian or menel. They are called "Meneaux ou croisillons
des fenêtres," in that language.

70. The use of the word mullion, as well as of tracery, by the
modern writers, is, as far as I can make it out, derived from Sir Chris-
opher Wren, who employs them habitually in his reports. Thus, in
describing Salisbury cathedral, he says, that "the whole church is vaulted
with chalk between arches and cross springers only, after the ancicnter
manner, without orbs and tracery; and the windows are not made too
great, nor yet the light obstructed with many mullions and transomes
of tracery work—." Afterwards, in describing the proceedings of the
freemasons, he mentions "the tracery work (as they called it) of which
this society was the inventors."

These words were adopted by Bentham and Milner, both evidently
deriving them from Wren, from whom they quote largely with admiration.
Dr Plot, his cotemporary, also uses the word; and from these authorities
the words derive their present universal employment. Other early anti-
quarians make use of awkward circumlocutions for tracery. Thus War-
ton, one of the first admirers of Gothic architecture, can yet find no better
terms for this beautiful and characteristic principle of decoration than
"Ramified windows divided into several lights, and branched out at the
top into a multiplicity of whimsical shapes and compartments." But
soon after he introduces a description of "fret-work thrown like a web
of embroidery over the old Saxon vaulting of Glocester."

3 This word is used both for the uprights and the transoms. "Ce sont dans les D'Aviler, ii.
croisées les montans et traverses de bois, de fer, ou de pierre, qui servent à en separer
les jours et les guichets." D'Aviler.

The intermediate upright bars of framing are still called by joiners muntins, but
the outside uprights are called styles, and the horizontal bars are rails. "Six pieces
of timber called montagnes." Smith's West, 207.

"Orthostats.... contrefercts montants. The side beams or postes in an house
standing upright: also the stones in masonic bearing the like stresses, and so placed."
Higgins' Junius, 212.

3 Antony Wood speaks of the "crustation" of the windows, meaning, I believe, the
cusps; and Walpole describes "gothic arches of pierced work" and "network."
R. Holmes, another cotemporary of Wren, gives both mullion and tracery. "Mul-
71. Instead of tracery every mediaeval account relating to windows contains an abundance of stones called form pieces, and allusions to forms, which, as I shall proceed to shew, was their proper word for the tracery.

In France the stone frames of Gothic windows are to this day termed formes de vitres, forms or seats for glass; for, as is well known, the word form (pronounced with the long o) bears, amongst others, the sense of a seat or receptacle, as a long bench or the seat of a hare. Bailey defines form (in mechanics) to be a kind of mould whereon a thing is fastened or wrought; and we have examples of this use in the printer's forme of types. In French and in the mediaeval Latin the stalls of a choir are so termed, and the French use it for a stone dry dock.

In the "Encyclopedie Methodique," after a description of the process of making up the "panneaux des vitres," as they call the great sheets of lozenge-shaped glasses, united by lead, we are told that these panneaux are either placed in wooden frames as in common buildings—in window frames of iron—or else "dans des formes de vitres divises par des meneaux de pierre, comme dans nos églises." The
following entry for glazing in the Ely fabric Roll of 13 E. III. is perfectly intelligible with the above nomenclature.

CV. "xxi panell. albi vitri 1s. 10d. per panell. i forma vitri in grosso 24s. ij sem. alb' vitri 13s. 6d. 10 panell. faciendis de vitro domini 5s." (and also a charge for repairing panells). "Solut. Will. Vitriario, pro prædictis panellis et aliis supponendis in formulæ superioris istioris, per 8 septiminas, ex conventione 6s. 8d."

72. Here we have the complete history of the glazing of the windows; two seams of glass are bought, a seam being 120 pounds or 24 stone. One forma vitri, or "grande forme de vitres," is paid for "in grosso," that is, a window is completely glazed; and certain "pannels" ("panneaux") are made up and placed in the formulæ or small tracery of the windows of the upper story—"formula" being in this passage used as a diminutive, of which there are several examples in Du Cange in its application to seats; it appears in one passage of Rymer as "formella."

Other examples of the form-pieces follow.

CVII. The accounts for St Stephen's Chapel contain a great number of entries for form-pieces, most of them mentioned in connexion with the windows, and none of them so as to indicate a different employment of the stones so called. In 5th and 6th E. III. there are ten entries of pieces of Ryegate stone for the form-pieces at the east gable, or sometimes for the window in the east gable, including in the whole ninety-two pieces. As this was a large six-light window with a transom, and with pannelled tracery on the walls and spandrels, this number of pieces would be required for the tracery-work. Also in the same years are five similar entries of form-pieces for the sides of the chapel, or for the upper story of the chapel, or for the windows, including ninety-one pieces; but some of the entries are printed twice over, and probably many omitted, so that no very accurate deductions can be made.

73. Mold-stones are mentioned for windows both in the Ely Rolls and those of St Stephen's Chapel, and were probably intended for the jambs of the windows, which being deeply molded require larger stones.

2 From Art. 51, it would seem that the term form piece was applied to tracery, whether glazed or not.

7 No ancient term has been preserved for the projecting molding which crowns doors, windows, and other arches, (as AB, fig. 17) if we except "hoodmold," an excellent word, which, according to Mr Willson, is "still in use in Yorkshire, where many old masonic
than usual. Thus, in 13 E. III. we have “petris de mold pret. pet. 6d.,” and in 26 E. III. “17 de muldestones pro fenestris ecc̄. parochialis,” from the Ely Rolls; and in the accounts for St Stephen’s Chapel, 5 E. III. “15 pieces and 19 pieces of Ryegate stone for the mold-pieces to the upper windows.” The first entry above may be for a door-jamb or any other architectural member requiring deep moldings.

I conclude them to have been employed for jams rather than for arches, because the stones of the latter have the name vousoirs; and this word occurs in conjunction with monials and forme-pieces in an account already quoted (Ex. cvi.) relating to windows.

74. The openings between the mullions or monials are termed the lights; and thus a window is commonly described as of four lights, two lights, and so on. The Catterick and Fotheringhay Contracts give many examples of this phraseology, which however is to be found in many other documents. Sometimes the windows are said to consist of so many bays or days. William of Worcetstre generally prefers panell, under different forms, to light. I shall give some specimens of his mode of describing windows, the numbers referring to the pages in Nasmith’s edition.

cviii. “Quelibel fenestra continet duas panas vitreatas (79). Quelibel fenestra in le ovyrhistory continet 5 vel 6 pagettas, anglice panys (93). Quelibel fenestra—habet 3 luces (235). Continet tres days vitreatas” (296). Similarly we have “panas glasses” (79); “panellas” (83); “panas luces” (285); “6 luces id est pareas fenestras sunt in quelibet magna fenestra” (292). A bay-window with two transoms is described as being “in altitudine trium etagurum” (287).

75. It must be observed that the word light is applied solely to the large principal openings between the mullions, and that the smaller glazed openings in the head of the window formed by the tracery are not alluded to.

In the contract for glazing the windows of the Beauchamp Chapel at Warwick, as printed by Mr Nichols, the whole of the openings of the tracery are enumerated and measured, so as to throw considerable light upon the ancient mode of describing this kind of decoration.

The agreement under the head “Measures of Glassse,” proceeds to terms remain.” Rickman calls it the “drip-stone,” and others the “weather-molding.” These are objectionable terms, because they apply as well to straight as to arched tables, and they imply that the member is exposed to the weather, whereas the hoodmold is as often found within as without, and is simply an appendage or border to the arch, derived from the cymatium or external architrave molding of the Romans.

“Label,” which has been sometimes awkwardly applied to this purpose, is borrowed from heraldry, and belongs to straight-headed openings alone. (Vide Note at p. 10.)
describe both the east window and the side windows, as follows. To
explain the nomenclature I have given in fig. 17, a diagram which ex-
hibits the configuration of half of one of the side windows, and have
added letters of reference. Recollecting that this is only half the window,
it will be seen that the numbers of each figure agree very well with
those of the tracery. The east window agrees equally well with its
specification, as will be seen by comparing it with the engravings in
the 4th volume of Britton's "Architectural Antiquities."

CIX. "South Windowes. (Vide fig. 17). In the south side of the chappell be
three windowes, every windowe containeth vij lights (Q). Every
light containeth xix foot. Item viij smaller baten'nts (R) above;
and every baten'nt containeth ij foot and a halfe. Item iiij angells
(S); every of them half a foot and a quarter. Item ij hiest small
lights (T); ether of them containing a foote and a halfe. Item all
the katures (V); quarrells (X); and oylements (Y). So every of
the said windowes containeth Clix (feet). All in toto iiiij C lx foot
lx inches."

CX. "In the est windowe be vij lights, of the which three in the middle, every
of those conteine in glasse xix foote. Also sixe baten'nts lights,
every light containinge ij foote. Also xij batement lights, every
containing a foote and half a quarter. Item 4th lights of the
same windowe, every light containing xij foote and half a quarter.
Item viij small lights, every of them containinge a quarter of a
foote. Item viij other smalle lights, every of them containinge a
quarter of a foote. Item other iiiij other baten'nts, every of them con-
taining a quarter of a foote. Item in the katures, quarrells,
angells, oylets of that est windowe cometh to iiiij foot. In
toto Cxlix foote i q. of a foote and ii inches."

76. In this document every opening with vertical sides and an
arch-head is termed a light; but most of those above the principal
lights are called batement lights.

All these upper lights, however, differ in form from the principal
ones in one respect—that instead of terminating below with a hori-
zontal line, they are cut off angularly; they are lights with the lower
corner cut off, or, in the language of workmen, they are lights with a
batement—for this word is used for a piece cut off from another; and
hence the term "batement lights," which is used for most of these
upper lights in the above description, and is doubtless applicable to
them all.

---

1 The words in italics are printed in Mr Nichols's copy, A xij base bateridge. This
does not connect itself with the remaining words of the sentence, and I have ventured
to substitute a phrase, which at least agrees with the window itself. The original
indentures are lost. Vide Nichols, p. 29.
A Quarrelle or quarry of glass is the small lozenge-shaped pane used in making up the pannels of leaded windows. The term in the present case is probably applied to those openings of the tracery which are so small as to employ only a single quarrel.

Oylement or rather Oylet¹ is commonly applied to the small windows, or crossed loops in mediæval fortification (fig. 18), but upon no distinct authority that I am aware of. In the accounts of St Stephen's Chapel, we find "40 pieces of Caen stone for oylets."

In the present case the term seems to apply to the trefoil openings marked Y. The Angells or angular openings are identified by the specified number to be those marked (S). Katurs can be shewn to mean the same as the openings now called Quatrefoils by many examples. The English dictionaries show cater to be equivalent to quatre. The tomb of Richard Beauchamp is directed to have under each principal tabernacle or "housing" at the sides a goodly quarter for a scutcheon of copper and gilt to be set in. One of these quarters is represented in fig. 19, and would now be termed a quatrefoil pannel. In the Indenture for finishing the turrets of King's College Chapel, Cambridge, "crosse quarters" are among the decorations, and accordingly fig. 15, which shews a part of the turret, exhibits a vertical row of diagonal (or cross) quatrefoil openings: "29 caters," "6 ft. of caters;" &c., occur among the items of the stall-work of St George's Chapel, meaning, of course, that common band of ornament, in wood and stone, which consists of a series of quatrefoil pannels².

77. The forms of tracery openings are nowhere else alluded to, as far as I am aware, except in the Rites of Durham, where the small upper lights of a perpendicular window are called "tower lights" or "tower windows"; of course from their resemblance to the small windows or loops of turret-staircases. The window of the Galilee is described as containing "six fair lights of glass severed by stone, three above and three beneath; and above in the highest part of the window six little glazed lights in tower manner." Again in one of the Ely Rolls——

¹ "Oylet, Yeux." (Roquefort.) We still retain oylet-hole "for a tag or point to go through;" and it is in this latter sense that the cross loops have been termed oylets, from their terminations.

² The words trefoil, quatrefoil, cinquefoil, are borrowed from the mediæval language of heraldry and decoration, in which, however, these terms appear to have been confined to groups of leaves. Bentham, who first applied the language of heraldry to the Norman moldings, also set the example, which has been pretty universally followed, of giving the above terms to openings, pannel and arch-heads.

M. de Caumont happily applies lobe in lieu of foil to these terms. (Vide Art. 79.)
The "O" is manifestly the round window (fig. 20), two of which are still in each face of the stone octagon, and each fitted with cross-bars, as in the sketch. The "upper story," however, seems to indicate a different position for them, and the actual oes of this entry were probably in the wooden lantern, where there are still windows of the same general form, although altered by Essex.

78. It is well known that in the later periods of Gothic architecture the use of stone pannelled tracery increased gradually to so great an extent, that in the more elaborate buildings the walls and vaults, and every space unoccupied by actual windows, were covered by them. I shall proceed to shew that these pannels were termed "orbs." This I shall do by comparing three independent passages, in which the word occurs, with the existing buildings to which they refer.

cxii. (1) The Indenture for the tomb of King Richard II. and his Queen, in Westminster Abbey, covenants that there shall be niches for statues on each side having orbs between them to match. "Et 18 R. H. les ditz masons ferront measons (maisons) pur xii images, c'est assavoir vi a lune coste et vi a lautre coste du dite toumbe, et le remenaunt du dite toumbe sera fait ove (avec) orbs accordauntz et semblables as dites measons."

Accordingly the tomb has tabernacles (maisons) at the sides, between which are placed blank pannels (orbes) corresponding to them, as may be seen from the drawing of the tomb of Edward the Third, which is exactly similar, in Blore's "Monumental Remains."

cxiii. (2) William of Worcester describes the tower of St Stephen's at Bristol in the following words:

"Habet 4 storyes et ibi in quarta historia sunt campane.
In superiori historia tres orbæ in qualibet panella.
In secunda et tercia historia sunt due orbæ in qualibet panella 4 panellarum.
In inferiori historia sunt in duobus panellis in qualibet panella south and west fenestrae, in alis duobus panellis ex parte boriali et orientali sunt due archæ."

3 Engravings of this tower are in Lysons's Gloucestershire, Pl. 37, and in Seyer's Bristol.

4 Our author often writes words carelessly, and in these passages I have been compelled to make two corrections for the sake of sense. In the first, panella was written for historia, and in the second, occidentali for orientali. These are errors in the manuscript, not in Nasmith. The second error is proved from the context as well as by the building, for the south and west windows having been mentioned, there remain only the north and east sides for the arches.
If orba be translated "a blank window," the above becomes a correct description of the existing tower. For its decoration consists not so much in stone pannelling as in literal blank windows, which are formed in each story. The lower windows are open as usual, but in the upper story, where the bells are, the blank tracery is not pierced, but a window-opening is formed between part of the mullions only of the central blank windows of each side. The description, if translated thus, will agree perfectly with the tower as it stands:

The tower has four stories, and the bells are in the fourth or upper story.
In the upper story there are three blank windows on each side.
In the second and third stories are two blank windows on each side of the four.
In the lower story there are windows on the south and west sides, but on the north and east there are arches, (for on these sides the tower joins the church).

CXIV. (3) There exists an indenture for the finishing of one tower at some one of the corners of King's College Chapel (probably as an experiment); for in the same document it is covenanted that all the fynyalls (pinnacles) of the same Chapel shall be made according to one that had been set up. It is agreed that the said tower is to have "fynyalls, rysant gabletts, batelments, orbys, and crosse quarters, and every otherthynge belongyng to the same—accordyng to a plat thereof made." This description corresponds very well with the existing tower, part of one compartment of which is shewn in fig. 15.

I shall return to this in the next section, and shall now merely point out the orb, or blank pannel EE, with its cinquefoil head, observing that this is not opened with tracery for glass as usual, but that the tracery, or string of cross quarters, is so introduced, as to be a mere piercing of part of the stone pannel, without destroying its character as a blank pannel.

As in all these examples the word so plainly applies itself to a blank or blind window, I imagine it must be derived from the Norman French orbe, "qui est caché, secret, privé de quelque chose, aveugle. Orbis. Lat."

The fact that stone pannelling was first called by a name that implies a blank window, would explain the history of its introduction into mediæval architecture, even if the existing examples did not shew it.

79. The heads of gothic arches are decorated with peculiar and characteristic appendages, represented at large in fig. 21, where ABC is

\[ \text{Archeologia, x. 29.} \]
\[ \text{Reprint, 639.} \]

\[ \text{1 William of Worcester employs the word again (p. 279) in describing the Chapter-house of the Augustine canons at Bristol, and it also occurs in the accounts of Louth steeple. Hall has "vantes in orbes with crobbes dependyng," and Sir Christopher Wren speaks of "orbs and tracery," in the Parentalia (304).} \]
the arch, and DEF FGH the additions in question, by which the opening of the arch acquires the figure which is termed a cinquefoil, from the number of *foils* or leaves into which it divides itself. These appendages were first distinctly noticed by Sir James Hall, who named them *cusps*. Rickman calls the entire arrangement featherings or foliation, and the separate small arches*3 cusps. When the cusps are themselves cuspidated, as at *mno*, then he applies the term double-feathering.

The only ancient allusion to these members is preserved by William of Worcester, in the description of the west door of Radcliff Church, Bristol, already given above (p. 8). It is evident from the general contents of this work, as I have already stated, that this writer had himself no technical knowledge of masonry, and that the two descriptions which he has preserved to us must have been either copied by him or dictated to him. At all events he derived them from a mason.

Of the door-way in question, he says, "The west dore ys fretted in the hede wyth grete genlese and smale." And the sketch in fig. 22, shews that the head of the door-arch is furnished with the appendages or cusps just described. Mr Willson first pointed out this application of the passage to the feathering of the arch, but was misled in his explanations by Nasmith, who prints the word "gentose."

The facsimile (Pl. I.) will shew that the word is distinctly written with an *l*, and indeed that the writer has departed from his usual scrawl, and taken great pains to make each letter distinct, as if the word was new and strange to him; so that the only ambiguity in it is the usual one between the *u* and the *v*,—*genles* or *genlesse*. I prefer the former reading, because I believe the word to be a corruption of *genouils*3. For with workmen a *knee* as well as an *elbow* is a bent piece; as, for example, the crooked timbers used in ship-building. But these cusps, DEF FGH, may in this sense be exactly described as *knees*, and the smaller ones, *mno opq*, in like manner. The above description, therefore, is a very consistent account of the door-way, which is fretted in the head with great knees (DEF, &c.) and small ones (*mno, &c.)*

*3 However, the mathematical *cusp* is the point formed by two parts of a curve meeting, and the name is therefore correctly applied by Hall to the points E, G, &c. and not to EFG, as Rickman has it.

*3 "*GENOILS," (Roquefort.) "Genoil, genouillet, dim., a knee; also a certaine piece of crooked wood in the poope of a ship." (Cotgrave and Nicot.) A workman ignorant of French might pronounce either of these words so as to correspond to the above orthography. "*Knee, or knee-piece, or kneeler, is a piece of timber growing angularly or crooked ...... Some call it a crook, or a knee-rafter." R. Holmes."
In like manner the cusp resembles the angles ABC of the heraldic fret, fig. 23, and hence the door is said to be fretted.

80. Fig. 24, will explain another arrangement which belongs to the interior construction of windows. This represents a window of a common form viewed from the inside. In the thick walls of mediaeval structures, the tracery and its glazing are commonly placed much nearer to the outer surface of the wall than to the inner, notwithstanding the deep moldings which usually encircle the outer arch-head, and run down the jambs.

An arch or rib (ABC) is placed so as to carry the inner surface of the wall. In simple examples like the present, this rib is plain, and dies against the jambs, but in superior buildings is richly molded, and a shaft, with base and capital and side-moldings, are added to the edges DE of the jamb. But this arrangement is mostly distinct from the window-tracery. This arch is of a different and larger span from that of the window-head, because the spreading or "embrasure" of the jambs increases the opening inwards. It is also often of a different curvature, and the decoration of the two disconnected and separated by the plain splayed sides F of the window-opening. Connecting the two, and resting at one end on the tracery and at the other on the rib, is a narrow vault or voussure G, which again is not necessarily of the same curvature as the sustaining arches, but which carries the core of the wall above.

81. This very arrangement by which a vault or arch of a different form from the window-opening is placed within it, for the purpose of carrying the wall above in such a manner as to increase the light way, is to be found in the system of Philibert Delorme, and he terms it the arrière voussure, or rear-vault of the window, in which he is followed by all the French writers on the coupe des pierres. As the contrivance is so universal in mediaeval architecture, we can hardly doubt but that this name is also the original one, for Delorme uses it without explanation, as if it were already well established and understood. We may there-

1 Vide note B at the end of this Chapter.

2 The window-sides F, and the slope H below, (as well as the soffit of a square window), are the embrasures; a word which originally had reference to the divergence or splay of these surfaces, but which appears to be sometimes employed for them whether they diverge or not. The use of the word is clearly shown in the following passage:—

"Les embrasures de croisées sont pour l'ordinaire revêtues par les côtés de deux morceaux de lambris nommés embrasements, d'un plafond par le haut, et d'une banquette ou soubassemment par le bas." Roubo, p. 181. (Art. du Menuisier.)
fore call the said vault, rib, and shaft, the rear-vault, rear-rib, and rear-shaft of the window or door; for the same appendage is universal in door-ways, where it is employed with admirable effect to enable the door to clear the arch-head as it opens. But the interior edge (D or E, Fig. 24) of the window side, was termed in French the *escoinson*, or *écoinson*. "Fault aussi que le derriere des pieds droits des fenestres que les ouvriers appellent escoinsons, soient fort embrasez, à fin que la fenestre de menuiserie se puisse joindre contre le mur et qu'elle n'empesche à donner la clarté et recevoir tant de lumiere que faire se pourra."

(Delorme.) And the same term is employed by Felibien and Roubo, but its exact meaning is defined by a letter of reference in D'Aviler (Pl. 51). The following example shews that it was used in England.

"Et solvit Johanni Knayth et Willielmo Chambre cimentariis pro facutura iij fenestrarum ex convencione secum facta in grosso e. Et eidem pro factura iij formpeys chaumeres retournes corbels trans- sowns j sol skownsiom pro ij fenestris in grosso lxvi', viij."

(Pyttyngton Hall.) (The masons appear to have furnished two windows complete, and certain portions enumerated for two other windows.)

Of these the "formpieces," "corbels," and "transoms," need no farther explanation. "Chaumeres" are probably *jumbers*, i. e. stones for the window jambs. "Retournes" for *returns,*—the angular finishing of the hood-mold; "i sol" is one *sill*, and "skownsiom" is the *écoinson*.

The "pilastres des écoinsons" of Roubo, correspond exactly in position to the medieval *écoinson shaft* (or rear-shaft) above described.

82. The thin wall which is frequently placed below the sill in the inside of a window (I. fig. 24), is called by French workmen the "mur d'appui" (or by some the sill is termed the "appui," and the thin wall below it the "allege"). The name, as well as "accoudoir," is applied to it because it serves to lean upon in looking out of the window, and similar phrases were employed in England as follows:

"The selyng of xi wyndowes rounde about over hed, and the lenyng places of the same" . . . . "Item, made new in the quenes dynyng chambe a great carrall window . . . and lenyng places made new to the same and a halpace under fote, new made and new joysted and borded" also "lenyng peace" "lenyng borde," &c. (Joyners' Bayley's Tower.

Carpenters' work at Tower of London, 24 H. VIII.)

A corner cupboard was also called an *écoinson*. Mr Way suggests that hence the *squinch or sconce*, as the diagonal arches are termed which carry an octagon tower or spire upon a square, may be derived. Vide Accounts of Louth Steeple, and W. de Worcestrce, p. 196.
This relates of course to the wainscot lining of the wall in question.

83. The iron work of ancient windows consists (1) of a strong bar \( ab \) (fig. 17) at the top of the monials, running in one piece from jamb to jamb; (2) of one or more upright bars \( f \) in the midst of the lights; (3) of short horizontal bars \( c, d, e \), extending only from monial to monial, and having staples to receive the upright bars, which usually pass through holes in the upper bar.

cxvii. “1 stay-bar, 4 standards, and 12 transeons for the window of the bell-tower.” (Smith's Westminster, 206).

Here the numbers shew that the window was a four-light window, the stay-bar being the horizontal bar \( ab \), the standards the upright bars \( f \), and the transeons (three to a light) the short bars \( c, d, e \). Similar entries occur in the same page, some of them explicable by supposing two standards to each light, which is sometimes the case.

This nomenclature was not invariable; the long bar or stay-bar was sometimes called by the general name “tiraunt.” For want of space I cannot enter at present into the nomenclature of iron work in general. The small iron bars to which the lead pannels are tied seem to have been called saddle-bars in the old time as they are now.

cxviii. “In diversis soudlets factis pro fenestris superioris istiorum novi operis” “xijv. barres et soudles reparandis.” Ely Sacrist Roll, 13 E. III.

cxix. “Nine small bars of iron called soudles, to hold the glass in the windowes,” also 61 soudlets, 90 soudlets, cramp-bars and soudelets for the windows. (Westminster Rolls.)

Stapel-barres are also in the Ely Roll (13 E. III.). These being bars to which staples are fixed, may either be the short cross-bars called transeons above, or they may be those bars which carry staples for the purpose of fixing the edges of the lead pannels. For the latter are secured in the ancient windows by a series of small keys or wedges inserted in staples, at equal distances round the margin of the pannel.

84. That the term clerestory was applied to the upper story of a church is evident from the first three examples which follow, but the

1 That selynge is the lining of walls with wainscot may be shewn by many examples.

2 Moxon and Holmes give a different definition to this term, which must either have had a double meaning, or else have changed it altogether. “Clearestory windows are such Windows that have no transum or cross-piece in the middle of them to break the same into two Lights.” (R. Holmes, iii. 109). “Clarester windows,” (iii. 112, 473). Blomfield absurdly uses the word (cleristory) for the sedilia, defining it to be the seats in the wall on the S. side of the altar in which the clerks, viz. priest, deacon, and subdeacon sat in stories, one higher than the other.
OF THE MIDDLE AGES.

59

others shew that it was not confined to this sense, or to ecclesiastical buildings. Thus in Ex. cxxiv. it is used for the open tracery of a carved chapel screen, which we may conclude was as usual made with closed pannel work below, and open treilage above; and apparently "clerestory" was used for any mode of admitting light over head. William of Worcester always uses "ovyrstorye" or "ovyrhistorye," for the clerestory of a church.

CXX. "And the clericory, both within and without, shall be made of cleue Asheler." Fotheringhay Contract.

CXXI. "And the forsaide Richard sall make the pilers with the arches and the clericory, &c." Katrik Contract.

CXXII. "Thomas Hyx did glasen a window in the clerestory." Black Book of Blond, Nof. Swaffham.

CXXIII. "Cloister . . . in height xx feet to the corbill tabel with clear stories, and butteracex with finials." H. VI. Will.

CXXIV. "Item, I ordeyn and bequethe that the ii chapelles of our Lady and Seynt George wythyn the seid chird of Seynt George (Stamford) be closyd with ostrich boarde, and clerestoried after such quantity as the closure of pleyn borde ther now conteineth." Will of W. Bruges, 1449.

CXXV. "It"a. made a new clerestorrey in the west ende of the greate chamble in the entry next to the closset, ayygnet the seid chamble the bredeth of the house w'. a penthous over the hed of it for y'. wether." Bayley's Tower, p. xx.

CXXVI. "It"a. a particion made between the seid entre and chamble contaynyng the bredeth of the same chamble, w'. a clerestorrey in the upper ende thorow, and a doore to the same." D'. Tower Repairs, 24 H. VIII.

CXXVII. "And in the said stepill shall be two flores, and abof either flore viij clerestorial windows set yn the myddes of the walle, eche window of three lights." Fotheringhay Contract.

85. The precise meaning of the word oriel has excited much discussion. It is now commonly applied to the projecting bay-window of Gothic domestic architecture, whether it rest upon the ground, as in the case of those which are usually appended to the upper extremity of an ancient hall, or whether it be supported by a long corbel or bracket, as it very frequently is, especially over a door of entrance. The first meaning is, I believe, derived from Fuller, who states that "that small excursion out of gentlemen's halls in Dorsetshire is commonly called an oriel;" or from Aubrey, who similarly says, that "oriele means a little room at the upper end of the hall, where stands a square or round table, perhaps in the old time was an oratory. In every old Gothic hall is one, viz. at Dracot." The ingenious dis-
quisition of Mr Hamper, in the "Archeologia," has brought together nearly all the ancient passages that contain the word, to which I beg to refer, although I am compelled to differ from the author with respect to the multiple meaning which he endeavours to affix to it. The quotations refer to oriel above or projecting before doors, and to particular chambers or entire buildings that were termed oriel chambers or the oriel. The first is a common position for oriel windows, and in the second case it may be presumed that the chambers and buildings received the name only because they were distinguished by a conspicuous and characteristic oriel window; for I believe that it was a window in every case. In the Lexicon Anglo-Latinum, A.D. 1440, the oriel of a window is explained by Cancellus, meaning probably the stone lattice or tracery of the window.

**Note A, on Door-ways.**

Some terms are common to windows and to doors, as sill, jambs, and lintel. The words that have been preserved with respect to doors, rather belong to domestic than to ecclesiastical architecture, and also to wooden frame-work, and therefore I shall not dwell upon them. They are principally to be found in the early dictionaries. Thus in Higin's Junius: "The doore postes, jambes, or checks of the doore" . . . . "The groundsell or foote poste of a doore; the threshold," present no difficulty. But this writer and others mention the "hanse of the door," which is not so intelligible. Mr Way, whose opinion is entitled to the highest deference, states that the hanse is synonymous with the lintel. (Promp. Parv. p. 230.) Moxon, however, in his Mechanical Exercises, in explaining the common construction of a three-centered arch, uses the term hanse for the arcs that rise from the impost, and scheam for the segment at the crown. A segmental arch is a scheam arch with this writer, as with Halfpenny and others. But hanse is an older word in our language. "This arche was figured masonrie on water tables, with hansees receiving pillers wrapped." (Hall's Chronicle.) The building, from the tenor of the whole description, was in the style of the Renaissance, and the pillars (spiral or wreathed) probably supported the hansees, or spring of the arch. Or else the pillars were placed against the piers of the arch, and the hansees must be understood to mean the spandrel², which we now call the haunch (and the French the "Reins") of the arch.

As it thus appears that "hanse" was the small arch at the springing of a three-centered and probably also of a four-centered arch, and as the lintel was often shaped as a four-

---

¹ From the Italian "arco scemo," a diminished or incomplete arch.

² Spandrel, which is used by Sir Christopher Wren, as well for arches as vaults, occurs twice in the old Records: (1) "Spandre," in the contract for raising the walls of Westminster Hall, is perhaps used in this sense. (2) "Spandrellys," in Tower repairs, 24 H. VIII.

The word hanse may have been derived from Anse and ansa (circulus in vet. gloss. vide Ducange), properly a handle. Thus an elliptical arch is still called in France "Anse de panier." But it is more likely that our hanse is derived from the verb to enhance, or raise up, from which Mr Way obtains the "hanse of a door."
centered arch, or at least had such an arch under it, I am inclined to think it likely that the **hanse** of the door was the small arch by which the lintel was raised up or **enhanced** at each end. The **hanse** of the door is only preserved by one or two lexicographers, in translation of **hyperthyrum** or **supercilium**, which they perceive from the context or etymology to mean something over the door, and therefore give their readers the choice of "lintell, transumpte, or hance," meaning three different things, and not synonymous, as appears at first sight. Higins, however, is more distinct; for after Higins, p. 213, translating "Antepagmenta, the doore postes," and "hyperthyrum, superliminare, the upper post in a doore, just over against the threshold—the brow-peece: the transom or lintell of a doore," he proceeds to "Supercilium; quod ipsis ostiorum antepagmentis sub ipso superliminari imponttur. The **hanse** of a doore." Therefore taking his own translations of the words, the **hanse** must be attached to the door-posts, and under the lintell, and therefore must be the springing arch or sub-arch in question.

That lexicographers are not to be trusted in technical words against the authority of the practical books, I have already had occasion to shew. Cotgrave and Phillips, evidently in this instance copy from their predecessors, without understanding the use of the word. (Vide frontail and contrd'rontail in Cotgrave, and **hanse** in Phillips.)

As examples of the use of the verb, we may take "the lynterelles enhansed by pill el'S Rel?!,rint, quadrant." Hall's Chron. "The pavement of the church to be enhanced four feet above the ground." Will of H. VI.

**Note B.**

**Fret** and **Fretwork** are old terms employed in heraldry and in decoration. A Frett in heraldry is the peculiar figure (Fig. 23) formed by placing a lozenge symmetrically upon the intersection of a diagonal cross. But when the field is covered with equidistant intersecting diagonal bars, as a net, a lattice, or treillis, it is termed "fretée or fretted." Again, "that thing is said to be **diapered** that is fretted all over, and hath something either quick or dead or both between the frets." (Guillim. 34.) The separate lozenges or meshes are termed **mascles**. That these are original terms, appears from the following passages:

```
cXXVIII.  "le champ rouge **frette** d'un noir **traile**, et en chescun place ou qe le Nickols. Wills. 155. frette se joynte un rose d'or, en chescun un **mascle** de la frette un ticielle lettre M noir, en chescun aultre **mascle** un leopard noir." Embroidery of a bed in the Will of John of Gaunt. 1397.

cXXIX.  "Un vestement, le champ de baukyn blue **diapers** des autres colours." p. 179. Will of Duchess of Gloucester. 1399.

cXXX.  "n're blank vestiment tout entier **diappree** d'une vive dazure." Will of p. 69. Black Prince. 1376.

cXXXI.  Walter de Taunton gave ten "capas" of which the first contained the histories of the Passion, embroidered upon a golden **diapered** field, "cujus campus aureus est et **denseratus**." Joh. Glaston. 260.
```

**Diaper**, however, in the above passages does not bear the heraldic definition, but Roquefort, means decoration with a variety of colour; "**diapré** **diapré**. Ornament d'etoffe précieuse, qui est varié de plusieurs couleurs, **diaprus**, **diasprom**." (Roquefort.)

---

3 **Fret**, croiser, entrelacer. (Roquefort). The bars of the heraldic Frett are always interlaced, and other heraldic symbols are said to be fretted when they are interlaced together.

4 The heralds however draw the **mascle** with right angles, and the lozenge with acute vertical angles.
ARCHITECTURAL NOMENCLATURE

CXXXII. "Et une table du dit Metall endorre sur la quele les ymages seront jesantz, la quele table sera fait ovesque une frette de Flour de Lys, Leons Eges Leoparades . . . ." Contract for Tomb of Ric. II. and Anne. (This is the Heraldic Diaper.)

Platt's Staffordshire, 359.

CXXXIII. Dr Plot admires "the fret-work of the chimney tunnells at Tixall Hall and Chillington."

"A casement with traylor of levys," has already occurred (p. 5) in reference to a series of square flowers set at regular intervals. A trail is anything drawn or dragged. A treillis is a frame upon which vines are trailed, and hence is any lattice or grated frame. These words often occur; and the first example shews that the ornaments in a trail may be detached, and are not necessarily connected as might be expected. Thus I imagine that a row of ball-flowers would be a trail. Sir Christopher Wren calls the classical guilloche ornament (that which resembles the wards of a key) "a trayle of fillets continuing in square angles," and Inigo Jones applies "traylor" to an ornament which is formed of a double waving line. In both these cases, however, the ornament forms a long continuous train.

Palgrave's Ancient Kalendars furnish excellent examples of words and terms of this class, in the description of jewellery and embroidery.

"Un basyn de bloy frette et chekette de jaune et blank polidre over flur de lyz et roses de jaune," iii. 164; also 165, E. III. "Vne coupe d'argent dorre od divers imagerie a fier de maecenerie." 12 E. III.; iii. 169.

"A cuppe of golde . . . . the body chasid with running leveys." Jewels of H. VIII.; ii. 281, 297.

"One payer of covered basones of gold with friers girled about the edges," ii. 296. (also 298).

"In one coller of golde . . . . xil. peces of gold smyths worke wrought like friers knottes." iii. 302.

Friers knottes also occur in Hall's Chronicle, as "this chambr was hanged and siled with cloths of gold, embroidered with great cordelles or friers knottes of cloth of silver," 615, also 612.

In the terms of art used by painters and other decorators, Diapering is defined to be "a tracing or running over a work (when it is finished) with damask branches and such like; it is the counterfeiting of cloth of gold, silver damask, with either branches, flowers, or other antick devices, in what fashion is most pleasing. It is termed also Damasking." (R. Holmes, iii. 146, and Salmon's Polygraphice, 32.)

Imbossing is giving everything its due proportion, and to swell out.

Tracing is laying the ground even and smooth the imbossed parts being hatched or fresced.

Freezing is to fill up all void places with scrowles, turns, or leaves, or making them full of pricks or holes.

"Matting or Hatchig is to make a Beast or Lion Hairy, a Bird Feathers, Fish-scales, and Flowers and Leaves, Veins and Threads," (Hochiatus Ducange.)

A field is masoned when it is covered with "the joynts of stone worke made by masons." (This is a favourite decoration in the painting of monuments, &c.) Holmes iii. 259; i. 69.

The English dictionaries supply many examples of these words from standard writers. My object is of course with the technical meanings. It appears that any kind of open screen-work and tracery was a treillis, although originally it was made of straight bars like fret-work.
OF THE MIDDLE AGES.

CHAPTER V.

ON PINNACLES AND TABERNACLE WORK.

86. Pinnacle (Pinna, or Pinnaculum) is defined by Rickman to be "a small spire, generally with four sides, and ornamented; it is usually placed on the top of buttresses, both external and internal." If we examine the examples of the use of this word in the chroniclers and poets, we shall find that it was employed in a much more enlarged sense for any small structure that rose above the roof or crest, that it was not necessarily even pointed, and that it was placed as well upon towers and turrets as upon buttresses. The "spera sive pinaculum" of Radclyff Church, and the "magnum pinaculum sive spera de mearemio" of St Nicholas, Bristol, show that it was not confined to small structures. Gervase describes the central tower of Canterbury as having in "pinna sua cherubin deauratam," and again, "hanc navem vel aulam finiunt due turres sublimes cum pinnaculis deauratis." The representation of the cathedral upon the seal, shews these towers capped with spires, and having also smaller spires upon the angles. "Duo pinnacula in fronte ecclesia versus le North," in the Annals of Dunstable, were probably early English octagonal spires upon the existing turret. The poets use the word freely: "towers turrettis and pynnakillis hye," "Lustye hie pineacles," and so on. In the will of Henry VI., it is ordered that there shall be erected in the middle of the west pane of the cloister of King's College, Cambridge, "a strong tower square, containing 24 feete within the walles, and in height 120 feete to the corbyl table, and fower small turrets over that, fined with pineacles." The design for this tower, engraved in Lysons' Cambridgeshire, shews that the towers were octagon, and their pineacles large octogonal spires, crocketed, and with vanes on each.

That the pinnacle was not necessarily pointed, appears from the contract for rebuilding Coventry Cross, in 1543, preserved by Dugdale, and of which cross an engraving is given: "upon every principal pinnacle on the lowest story, is to be set the image of a beast or a fowl, holding a fan." But these pineacles with the beasts on them are slender.
octagon turrets\(^1\). I imagine that the octagon ogive domes, or caps, on turrets, would be also called pinnacles.

The following example shows, however, that "pinnacle" included the modern application to the pyramids that are set on buttresses.

"Butteraces, conteyning in height, from the ground workes unto the overparts of the pinnacles, 100 fete of assise." (Will of H. VI.)

87. That the term finial was never in the middle ages applied merely to the bunch of foliage which now usurps that name, is sufficiently evident from the manner in which it is employed.

Here follow four similar passages from different contracts:

cxxxviii. (1) "Every butterace to be fined with finiala." King's College Chapel, in Will of H. VI.

(2) "Every Botrass fynisht with a fynial." Fotheringhay Contract.

(3) "At every Scouchon a boutrasse fynysht with finial according to the finials of the said Qwire and Body." Fotheringhay Contract.

(4) "Every buttress having a funnel upon the top, according to the fashion of the funnels of the Chapel of our Lady at Whally." Burnley Contract.

Now it can hardly be supposed that so much pains would be constantly taken to specify that each pinnacle should have a knob on the top. But if we suppose finial to be the entire pyramid, or pinnacle as it is usually termed, the mention of it makes a very necessary distinction between the proposed buttress and the plainer kind, which instead of rising above the battlements, merely rises "unto the tabill that sall bere the aloryng," and then dies against the wall. But we can show that in the first of the above examples, the whole pyramid is meant, for the buttresses of King's College Chapel having been left incomplete, an indenture was made in the 4th of H. VIII., between the College and John Wastell, mason, by which the latter undertook to make and set up the 21 fynyalIs of the buttresses, "according to the fynyall of oon butterasse which is wrought and sett up." The quantity of stone, the price £6. 13s. 4d. each, scaffolding, &c., is sufficient to show that the fynyalls here specified must be the entire pyramid,

commonly termed the *pinnacle*; and this is generally admitted, as far as this example is concerned.

In the same Indenture, one of the towers at the corner of the chapel is to be finished “accordyng to a plat thereof made, remayning in the kepynge of the seid surveyor” . . . . “with fynyalls, rysant gabletts, batelments, orbys, and crosse-quarters, and evry other thynge belongyng to the same.” (Vide Ex. cxiv. p. 54.)

It seems probable that this one tower was to be set up as a pattern for the rest, as had already been done for the fynyalls of the buttresses, and also that the upper stage of the turret with its ogee cap was not contemplated in this Indenture, unless it be included in the last clause, amongst “the other thynge accordyng to the plat.” Fig. 15, which represents one side of the eight belonging to the tower, will shew that, supposing fynsayll to include the entire so called “pinnacle” with its shaft at (A), every principal part of this composition is enumerated. The rysant gablet has been already explained, as well as the orbe, or blank pannel EE, which is pierced in its center by the cross-quarters.

88. In the following passages *finial* occurs, but with no context to lead us to the meaning.

```

cxl. “Nos devisims...une sepultre ove (avec) tabernacles et *finols*.” (Will Nichols’ of Humfrey de Bohun, 1361.)... “to Master Andrew the smith for 44 (and 32) gorons for the *finials* above the chapel” (of St Stephen); Smith, 199. also for 4 gorons made for holding the upper stones upon the great *pinnacles* of the chapel . . . . “botraces, gablet, *finols*, &c., in the Indenture for the wax herces of Queen Anne, 18 R. II. (Explain’d below, Art. 97.) Lastly, “22 *fynsaylls,*” for the Stalls of St George’s Chapel. 22 E. IV.
```

It is not probable, however, that the terminating knob only is here meant, when we are quite sure that the whole member must have been employed. But as the presence of the *pinnacle* necessarily supposes that of the *upper knob*, there can be no necessity to mention the latter, without the former. In Ex. cxxix. the *finials* are probably the pyramids of the buttresses at the angles of the canopies, and

1 Printed or in Malden’s account, a probable misreadding of the abbreviated and. The original indentures are unfortunately missing. Copies only of them have been preserved among the College muniments.

2 Vide note at foot of page 42 for *rysant gablet*, p. 52 for *crosse-quarters* and p. 54 for *orbys*.

3 “Pignon, a finiall, cop or small pinnacle on the ridge of a house.” (Cotgrave.)
the *pinnacles* are the great central spires which crown the entire canopies. And in Ex. cxi. the *finials* belong to the lateral buttresses of the chapel, and the *great pinnacles* to the octagonal angle turrets. Hence it is, too, that we so seldom find any allusion to the lateral bunches of leaves, or *crockets*, for they also are included in the term *finial* as its constant appendages. Of this word I know only three examples, viz.:

The first passage was quoted by Warton, and thus, as I suppose, the word was suggested to Milner, who first applied it as well as *pinnacle* and *finial*, in the modern sense. Assisted by Mr Willson's derivation from *crochet*, a hook, which is very descriptive of the ornament, we may admit this application of the term to be correct.

89. The upper knot of leaves, usually denominated the "*finial*," seems to be the *crope* in the following example from William of Worcester.

This tower (vide Lysons' engraving,) has a pinnacle at each angle, crowned with a finial of the usual form, the "*crope*" of our author.

1 For the following note I am indebted to the kindness of Mr Way.

"Crope is the legitimate term whereby the knop of unfolding leaves, such as surmounts a purfled pediment or finial in architecture, or forms the head of a sceptre, may be designated. Anglo-Saxon—*crap*, *cima*. In addition to the short note in my edition of *Promptorium*, p. 104, note 4, I would mention the following from the *Medulla Grammatica*, first Latin-English Dictionary, circa 1440. 'Cacumen—the topppe or the croppe of a tre.' 'Cima—the crope of wortes (i.e. oleraceous herbs) or of trees.'

'And for to keep out well the sunne,
The crabbes were so thicke irunne,
And every branch in other knyte.'

Chaucer—Of the trees in Mirth's Garden. R. of Rose.

So also Cant. T. v. 1534. 'Now in the *crop*,' that is, the extreme shoot. 'The tendre cropees,' v. 7, the burgoens, or buds shooting in spring. 'Croppe and rote,' i.e. root and branch.

'Now stante the *crope* under the roote,
The world is changed overall.'


"The chronicler Hall, in his description of pageants constructed in London for the triumphal entrance of Charles V., 1522, uses the word *crobbe*, seemingly to denote the knops of leafy buds, used as pendants from the roof in later perpendicular or Renaissance times—"

"At the standard was a mighty building of tymber w't towers set in carbles forced with arches buttand, and al abilamentes embossed, and the lynterelles inhaunised with
Again, in the wax herce described below, (Art. 99,) we find an account of certain tapers, called "croppes," which were fixed on the tops of the finials.

90. *Pomell*, from the way in which it occurs in Ex. cxxxix. may have been sometimes employed for this member, or for the crockets. But it was properly used for any globular or *apple-shaped* arrangement (Ducange). The balls on a crown, the feet of a cup, the buttons of a dress, are all quoted as examples of its application, and, lastly, the handle of a sword, in which sense it is still applied. In the numerous descriptions of cups in the inventories of plate, given in Palgrave’s "Ancient Kalendars," the pommell of the cup seems to be the upper knob: "le pomell, grave a guise d’un knot de foilles," is very descriptive of the so-called *finial* of modern writers. But balls are commonly introduced into the ancient jewellery. The word was, however, also employed in building. Thus there are accounts for making a wooden pomellum upon the great Hall of Westminster, and whitewashing it, and for covering with lead the two new pomeills of the two great kitchens, and for six new wooden pomeills bought for the king’s seat in Brayley’s houses, 81.

91. *Tabernacle* is a general term for the niche in mediæval architecture, which, with its pedestal and ornamented canopy, is employed for the reception of images. The word is so well established and understood, that it is hardly worth while to multiply quotations about it. Warton’s Essay and History of Poetry abound with passages in pillars quadrant, and the vautes in orbes, with crobbes depending, and monsters bearing up the pillers, and in the roffe was a louer swelling, in y* top whereof was a baner of the armes of Spayne and England;’ &c.”

2 Randle Holmes, describing the gable end of a house of his time (1688), has the following terms: “The *crostone* is the top stone of the gable end on which the *finishing* is set.” “The *finishing* is the *pinicle* or what thing else is wrought in stone, to set out or adorn the end of an house or building.” The *crostone* and *finishing* are evident reminiscences of the croke and finial.

3 “Sur le covercle une trail de foilles et coronez ove un ronde pomel grave e n v. 3, 327. maniere dun roso.” "Covercle embataillez ove un pynakille sur le pomelle." Pomell £ 144. and 3. of a sword also occurs in the same documents. “*Pommeau*, the pommel of a sword—the calves of the leg—and the ball of a tower, the centre or middle of the top thereof; that part whereon the weatherecock is planted.” Cotgrave. Perhaps *pomellum* was the ogee-cap or dome, in opposition to the *pinnacle* or octagonal pyramidal cap. “Superior Hist. Dan. pars magni campanilis, sub tolo vocato anglice le poll.” This "*tulus* (tholus) de cupro p. cxviii. vel ere, contenis in circumferentia iij ulnas et iij quarterias," which was on the belfry of Durham, was struck by lightning in 1429. (Raine’s Cuthbert, p. 148.)

4 Inigo Jones applies this word to the niches of Roman architecture, with their pediments and columns.
which it occurs, to which I beg to refer. The description of the canopied tomb of Hector, in Lydgate’s Book of Troy, is however too curious to be passed over, especially as Warton has only quoted from it. I shall therefore insert it at length, omitting merely the description of the image, which is not to my purpose. I do this the rather, because the Monk was evidently better and more technically acquainted with the subject than Chaucer and the other poets, in whose works architectural terms may be picked up 1.

CXLIII. “And in this phane that I speake of here,
They made fyrste by the hyghe aultere
By great devyse a lyttell oratorye,
Perpetually to be in memory,
Where as was sette a ryche receptacle,
Made in manner of a tabernacle,
Egall of syght for a large ymage
That reysed was on a ryche stage.
That was borne at eche of his corners
Of pured golde upon foure pyllers,
And on everyche full craftely ydyght
An aunget stode of golde borned bright.
Ceryously the worke to sustene
With craftye archys reysed wonder clene,
Embowed over all the worke to cure.
So merveylous was the celature
That all the rofe and closure envyrowne
Was of fyne golde plated up and downe,
With knottes grave wonder curyous
Fret full of stones ryche and precious.

And fro the grounde uplyght as a lyne
There were degrees men by to ascende,
Made so well that no man coulde amende
The worckmanshyp, and they were everychone
Performed up all of crystall stone,
Attaynyng up from the table base
Where the standynge and the restynge was
Of this ryche crafty tabernacle,
Havyng above upon eche penele
A ryche rubye, and reysed hye on hyght
Stode an ymage huge and large of weyghte
Of massye gold havyng the lykenesse
Of worthy Hector

And when this worke was complete everidell
Rounde envyrowne ful ryche and freshe to se,
They made a parcloses all of Eban tre.”

Lydgate’s Troy, c. xxviiij.

1 Chaucer however was appointed clerk of the works to Richard II. in 1390, and held that office for about twenty months. (Godwin’s Life of Chaucer, ii. 498.)

2 The Temple of Apollo.
92. Other terms were sometimes applied to tabernacles, as in the following passages:

**CXLIV.** "Et les ditz Masons ferront *Masons* (Maisons) pur xii Images, c'est assavoir vi a lune coste et vi al autre coste." Contract for the marble-work of the Tomb of Richard II. and Anne his Queen. 18 R. II.

**CXLV.** "Et auxi ferront Tabernacles appeles *Hovels* ove (avec) gablets de dit Metall endorreex as (aux) Testes (des Images) ove doubles jambes a chescune partie." Contract for the metal-work of the same Tomb.

**CXLVI.** "In and about the same tombe to make xiv principal *housings*, and xviij small *housings*." Contract for marble-work of the Tomb of Rich. Beauchamp.

**CXLVII.** "Sur quele tombe seront faite deux images dalabastre—l'un des ditz images tenant l'autre per la main avec deux *tabernacles* appelés *gablettes* à leur testes . . . sur les costes . . . seront images d'anges ove *tavernacles* portant escutz selon la devise des ditz Katherine, William et William." Contract for Tomb of Ralph Greene, in Luffwick Church, Northamptonshire, 1420.

**CXLVIII.** "the *housyng* full of backewines." *babewyns?* or grotesque images. Lydgate's Troy.

Most of the metal-work upon the tomb of Richard and Anne has been stolen, but enough remains to shew that it was similar to that of Edward the Third; and indeed the views in Sandford and Dart shew it complete, so that Blore's drawing of the effigy of Edward may be referred to, and it will be seen that the same figure is placed in a complete tabernacle, corresponding to the above description in Ex. CXLV.

The recumbent canopy at the head of the image is a semihexagon, having on each of its three faces a rich "gablet" of pierced tracery-work, with hoodmold and crockets, and a short turret above with buttresses and finials at the angles. This projecting structure is termed a hovel3, and in Ex. CXLVII. a similar one is simply designated as a "tabernacle" of the kind called "gablettes." The "double jambes" consist each of two flat buttresses connected by cross bars and gablets, forming a pile of four niches on each side, in each of which is placed an angel. The "measons" at the side of the tomb, as well as the "housyngs" on that of Richard Beauchamp, have projecting canopies or "hovels" above the heads of the figures. From the phrase, "tabernacles at the head

3 "*Hovyl*, lytylle howse," (Prompt. Parv. 250). "A shed open at the sides, and covered over head," (Bailey's Dict.), in which sense it is applied above. "In money paid to Walter Walton for making two images in likenes of the king, and *Hovell*, the same placed at the end of the king's great hall within the palace of Westminster, 2l." (Devon's Issues of the Exchequer, p. 229.) As this is unfortunately translated, we are left to guess that in the original "Hovell" must apply to the canopies over the images.
of the images," in Exs. cxlv. and cxlvii., it appears that sometimes the tabernacle was the canopy, or work above the head of the image, and not the entire niche, including base, sides, and canopy. But "Meason," or "housing," seems to have had this general application.

93. Corbels are stones which project from a wall to support some weight, as an image, a shaft, or a group of vaulting shafts. Here follow some passages in which they occur.

Roll. 1365-6.

"50 corbels of Maidstone stone for the clock-tower" (at Westminster).

cl. "Et in solutis Johanni Chepyn latamo, aptanti et facienti xvij corbel-stony ponendis in prædicto muro." Accounts of the Prior of Bur­cester. 3 H. VI.


Corbel tables have been already discussed. But source, or souse, is a favourite term for a corbel.

clii. "24 pieces of marble expended in the works of the said chapel (of St Stephen), for sources to the images under the tabernacles."

Smith'sWest­minster, p. 290, & 297.

cliii. "And in the columns placed as well under the aforesaid sources, and on each side of the tabernacles as in the walls of the porch at the west end of the same chapel, 200 pieces of marble." (19 E. Ill.)


cliv. "In stipendio Rob. Burwell faciend' gargayles et imagines pro sources ad le Blakkerode." Ely Sacrist Roll, 38 E. III.

clv. In the Indenture, 18 R. II. the masons undertaking to make and fix in the wall of Westminster Hall twenty-six souses carved according to a patron exhibited to them. These are the corbels upon which the present roof was then raised.

94. "Buttress," has occurred already in several examples. The following passage shows that the upper sloping termination (and probably each set-off below) was termed a "skew."

Bayley's Tower.

clvi. "A bottress made with harde asheler of Kent 2-foot and in Cane asheler a skew vj foot, the same botres in height xv fote." Tower Repairs, 24 H. VIII.

Throughout the Catterick Contract a buttress placed diagonally against the corner of a wall is termed a "franche botras." Perhaps, Mr Raine suggests, "from its free salient character, or perhaps from its being of French invention."

Flying buttresses, as we now universally call them, were "arches
OF THE MIDDLE AGES.

buttant'" (vide Ex. iii. p. 8), "Arcs boutant." Wren even uses "arch-buttresses," but also "flying buttresses;" and from him, as in many other cases, the modern writers have derived the phrase.

CLVII. "Nothing was thought magnificent that was not high beyond measure with the flutter of Arch-buttresses; so we call the sloping arches that poise the higher vaultings of the Nave;" also "Butments spanning over the cloyster." (Westminster Abbey Report, 1713, in Parentalia, 299.) "From the Aisles are Bows or flying Buttresses to the walls of the Navis." (Salisbury Report, 1669, in Parentalia, 304.)

95. In the Indenture for the roof, or vault, of St George's Chapel, at Windsor, (5th June, 1505), the outside is to have "arcebocens (flying buttresses) and crestes, and cores with the king's beasts standing on them, to bear the fines on the outside of the said choir." And, as Mr Poynter well explained, these corses are shewn by the actual building to be the shafts of the pinnacles, which in this instance, instead of being capped by finials, or "pinnacles," as they are commonly called, of the usual pyramidal form, have square capitals for the reception of the beasts, which are now gone, but which were arranged as in Coventry Cross.

William of Worcester, however, employs the same word in the two examples of the porch of St Stephen and St Mary Redcliff. In the first we find "A cors wythoute," that is, outside the wall. The plan (A, fig. 2), shews that this was a square shaft, placed diagonally against the wall, and in the actual porch the square shaft remains, and is surmounted by a final. By this it seems that the cors did not always merely surmount the buttress, but that it might extend down to the ground. In fact, the difference between the two is that the buttress rises with a nearly equal transverse thickness, while in front it falls back at every successive stage, so that its projection is diminished in gradation as it rises. The cors, on the contrary, has nearly an equal diameter at the top and at the bottom. The moldings that separate its different stages run round it, and the diminution, or change of diameter, besides being much less than in the buttress, takes place equally in both diameters. Moreover, the buttress, whether placed directly against a wall, or diagonally against the corner, is always in the attitude of resisting an outward or

1 "Arches butting on to the clerestory." (Fotheringhay Contract.) Also, "Arches buttant," (Hall, Note, p. 66, above.) "Arcebocens," (Indentures for St George's Chapel vault, Art. 95, below.) "Archibotants" (Herce of Q. Anne, Art. 99, below.)

2 Anterides. Vitru. Arc ou pilier boutant. Arches or bowing pillers like bowes: buttresses, shore-posts, or props. (Higins, 205.)
diagonal pressure, and presents its greatest diameter for the direction of that pressure. But the cors is merely a slender pier sustaining a vertical weight alone, and may be placed either with its sides parallel to, or diagonally against a flat wall, but never with the effect or appearance of sustaining any lateral pressure.

In tabernacle-work, and the lighter architectural compositions, however, the buttresses and the corses are combined, as in fig. 25, in which slender buttresses are seen applied against the two outward sides of the cors. The moldings of the latter are carefully adjusted so as to interpenetrate the buttresses, and shew themselves distinctly as at eg; the base moldings, kl, however, are usually common to both members. This is one of the simplest arrangements; for I have no space to develope the more complicated contrivances to which this principle leads, even if it suited the purpose of the present paper. My object in explaining this last arrangement is to make the wax heroes more intelligible. In the accounts of these, abundance of bodies and botraces are enumerated; and it is evident that body and cors are identical terms. “Cors, corps, corpus.” (Roquefort.) Sometimes the buttresses are applied against the edges of the cors, as in the tomb of king Edward III., at Westminster Abbey.

96. We may now understand the latter part of the description of the door-way of Radclyff church, which relates to the external ornaments on the “wings,” or lateral walls on each side. Fig. 22 is an elevation of the door-way, as nearly as it can be obtained, from its present skinned condition. The porch is flanked by a pair of “corses,” or “bodies,” Q, whose finials, k, rise nearly as high as the sill-table, ab, of the great window, the lower part of which is shown in the figure at A B. Beyond these, and with an intervening field of plain ashlar, or “champ ashlar,” R, is placed on each side a group, consisting of a “cors,” T, applied diagonally against the wall, and having on each lateral angle “a corner buttress,” S and V. The “cors” rises and forms part of the lateral decoration of the great window above. A small “arch buttant,” X, connects the pair of “corses,” Q and T. The description in William of Worcester (p. 8, above,) is somewhat confused, although it plainly contains all the above elements. The last line of the “proporcio” admits of being read, (vide Plate I.), a cors wythoutefor—Explicit proportio fenestre; which, upon consideration, I believe to be a better reading than the one which I have already given. Fenestre must have been put down for the door-way, either from carelessness, or because the term was really applicable to any opening, which I am
OF THE MIDDLE AGES.

73

inclined to suspect. "A boterasse," and "a body boterasse," are the lateral buttresses, S and V, the first of which deserves the epithet as well as the other; and they are so called because they are applied against a "cors," or "body." "Corner boterasse" is inserted by way of a gloss, supplying another epithet, which the brace shews was intended for the two. The concluding clause, therefore, will, according to this explanation, receive the letters of reference as follows:

A cors wythouteforthe (Q)

Explicit proporcio fenestre

1. A champ ashler (R)

Isti 4 proporciones sunt in ambabus alis

2. A cors (T) with an arch buttant (X)

3. A (body) boterasse (S) (otherwise) a corner boterasse.  

4. A body boterasse (V)

97. A collection of terms relating to the minor decorations and enrichments that belong to screens, monumental and shrine-work, is to be found in a most curious set of documents concerning the expenses and details of the wax herces employed for the funeral of Anne, the queen of Richard the Second, (18 R. II). These are printed at length, without comment or explanation, at the end of the first volume of Gough's Sepulchral Monuments.

From the items and terms, as well as the details of these documents, it may be gathered that the herce, or canopy, which it was then the custom to place over the coffin at each of its resting-places, was in fact a complete architectural composition, with tabernacles, images, and all members complete, but cast or modelled in wax; and that beside this, great quantities of wax tapers were employed, of different forms and names. Beside the indentures in question, in which "Roger Elys, chandeler, and citizen of London," is the workman, there are other entries to be found, without details, which confirm this account of the matter. Thus,

1 The reading in p. 8, was given under an impression that the "cors wythoute for the fenestre" referred to the outside cors, T, which runs up the great window side, but the explanation given above seems to suit the existing arrangement better. "Salomon made in the temple windowis streite withoutforth and large withinne." Kings iii. 6. Wicliff.

2 The body of Henry VII. was taken out of the chamber at Richmond where he died into the great chamber, where he rested three days, from thence into the hall, where he was also three days, and so three days in the chapel, and in "every of these three places was a herce of wax garnished with banners." He was then conveyed to St Paul's Church in London, and "set under a goodly herce of waxe, garnished with Banners, Pencelles, and Cushions," and next day was carried to Westminster, where there was "a curious herse, made of ix principalles full of lightes." Half's Chronicle.

For the etymology of the word, and much curious information, see a note in Promp- torium Parvulorum to the article "Herce on a dede corce."
CLVIII. To Simon Prentot, wax-chandler, 200l. for a hearse to be placed in Christchurch, Canterbury, for Henry IV. late king of England. 1 H. V. (Devon’s Issues of the Exchequer, p. 326.) Again, in 10 H. V. 300l. to the same for divers hearse numbers for the funeral of Henry the Fifth. (Dn. Dn. p. 376.) Also in 14 H. VI. 36l. 13s. 4d. to John Davy of London, wax-chandler, for a hearse in Westminster Abbey for the funeral of the Duke of Bedford, and 100l. for the expenses of renewing the same hearse for the funeral of Anne, late Queen of France. (Dn. Dn. p. 427.)

CLIX. I will that the hearse be covered all round with black cloth, and that a curious hearse of wax of a small size be placed upon the aforesaid hearse: “Item que une tres bele herce de cire de la mene assise soit sur la herce avandit.” Will of Philippa duchess of York. Nichols’s Royal Wills, p. 225.

98. The ancient drawing of abbot Islip’s hearse, in the Vetusta Monumenta, shews the nature of this decoration at a later period. It consists of four octagon turrets at the angles, which rise to a considerable height, and branch out into an abundance of tapers; but the turrets themselves are of an architectural form, with proper bases, and their sides are occupied by canopies, tabernacles, images, pannelling, and battlemented tablets of the usual character; and in accordance with the documents below, were probably all formed in wax. The upper part of this machine has a more temporary character, being apparently made up of more roundels of wax. It is probable, however, at the earlier period to which the hearse of queen Anne belong, that a more strict architectural character was preserved throughout. But to return to the said documents.

99. They consist of various accounts and computations of expenses between “Rogier Elys, chandeler and citizein de Londres,” and “Johan de Melton,” one of the clerks of the receipt of our lord the king, dated 18 R. II. (1394); from which it appears that four hearse numbers were provided to set over the coffin at its several resting-places; namely, at Wandsworth, at St Mary Overie, at St Paul’s in London, and at Westminster. The weight of wax employed upon the several hearse numbers was

<table>
<thead>
<tr>
<th>Location</th>
<th>cwt</th>
<th>qr</th>
<th>lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Westminster</td>
<td>66</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>At St Paul’s</td>
<td>38</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>At St Marie</td>
<td>12</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>At Wandsworth</td>
<td>14</td>
<td>0</td>
<td>64</td>
</tr>
</tbody>
</table>

Making a total of ..................................... 132 0 10½

Deduct for the consumption of wax in the lights called “cost tapres et quar’, cropp’,” and “brennynges fact’p’ mortar,” also for the waste in working, and for wax consumed in the torches, &c. 41 2 18

There remains in the custody of the said Roger for the king’s use 90 1 20½
100. Now it will appear that this enormous quantity of four tons and a half of unconsumed wax was employed for modelling or casting the architectural portion of the herces. The particulars of each herce are given at length; but for want of space, I shall select that of St Paul's as a specimen, which I shall print entire, thus:

"Pur la herce a Seint Paul.

101. The summary in Art. 99 above quoted enables us to pick out from this enumeration the tapers. These are termed "cost tapres," or side tapers; "croppes," or crowning tapers, probably fixed on the top of the pinnacles or finials; "mort's or mortiers," "brennynges," and "tapres quarre," or square tapers.

102. The remaining articles, namely, "botrac'," "botrac' faux p'r le plus bas degré poisantz," "botrac' p'tes archibotants ave le botants poisantz," "bodies," "housyngs avec baces," "chapitrells," "ymages," "gables," and "fynoly," are manifestly the elementary parts of tabernacle and canopy-work of the richest description, similar to that which crowns the monuments, stalls, stalls.

1 In shrines it was not unusual in this way to stick candles on the top of each finial.

2 "Mortier de veille. Lampe garnie d'huile, lampion." (Roquefort.) "Mortier, est une petite lampe de terre ou de cuivre, que ses communes maisons ou emplis de suif ou d'huyle, et ses maisons des grands seigneurs d'argent qu'on emplit de cire pour avoir toute la nuit de la lumiere dans la chambre." (Nicot.)
and altars of the same period; as for example, the altar-skreen, or "reredos," at Durham, which was completely finished, and the altar dedicated in 1380; the monuments of John of Gaunt, and Archbishop Bowett, and the great seal of Richard II. This kind of work usually rises in successive graduated stages, and thus we find "le plus bas," and "le plus haut degré." The semihexagonal or triangular fronts of the canopies have usually hanging buttresses and corces, which are terminated below with knots of foliage, or other bossy sculpture. These are the "boîtraç' faux p'r le plus bas degré;" namely, buttresses with a false bearing, a term always applied in French to architectural members which do not stand fairly and directly upon a foundation. Again, the buttresses of the successively retiring stages in this kind of work are commonly connected by small "archibotants," or "botants," as they are here called. "Bodies, housyngs, gablets, and fynoly," or finials, have been already explained; but it must be observed that here the "baces" are always coupled with the housyngs, and in the herce at Westminster we find "ymages, housyngs, baces p'r lea dits ymages, 3 cwt. 1 qr. 16 lbs." These baces therefore were the pedestals of the images. The Westminster herce has also, "fenestrall et gabletz, 2 cwt. 1 lb." This was probably tracery-work, or "orbs." From the manner in which "chapitrell" occurs in all these entries, it may have been applied not to capitals of pillars, but to the hoodmolds of the gablets, with their crockets and "cropes," or finials. The apparently great number of each of these articles, especially of the buttresses, does not after all exceed those which are employed in canopies of the same style which still exist.

103. If, which is probable, these wax ornaments were partly laid upon a frame painted or covered with cloth of a rich color, the effect would greatly resemble that of the tomb of Queen Philippa, in which rich open work of pierced alabaster is applied to a tomb of black marble, or it may be that the wax was stained of different colours.

1 The entries in the contracts for making the stalls of St George's Chapel, Windsor, are of a similar nature, e.g. "making and carving 12 tabernacles for the knights and canons, and 48 vaults of wainscot under the said tabernacles, 313\frac{1}{2} feet of creastes and trayles, 27 lintels, 29 eaters, and 6 feet of eaters, 120 chaptreilles and baces, 17 stolys, 42 bottresses, 109 panels behind the choir, 182 gablettes, 22 fenyailles, &c." 22 E. IV. As the tabernacles are charged entire, they are not dissected into their elements as in the wax-work above.

2 Fenestral; from fenestrella, or fenestrelle, the diminutives of fenestra and fenestre. (Ducange and Roquefort.) "And all the windowes and each fenestrall.—Wrought were of beryll and of cleare crystall." (Lydgate’s Troy.) Mr Way has shewn that "fenestral" was also used for certain framed blinds of cloth or canvas, that served to supply the place of glazed windows, before the general introduction of the latter. (Promp. Parv. 155.)
For want of space I cannot develope this subject any farther, but it would not be difficult to reconstruct these herces from the numbers and weights given. Some of them, however, are incorrectly printed. The magnitude may be judged from the specific gravity of the material, which was moreover probably cast hollow, and with this allowance it will be found that the ornaments were of the full size, and not mere models on a small scale. The herce of Westminster was the most complicated, but its particulars are too long for insertion. It contained 280 buttresses of different sizes, 72 "botants" or archbuttresses, and 96 bodies, besides housyngs, &c., as in the herce of St Paul, and 428 tapers.

104. This paper has extended itself so much beyond the limits which I originally proposed, that I shall here conclude, leaving for another opportunity several branches of the subject, as the nomenclature of carpentry, of the plan and arrangement, &c.

I stated in the beginning that my object was not to construct a complete nomenclature, but to elucidate those words that either remained in obscurity, whose meanings were doubtful, or which had been misapplied. In attempting this I have always preferred to investigate the meaning from the use of the word in technical documents rather than trust to etymology or to dictionaries, for my present purpose requires the sense which was given to each term by those who employed it rather than its derivation, and in this class of words especially, etymology is often little better than guessing, and the lexicographers are never safe guides, for want of that technical knowledge which is essential, as I have had occasion to shew. I trust that the sketch which I have ventured to make will be filled up from various ancient documents now hidden, but which in the present increased state of interest for such subjects it is not too much to hope may be brought to light and published.

ROBERT WILLIS.
APPENDIX.

No. I.

Names of Moldings of the Tower Pier of Ratcliff Church, corresponding to the numerals in Fig. 3, Plate II. (Art. 17, p. 12 above).

<table>
<thead>
<tr>
<th>A bowtell</th>
<th>A bowtell</th>
<th>A casement</th>
<th>A bowtell</th>
<th>A filet</th>
<th>A casement</th>
<th>A filet</th>
<th>A filet</th>
<th>A double ressant with a filet</th>
<th>A filet</th>
<th>A filet</th>
<th>A bowtell</th>
<th>A bowtell</th>
<th>A ressant</th>
<th>A filet</th>
<th>A filet</th>
<th>A bowtell</th>
<th>A bowtell</th>
<th>A bowtell</th>
<th>A bowtell</th>
<th>A casement</th>
<th>A filet</th>
<th>A ressant</th>
<th>A filet</th>
<th>A filet</th>
<th>A casement</th>
<th>A filet</th>
<th>A ressant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>29</td>
<td>...</td>
<td>78</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td></td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

N. B. The numbers run down one column and up the next continuously. Some of these numbers are omitted in the engraving, for want of room, but only in cases where their places are obvious.
APPENDIX.

No. II.

Indentura inter Katherinam uxorem Radulphi Greene et Thomam Prentys et Robertum Sutton de Chelaston, Kervers. 1


1 I have borrowed this indenture from a scarce book (Halstead’s Genealogies, p. 189), as an excellent specimen of this kind of document, and one little known. (Vide Arts. 39, 67, 92, above). It has been however reprinted in Sir R. C. Hoare’s County History of Wiltshire. “Warminster Hundred.”
APPENDIX.

No. III.

List of the principal published Mediæval Documents relating to Buildings, which have been employed in the present Paper.

<table>
<thead>
<tr>
<th>DOCUMENTS</th>
<th>WHERE PRINTED</th>
<th>MARGINAL ABBREV.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Westminster Hall. Indenture (18 R. II.) for raising the walls and putting in corbels.</td>
<td>Rymer’s Fredericæ, Ed. 1709. t. vi. p. 794.</td>
<td></td>
</tr>
<tr>
<td>Indentures and accounts relating to the wax herces for the funeral of Anne, the Queen of Richard the Second. (18 R. II.)</td>
<td>Gough’s Sepulchral Monuments, Vol. i. p. 170.</td>
<td></td>
</tr>
<tr>
<td>Contract for the building of Catterick Church, in Yorkshire. 1412.</td>
<td>Published with notes, by Mr Raine, 1834, accompanied by drawings by Mr Salvin.</td>
<td></td>
</tr>
<tr>
<td>Indenture for rebuilding the north and south “bylings” (aisles) of Burnley Church. (24 H. VIII.)</td>
<td>Whitaker’s History of Whalley. 1818. p. 322.</td>
<td></td>
</tr>
<tr>
<td>DOCUMENTS</td>
<td>WHERE PRINTED</td>
<td>MARGINAL ABBREVIATION</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>The last Will of Henry the Sixth, 12th March, 1447, contains a minute and technical description of His Colleges at Eton and Cambridge.</td>
<td>Nichols' Collection of the Wills of the English Kings, &amp;c. 4to. 1780. (p. 291.)</td>
<td></td>
</tr>
<tr>
<td>Five Indentures for the vaults, pinnacles and windows of King's College Chapel, Cambridge. (4, 5, and 18 H. VIII.)</td>
<td>Malden's Account of King's College Chapel. 8vo. 1760.</td>
<td>Britton, A.A.</td>
</tr>
<tr>
<td>Various Agreements for the Monument of Richard E. of Warwick, and other works in the Beauchamp Chapel. (25 H. VI. &amp;c.)</td>
<td>Description of the Beauchamp Chapel, &amp;c. by J. C. Nichols. 4to.</td>
<td></td>
</tr>
<tr>
<td>Indenture for building the Cross in Cross Cheping, in Coventry. 1542.</td>
<td>Dugdale's Warwickshire, p. 145.</td>
<td></td>
</tr>
<tr>
<td>Accounts relating to the Stalls in St George's Chapel, Windsor. 18 E. IV. and following years. And the Indenture for the vault of the Choir. 5 June, 1505.</td>
<td>Essay on the History of Windsor Castle, by Ambrose Poynter, Esq. prefixed to Sir J. Wyatville's Illustration of Windsor Castle, (referred to under the name of Nash, by mistake), fol.1840.</td>
<td>Poynter in Nash's Windsor Castle.</td>
</tr>
<tr>
<td>Extracts from the Fabric Rolls of Exeter Cathedral.</td>
<td>Lyttelton's Remarks on Exeter Cathedral, 1754, reprinted and prefixed to the Exeter Cathedral of the Society of Antiquaries.</td>
<td></td>
</tr>
<tr>
<td>Extracts from an old book relating to the Building of Louth Steeple or &quot;broach,&quot; from about 1500 to 1518.</td>
<td>Britton's Arch. Ant. Vol. ii.</td>
<td></td>
</tr>
<tr>
<td>Will of King Henry VII. describing his Monuments, &amp;c., with other Estimates and Agreements.</td>
<td>Britton's Exeter Cathedral contains some additional extracts.</td>
<td></td>
</tr>
<tr>
<td>Estimates and Reports relating to repairs at the Tower of London. 24 H. VIII.</td>
<td>Bayley's History of the Tower of London.</td>
<td></td>
</tr>
<tr>
<td>Contracts with the Mason and Plasterer (joiner?) (29 H. VIII.) for the erection and &quot;seelyng&quot; of Hengrave Hall, in Suffolk. (Art. 82, above.)</td>
<td>History and Antiquities of Hengrave, by John Gage, Esq. London, 1822. (p. 41.)</td>
<td></td>
</tr>
</tbody>
</table>
As I have usually referred to the following books under abbreviated titles, I subjoin their titles at length.

Cotgrave, Mr Randle. A French and English Dictionary. 1611, (and by Howell, 1660).
Architecture de Philibert de l’Orme. Par. fol. 1568.
Cours d’Architecture, par le Sieur Daviler. Par. 2 t. 4to. 1691.
Des Principes de l’Architecture, par Felibien. Par. 4to. 1690.
Dictionnaire d’Architecture, par M. C. F. Roland de Virlois. 3 t. 4to. Par. 1770.
INDEX TO THE MEDIÆVAL WORDS IN THE PRECEDING PAPER.

The numbers refer to the articles, unless otherwise specified, and the notes are indicated by affixing their proper number of reference to the number of the article to which they are appended, thus 94^a.

<table>
<thead>
<tr>
<th>Term</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achelar</td>
<td>36^a</td>
</tr>
<tr>
<td>Achiler</td>
<td>36^a</td>
</tr>
<tr>
<td>Aloryng</td>
<td>49</td>
</tr>
<tr>
<td>Alura</td>
<td>49</td>
</tr>
<tr>
<td>Angells (of Tracery)</td>
<td>75, 76</td>
</tr>
<tr>
<td>Anulus</td>
<td>58</td>
</tr>
<tr>
<td>Areebocoaen</td>
<td>95</td>
</tr>
<tr>
<td>Archbuttant</td>
<td>94</td>
</tr>
<tr>
<td>Arch-buttress</td>
<td>94</td>
</tr>
<tr>
<td>Archibotant</td>
<td>94^1, 100, 102</td>
</tr>
<tr>
<td>Arcs doubleaux</td>
<td>66</td>
</tr>
<tr>
<td>Arrière voussure</td>
<td>81</td>
</tr>
<tr>
<td>Arris</td>
<td>35</td>
</tr>
<tr>
<td>Ashlar</td>
<td>36</td>
</tr>
<tr>
<td>Bace</td>
<td>100, 102</td>
</tr>
<tr>
<td>Batement light</td>
<td>75, 76</td>
</tr>
<tr>
<td>Battlement</td>
<td>43</td>
</tr>
<tr>
<td>Battling</td>
<td>43</td>
</tr>
<tr>
<td>Bay</td>
<td>63^1</td>
</tr>
<tr>
<td>Beddyng</td>
<td>36</td>
</tr>
<tr>
<td>Benchtable</td>
<td>38, 40</td>
</tr>
<tr>
<td>Body</td>
<td>95, 96, 100, 102</td>
</tr>
<tr>
<td>Body boterasse</td>
<td>96</td>
</tr>
<tr>
<td>Boltell</td>
<td>16</td>
</tr>
<tr>
<td>Boss</td>
<td>65</td>
</tr>
<tr>
<td>Boterasse</td>
<td>96, 100, 102</td>
</tr>
<tr>
<td>Botrace faux</td>
<td>100, 102</td>
</tr>
<tr>
<td>Bottaccio</td>
<td>13</td>
</tr>
<tr>
<td>Bottle</td>
<td>16</td>
</tr>
<tr>
<td>Boultele</td>
<td>16</td>
</tr>
<tr>
<td>Boultel</td>
<td>8</td>
</tr>
<tr>
<td>Bow</td>
<td>94, 94^a</td>
</tr>
<tr>
<td>Bowtel</td>
<td>8, 13, 17, 45, 52, 58</td>
</tr>
<tr>
<td>Bowtellle</td>
<td>8, 13</td>
</tr>
<tr>
<td>Bozel</td>
<td>13</td>
</tr>
<tr>
<td>Bracket</td>
<td>93</td>
</tr>
<tr>
<td>Bragger</td>
<td>93</td>
</tr>
<tr>
<td>Branches</td>
<td>66</td>
</tr>
<tr>
<td>Brattishing</td>
<td>48</td>
</tr>
<tr>
<td>Brennynges</td>
<td>99, 100, 101</td>
</tr>
<tr>
<td>Brettismenta</td>
<td>48</td>
</tr>
<tr>
<td>Buttress</td>
<td>94, 95</td>
</tr>
<tr>
<td>Campher</td>
<td>44^a</td>
</tr>
<tr>
<td>Capital</td>
<td>57, 57^1</td>
</tr>
<tr>
<td>Casement</td>
<td>8, 13, 16</td>
</tr>
<tr>
<td>Casshepece</td>
<td>39</td>
</tr>
<tr>
<td>Caters</td>
<td>76</td>
</tr>
<tr>
<td>Chamfer</td>
<td>9^a, 44^a</td>
</tr>
<tr>
<td>Champ</td>
<td>25</td>
</tr>
<tr>
<td>Chamfrain</td>
<td>9^a</td>
</tr>
<tr>
<td>Chapiter</td>
<td>57, 57^1</td>
</tr>
<tr>
<td>Chapitreel</td>
<td>57, 102</td>
</tr>
<tr>
<td>Chaumieres</td>
<td>81</td>
</tr>
<tr>
<td>Cheeks (of a door)</td>
<td>p. 69</td>
</tr>
<tr>
<td>Ciborium</td>
<td>83</td>
</tr>
<tr>
<td>Civery</td>
<td>63</td>
</tr>
<tr>
<td>Clarester window</td>
<td>84^a</td>
</tr>
<tr>
<td>Clearstory</td>
<td>84</td>
</tr>
<tr>
<td>Clerestory</td>
<td>49, 84</td>
</tr>
<tr>
<td>Cleristory</td>
<td>84^a</td>
</tr>
<tr>
<td>Coin</td>
<td>35</td>
</tr>
<tr>
<td>Columna</td>
<td>56</td>
</tr>
<tr>
<td>Columnella</td>
<td>56</td>
</tr>
<tr>
<td>Cop</td>
<td>46, 88^3</td>
</tr>
<tr>
<td>Coping</td>
<td>46</td>
</tr>
<tr>
<td>Corbel</td>
<td>93</td>
</tr>
<tr>
<td>Corbel-table</td>
<td>38, 42</td>
</tr>
<tr>
<td>Corner boterasse</td>
<td>96</td>
</tr>
<tr>
<td>Cornice</td>
<td>53^3</td>
</tr>
<tr>
<td>Cors</td>
<td>95, 96, 102</td>
</tr>
<tr>
<td>Cost tapres</td>
<td>99, 100, 101</td>
</tr>
<tr>
<td>Creasing</td>
<td>45^3</td>
</tr>
<tr>
<td>Crest</td>
<td>38, 45</td>
</tr>
<tr>
<td>Crest-table</td>
<td>38, 42</td>
</tr>
<tr>
<td>Crest-tile</td>
<td>45^4</td>
</tr>
<tr>
<td>Crobbe</td>
<td>89^4</td>
</tr>
<tr>
<td>Term</td>
<td>Page(s)</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Crochetes</td>
<td>88</td>
</tr>
<tr>
<td>Crocket</td>
<td>88</td>
</tr>
<tr>
<td>Croisée d'ogive</td>
<td>15, 66</td>
</tr>
<tr>
<td>Crokette</td>
<td>88</td>
</tr>
<tr>
<td>Crokytt</td>
<td>88</td>
</tr>
<tr>
<td>Crop</td>
<td>89</td>
</tr>
<tr>
<td>Crope</td>
<td>89</td>
</tr>
<tr>
<td>Croppe</td>
<td>89, 99, 100, 101</td>
</tr>
<tr>
<td>Cross quarters</td>
<td>76</td>
</tr>
<tr>
<td>Crown bottle</td>
<td>52, 61^2</td>
</tr>
<tr>
<td>Crowstone</td>
<td>89^2</td>
</tr>
<tr>
<td>Crustation</td>
<td>70^2</td>
</tr>
<tr>
<td>Cune</td>
<td>35</td>
</tr>
<tr>
<td>Cusp</td>
<td>70^3, 79</td>
</tr>
<tr>
<td>Cypher</td>
<td>9^2</td>
</tr>
<tr>
<td>Diaper</td>
<td>p. 61</td>
</tr>
<tr>
<td>Doorway</td>
<td>p. 60</td>
</tr>
<tr>
<td>Dripstone</td>
<td>12^2, 73^2</td>
</tr>
<tr>
<td>Double</td>
<td>36</td>
</tr>
<tr>
<td>Double ressaunt</td>
<td>12</td>
</tr>
<tr>
<td>Double ressaunt with a fillet</td>
<td>12</td>
</tr>
<tr>
<td>Earth-table</td>
<td>38</td>
</tr>
<tr>
<td>Embattailment</td>
<td>43</td>
</tr>
<tr>
<td>Embrasure</td>
<td>90, 90^2</td>
</tr>
<tr>
<td>Entablement</td>
<td>53</td>
</tr>
<tr>
<td>Entablature</td>
<td>53</td>
</tr>
<tr>
<td>Escoisson</td>
<td>81, 81^2</td>
</tr>
<tr>
<td>Escoisson shaft</td>
<td>81</td>
</tr>
<tr>
<td>Fenestrall</td>
<td>102, 102^2</td>
</tr>
<tr>
<td>Fenyllle</td>
<td>88</td>
</tr>
<tr>
<td>Felet</td>
<td>8</td>
</tr>
<tr>
<td>Fillet</td>
<td>8, 16, 25</td>
</tr>
<tr>
<td>Finial</td>
<td>37, 83, 88^2</td>
</tr>
<tr>
<td>Finishing</td>
<td>89^2</td>
</tr>
<tr>
<td>Finol</td>
<td>88</td>
</tr>
<tr>
<td>Fleche</td>
<td>58</td>
</tr>
<tr>
<td>Flying buttress</td>
<td>94</td>
</tr>
<tr>
<td>Foil</td>
<td>76^4</td>
</tr>
<tr>
<td>Footing</td>
<td>57^4</td>
</tr>
<tr>
<td>Footstall</td>
<td>60</td>
</tr>
<tr>
<td>Foot-table</td>
<td>36, 52</td>
</tr>
<tr>
<td>Form</td>
<td>33, 71</td>
</tr>
<tr>
<td>Form-piece</td>
<td>71, 72</td>
</tr>
<tr>
<td>Formula</td>
<td>72</td>
</tr>
<tr>
<td>Formeret</td>
<td>66</td>
</tr>
<tr>
<td>Fousura</td>
<td>61</td>
</tr>
<tr>
<td>Fractable</td>
<td>33, 32</td>
</tr>
<tr>
<td>Franche-botras</td>
<td>94</td>
</tr>
<tr>
<td>Frers girdells</td>
<td>p. 62^2</td>
</tr>
<tr>
<td>Frett</td>
<td>pp. 61, 62, Art. 79</td>
</tr>
<tr>
<td>Fretted vault</td>
<td>64</td>
</tr>
<tr>
<td>Fret-work</td>
<td>pp. 61, 62, Arts. 70, 79</td>
</tr>
<tr>
<td>Friers knottes</td>
<td>p. 62^2</td>
</tr>
<tr>
<td>Fundament</td>
<td>57^4</td>
</tr>
<tr>
<td>Funnel</td>
<td>87</td>
</tr>
<tr>
<td>Fynoly</td>
<td>100, 102</td>
</tr>
<tr>
<td>Gablet</td>
<td>92, 100, 102</td>
</tr>
<tr>
<td>Gargoyle</td>
<td>55</td>
</tr>
<tr>
<td>Garytte</td>
<td>44, 46^1</td>
</tr>
<tr>
<td>Genlese</td>
<td>79</td>
</tr>
<tr>
<td>Genoil</td>
<td>79</td>
</tr>
<tr>
<td>Gimal</td>
<td>61^2</td>
</tr>
<tr>
<td>Gobett</td>
<td>36</td>
</tr>
<tr>
<td>Grass-table</td>
<td>33</td>
</tr>
<tr>
<td>Grete bowtelle</td>
<td>12</td>
</tr>
<tr>
<td>Groft</td>
<td>36</td>
</tr>
<tr>
<td>Ground-table</td>
<td>38, 39</td>
</tr>
<tr>
<td>Gutter</td>
<td>55</td>
</tr>
<tr>
<td>Hanging buttress</td>
<td>102</td>
</tr>
<tr>
<td>Hanse</td>
<td>p. 60</td>
</tr>
<tr>
<td>Harlas</td>
<td>57^1</td>
</tr>
<tr>
<td>Hastler</td>
<td>36^3</td>
</tr>
<tr>
<td>Hercse</td>
<td>97, 97^2</td>
</tr>
<tr>
<td>Hoodmold</td>
<td>73^3</td>
</tr>
<tr>
<td>Hovel</td>
<td>92</td>
</tr>
<tr>
<td>Housyng</td>
<td>92, 100, 102</td>
</tr>
<tr>
<td>Intrasure</td>
<td>34</td>
</tr>
<tr>
<td>Jamb</td>
<td>68</td>
</tr>
<tr>
<td>Jaum</td>
<td>69^1</td>
</tr>
<tr>
<td>Jawme</td>
<td>68</td>
</tr>
<tr>
<td>Jawmer</td>
<td>81</td>
</tr>
<tr>
<td>Katur</td>
<td>75, 76</td>
</tr>
<tr>
<td>Key</td>
<td>65</td>
</tr>
<tr>
<td>Keystone</td>
<td>61^2</td>
</tr>
<tr>
<td>King-table</td>
<td>38, 51</td>
</tr>
<tr>
<td>Knee</td>
<td>79</td>
</tr>
<tr>
<td>Kneeler</td>
<td>46, 79^3</td>
</tr>
<tr>
<td>Knottes</td>
<td>65, 67</td>
</tr>
<tr>
<td>Label</td>
<td>73^3</td>
</tr>
<tr>
<td>Lambriz</td>
<td>82^1</td>
</tr>
<tr>
<td>Lancea</td>
<td>58</td>
</tr>
<tr>
<td>Larmier</td>
<td>12^2</td>
</tr>
<tr>
<td>Ledinement-table</td>
<td>38, 39</td>
</tr>
<tr>
<td>Leggement</td>
<td>39, 39^4</td>
</tr>
<tr>
<td>Legger</td>
<td>39^4</td>
</tr>
<tr>
<td>Lenynghplace</td>
<td>82</td>
</tr>
<tr>
<td>Lierses</td>
<td>66</td>
</tr>
<tr>
<td>Ligement</td>
<td>39</td>
</tr>
<tr>
<td>Light</td>
<td>68, 68^3, 74, 75</td>
</tr>
<tr>
<td>Lintel</td>
<td>68</td>
</tr>
<tr>
<td>Linton</td>
<td>68</td>
</tr>
<tr>
<td>Lista</td>
<td>25^2</td>
</tr>
<tr>
<td>Lobe</td>
<td>76^2</td>
</tr>
<tr>
<td>Loop</td>
<td>46, 46^1</td>
</tr>
<tr>
<td>Lorymer</td>
<td>12^2</td>
</tr>
<tr>
<td>Lowryng casement</td>
<td>12</td>
</tr>
<tr>
<td>Term</td>
<td>Page(s)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Lynterelle</td>
<td>68</td>
</tr>
<tr>
<td>Mascle</td>
<td>p. 61</td>
</tr>
<tr>
<td>Masoned</td>
<td>p. 62²</td>
</tr>
<tr>
<td>Meason</td>
<td>92</td>
</tr>
<tr>
<td>Mold</td>
<td>3¹, 33</td>
</tr>
<tr>
<td>Molding</td>
<td>3¹</td>
</tr>
<tr>
<td>Mold-stone</td>
<td>73</td>
</tr>
<tr>
<td>Monelle</td>
<td>69</td>
</tr>
<tr>
<td>Monial</td>
<td>69</td>
</tr>
<tr>
<td>Monyall</td>
<td>69</td>
</tr>
<tr>
<td>Mortier</td>
<td>99, 100, 101, 101²</td>
</tr>
<tr>
<td>Mountayne</td>
<td>69³</td>
</tr>
<tr>
<td>Moynielle</td>
<td>69</td>
</tr>
<tr>
<td>Mullion</td>
<td>68, 69, 70</td>
</tr>
<tr>
<td>Munnion</td>
<td>69</td>
</tr>
<tr>
<td>Muntin</td>
<td>69³</td>
</tr>
<tr>
<td>Mur d’appui</td>
<td>82</td>
</tr>
<tr>
<td>Oes</td>
<td>77</td>
</tr>
<tr>
<td>Ogee</td>
<td>14, 16</td>
</tr>
<tr>
<td>O. G.</td>
<td>16</td>
</tr>
<tr>
<td>Oggif</td>
<td>13, 14</td>
</tr>
<tr>
<td>Ogive</td>
<td>15, 15¹</td>
</tr>
<tr>
<td>Opus internasile</td>
<td>70¹</td>
</tr>
<tr>
<td>Opus triforiatum</td>
<td>70¹</td>
</tr>
<tr>
<td>Orb</td>
<td>70, 73</td>
</tr>
<tr>
<td>Oriel</td>
<td>35</td>
</tr>
<tr>
<td>Oversale</td>
<td>61¹</td>
</tr>
<tr>
<td>Ovyrhistorye</td>
<td>84</td>
</tr>
<tr>
<td>Ovyrstory</td>
<td>84</td>
</tr>
<tr>
<td>Oylement</td>
<td>75, 76</td>
</tr>
<tr>
<td>Oylett</td>
<td>75, 76</td>
</tr>
<tr>
<td>Paneaux</td>
<td>34</td>
</tr>
<tr>
<td>Parapent</td>
<td>35</td>
</tr>
<tr>
<td>Parpent</td>
<td>35</td>
</tr>
<tr>
<td>Parpaing</td>
<td>35</td>
</tr>
<tr>
<td>Parpainge</td>
<td>35¹</td>
</tr>
<tr>
<td>Patand</td>
<td>60</td>
</tr>
<tr>
<td>Patin</td>
<td>60</td>
</tr>
<tr>
<td>Pedestal</td>
<td>60</td>
</tr>
<tr>
<td>Pediment</td>
<td>53³</td>
</tr>
<tr>
<td>Pendant</td>
<td>67</td>
</tr>
<tr>
<td>Pendentif</td>
<td>67</td>
</tr>
<tr>
<td>Pennant</td>
<td>61¹, 67</td>
</tr>
<tr>
<td>Perpender</td>
<td>35</td>
</tr>
<tr>
<td>Perpent</td>
<td>35</td>
</tr>
<tr>
<td>Perpeyn</td>
<td>35</td>
</tr>
<tr>
<td>Perpin</td>
<td>35</td>
</tr>
<tr>
<td>Pier</td>
<td>56³</td>
</tr>
<tr>
<td>Pillar</td>
<td>56</td>
</tr>
<tr>
<td>Pinicle</td>
<td>89²</td>
</tr>
<tr>
<td>Pinnacle</td>
<td>88, 88</td>
</tr>
<tr>
<td>Poll</td>
<td>90²</td>
</tr>
<tr>
<td>Pomell</td>
<td>90, 90²</td>
</tr>
<tr>
<td>Putlog</td>
<td>39⁴</td>
</tr>
<tr>
<td>Quarrell</td>
<td>75, 76</td>
</tr>
<tr>
<td>Quarter</td>
<td>76</td>
</tr>
<tr>
<td>Quatrefoil</td>
<td>76, 76²</td>
</tr>
<tr>
<td>Quoin</td>
<td>35</td>
</tr>
<tr>
<td>Rag</td>
<td>36</td>
</tr>
<tr>
<td>Raising piece</td>
<td>50²</td>
</tr>
<tr>
<td>Resant</td>
<td>8, 14, 17, 61²</td>
</tr>
<tr>
<td>Resant lorymer</td>
<td>12</td>
</tr>
<tr>
<td>Rear vault</td>
<td>81</td>
</tr>
<tr>
<td>Respond</td>
<td>59</td>
</tr>
<tr>
<td>Return</td>
<td>81</td>
</tr>
<tr>
<td>Rib</td>
<td>66</td>
</tr>
<tr>
<td>Running leves</td>
<td>p. 62²</td>
</tr>
<tr>
<td>Rysant</td>
<td>13</td>
</tr>
<tr>
<td>Rysant gablet</td>
<td>61²</td>
</tr>
<tr>
<td>Sailing course</td>
<td>61¹</td>
</tr>
<tr>
<td>Scheum arch</td>
<td>p. 60</td>
</tr>
<tr>
<td>Scill</td>
<td>68</td>
</tr>
<tr>
<td>Scoinson</td>
<td>81</td>
</tr>
<tr>
<td>Sconce</td>
<td>81¹</td>
</tr>
<tr>
<td>Scouchon</td>
<td>54</td>
</tr>
<tr>
<td>Seeling work</td>
<td>82¹</td>
</tr>
<tr>
<td>Sell</td>
<td>68¹</td>
</tr>
<tr>
<td>Selynge</td>
<td>82¹</td>
</tr>
<tr>
<td>Severall</td>
<td>41</td>
</tr>
<tr>
<td>Severans</td>
<td>41</td>
</tr>
<tr>
<td>Severey</td>
<td>63</td>
</tr>
<tr>
<td>Severonde-table</td>
<td>38, 41</td>
</tr>
<tr>
<td>Sextefother</td>
<td>36</td>
</tr>
<tr>
<td>Shaft</td>
<td>59</td>
</tr>
<tr>
<td>Shouldering piece</td>
<td>93</td>
</tr>
<tr>
<td>Sill</td>
<td>68</td>
</tr>
<tr>
<td>Sill-table</td>
<td>14</td>
</tr>
<tr>
<td>Skew</td>
<td>94</td>
</tr>
<tr>
<td>Skew and crest</td>
<td>44</td>
</tr>
<tr>
<td>Skew-table</td>
<td>38, 42, 44, 45</td>
</tr>
<tr>
<td>Skinning</td>
<td>10</td>
</tr>
<tr>
<td>Skownsiom</td>
<td>81</td>
</tr>
<tr>
<td>Soil</td>
<td>68¹</td>
</tr>
<tr>
<td>Sole</td>
<td>68, 81</td>
</tr>
<tr>
<td>Sousdel</td>
<td>83</td>
</tr>
<tr>
<td>Souse</td>
<td>93</td>
</tr>
<tr>
<td>Source</td>
<td>93</td>
</tr>
<tr>
<td>Sowdel</td>
<td>83</td>
</tr>
<tr>
<td>Soyle</td>
<td>68</td>
</tr>
<tr>
<td>Space</td>
<td>46</td>
</tr>
<tr>
<td>Spandrel</td>
<td>p. 60</td>
</tr>
<tr>
<td>Spaunder</td>
<td>p. 60</td>
</tr>
<tr>
<td>Splandrel</td>
<td>p. 60</td>
</tr>
<tr>
<td>Square</td>
<td>p. 21, 52</td>
</tr>
<tr>
<td>Square angler</td>
<td>54</td>
</tr>
<tr>
<td>Square Embattailment</td>
<td>43, 45</td>
</tr>
<tr>
<td>Term</td>
<td>Page(s)</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Squinch</td>
<td>81^3</td>
</tr>
<tr>
<td>Standard</td>
<td>39^2, 83</td>
</tr>
<tr>
<td>Stapelbar</td>
<td>83</td>
</tr>
<tr>
<td>Stat de charge</td>
<td>66</td>
</tr>
<tr>
<td>Staybar</td>
<td>83</td>
</tr>
<tr>
<td>Sub-basis</td>
<td>69</td>
</tr>
<tr>
<td>Tabernacle</td>
<td>91, 92</td>
</tr>
<tr>
<td>Table</td>
<td>37</td>
</tr>
<tr>
<td>Tablement</td>
<td>37, 53</td>
</tr>
<tr>
<td>Table-stones</td>
<td>45</td>
</tr>
<tr>
<td>Tabling</td>
<td>37</td>
</tr>
<tr>
<td>Tapres quarré</td>
<td>99, 100, 101</td>
</tr>
<tr>
<td>Tas de charge</td>
<td>66</td>
</tr>
<tr>
<td>Temple mold</td>
<td>34</td>
</tr>
<tr>
<td>Templet</td>
<td>34</td>
</tr>
<tr>
<td>Throating</td>
<td>12^2, 50</td>
</tr>
<tr>
<td>Through stone</td>
<td>35</td>
</tr>
<tr>
<td>Tiercerons</td>
<td>66</td>
</tr>
<tr>
<td>Tile creasing</td>
<td>45^3</td>
</tr>
<tr>
<td>Tiraunt</td>
<td>83</td>
</tr>
<tr>
<td>Tower light</td>
<td>77</td>
</tr>
<tr>
<td>Tracery</td>
<td>68, 70, 70^4</td>
</tr>
<tr>
<td>Trail</td>
<td>p. 62</td>
</tr>
<tr>
<td>Transeon</td>
<td>83</td>
</tr>
<tr>
<td>Transom</td>
<td>68, 70</td>
</tr>
<tr>
<td>Trasura</td>
<td>34</td>
</tr>
<tr>
<td>Trayler</td>
<td>p. 62</td>
</tr>
<tr>
<td>Treillis</td>
<td>p. 62</td>
</tr>
<tr>
<td>Trellas-dome</td>
<td>p. 62</td>
</tr>
<tr>
<td>Triforium</td>
<td>49^2, 70^4</td>
</tr>
<tr>
<td>Urnell</td>
<td>36</td>
</tr>
<tr>
<td>Vault</td>
<td>62</td>
</tr>
<tr>
<td>Valuryng</td>
<td>49^3</td>
</tr>
<tr>
<td>Vansing</td>
<td>61^1</td>
</tr>
<tr>
<td>Verge</td>
<td>58</td>
</tr>
<tr>
<td>Virga</td>
<td>58</td>
</tr>
<tr>
<td>Vensura</td>
<td>61</td>
</tr>
<tr>
<td>Volsura</td>
<td>61</td>
</tr>
<tr>
<td>Voussoir</td>
<td>61, 67</td>
</tr>
<tr>
<td>Voussure</td>
<td>61, 81</td>
</tr>
<tr>
<td>Water-table</td>
<td>38, 50</td>
</tr>
<tr>
<td>Weather molding</td>
<td>73^2</td>
</tr>
<tr>
<td>Wheeler</td>
<td>46</td>
</tr>
</tbody>
</table>

N.B. This index does not include the Vitruvian words, or the moldings of the Renaissance, which will be found in the first chapter, p. 21.
ITINERARIUM or W. DE WORCESTRE.

Plate 1

The Ashdown, near the Battle of Hastings, where the mighty
armies of William and Harold fought and died. The
village is still called Battle, and the church is called

A. Newmarket
B. Oldmarket

A. Longstreet
B. Shortstreet

A. Whitechurch
B. Blackchurch

A. Redgate
B. Greengate

A. Blackmoor
B. Whitemoor

A. Greyfield
B. Greenfield

A. Whitehouse
B. Blackhouse

A. Redmanor
B. Greenmanor

A. Blackwall
B. Greenwall

A. Redfield
B. Greenfield

A. Whitehouse
B. Blackhouse

A. Redmanor
B. Greenmanor

A. Blackwall
B. Greenwall
Plate II.

Fig. 1

Facsimile of Page 129 of the Itinerarium.

Fig. 2

South West Tower Pier of Ratisbod Church.

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9.