



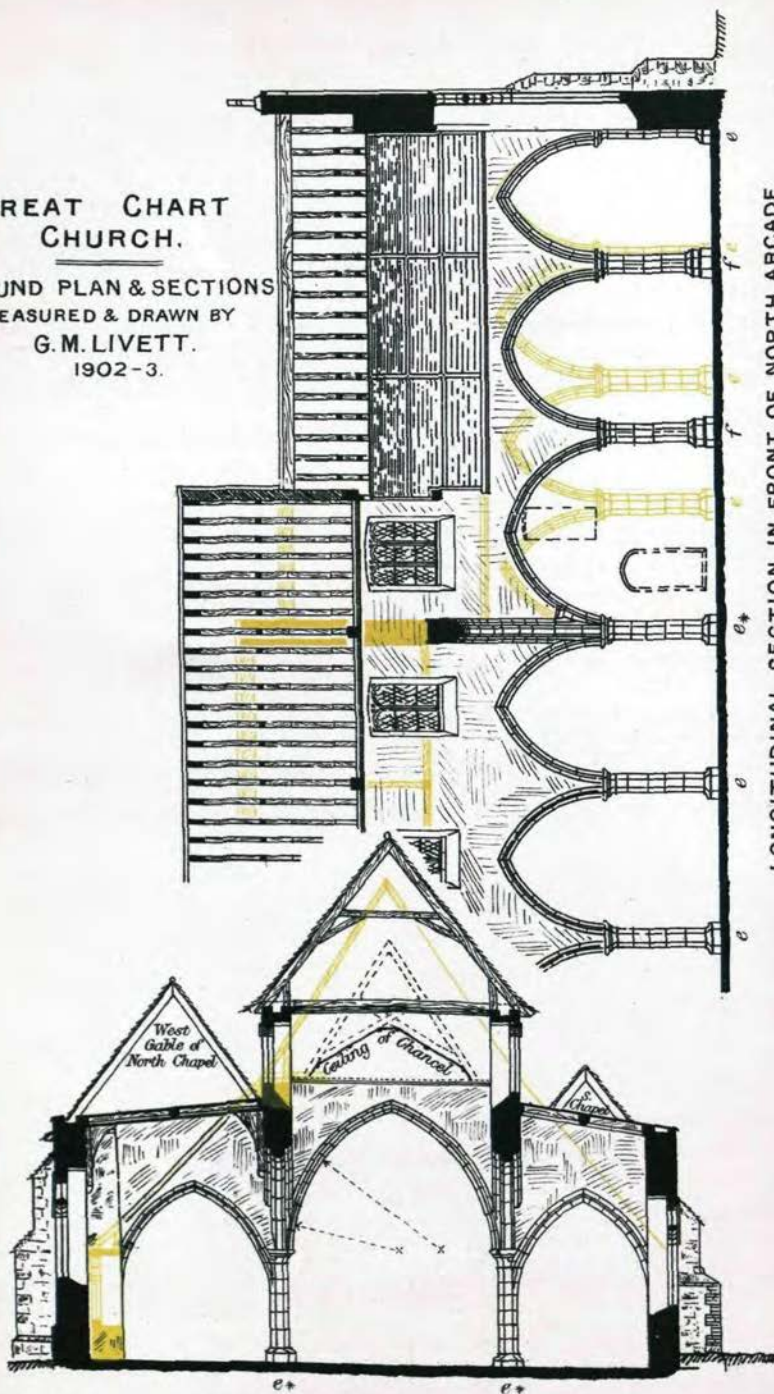
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GREAT CHART CHURCH.

GROUND PLAN & SECTIONS
MEASURED & DRAWN BY
G.M. LIVETT.
1902-3.



LONGITUDINAL SECTION IN FRONT OF NORTH ARCADE.
(DESTROYED DECORATED ARCHES, ETC. SHEWN IN COLOUR)

CROSS SECTION IN FRONT OF CHANCEL ARCH.
(LINES OF DESTROYED DECORATED ROOFS, ETC. SHEWN IN COLOUR.)

THE ARCHITECTURAL HISTORY OF GREAT CHART CHURCH,

WITH A NOTE ON ASHFORD CHURCH AND
SOME LOCAL MOULDINGS.

BY THE REV. G. M. LIVETT, F.S.A.,

VICAR OF WATERINGBURY.

THE Church of Great Chart stands upon a slight eminence on the north border of the Weald Valley, two miles west of Ashford. With its three eastern gables above three Decorated windows, its square Perpendicular side-windows, its long nave-roof and clerestory rising from flat aisle-roofs, and its tall western tower, it presents a prominent object to view from the railway and for some distance along the valley.

In plan, irrespective of its tower and porches, the Church is a rectangular building, measuring on the inside about $82\frac{1}{2}$ feet in length by $48\frac{1}{2}$ in breadth, the chancel being about 2 feet longer than the nave. The nave and chancel are of the same width ($17\frac{1}{2}$ feet), the arcades running continuously from end to end of the Church. The nave-aisle and chancel-chapel on the north side are 16 feet wide, on south side 11 feet wide.*

About midway between the two ends of the Church there runs a cross-wall which is built upon three arches. They are shewn in the accompanying section (PLATE I.). The two side-arches separate the nave-aisles from eastern chapels, one on either side of the chancel. The central arch is no doubt what is usually called the chancel-arch. Its wall does not run up to the nave-roof; it is finished about two feet above the crown of the arch with a moulded

* The Plan which accompanies this Paper does not pretend to be absolutely accurate. I have satisfied myself that the columns of the north arcade are almost in line; and, finding that the cross measurements at the two ends and at the centre tally fairly well with one another, I have been content to lay down all east and west lines as parallel to one another, and all cross-lines at right-angles to them. The south face of the central column is two inches north of a straight line stretched from the south face of the east respond to that of the west respond.

cornice, and the space above it is left open, so that the nave clerestory-stage and roof are seen extending beyond it over the western part of the chancel. This is a very peculiar arrangement, and constitutes one of the most interesting features of the Church. There is a local tradition that the cross-wall has been inserted to serve as a straining-wall, but a very slight examination of the structure shews that this cannot be the true explanation of the arrangement. I have no doubt that in the fourteenth century the central arch and its wall supported the east gable of the roof of the nave, and that when the clerestory was built, towards the end of the fifteenth century, for reasons to be discussed hereafter, the new roof was carried eastwards about 11 feet beyond the original limit, the chancel-arch being left standing on account of its intimate structural connection with the arcades, while its gable-wall was removed. The flat roof of the south aisle was at the same time similarly extended, but not quite so far. These alterations have somewhat obscured the natural line of division between nave and chancel.

Another interesting and puzzling feature is the insertion (probably at the time of the extension of the clerestory) of awkward-looking arches of unequal span in the arcades of the chancel. The main object of this Paper is to essay an explanation of these peculiarities, for the due consideration of which there was insufficient time at the disposal of the Society when it visited the Church on the occasion of the Annual Summer Meeting of 1902.

In the plan and sectional elevations of PLATE I. the Church as it now stands is shewn in full black. The yellow lines indicate the parts of the Church that were destroyed in the course of the fifteenth century. Later on we shall see reason to believe that the aisle-walls were raised and covered with flat roofs about the middle of the century, and that the rest of the alterations, including the building of the clerestory, the erection of a rood-loft, and the insertion of the unequal arches of the chancel-arcades, were being carried out at the very end of the century.

THE EARLY CHURCH.

The original form of the Church and the story of its growth are wrapt in obscurity. There is no mention of the Church in the Doomsday Survey, but there is ample evidence that a stone church was in existence in the twelfth century. The inner

jambs of the doorway into the vestry on the north side of the nave are composed of Caen-stone, shewing the kind of facing which characterizes Norman workmanship. In the walling of the south chapel there are at least two Caen-stone voussoirs or arch-stones of Norman date. There is a small Caen-stone voussoir near the north stop of the label of the west door; it bears evident marks of fire. This abundance of Norman material can have come only from a church that was built or enlarged in the twelfth century. It may be assumed that the width of the original nave was the same as that of the present nave, and that the existing chancel-arch is on the lines of the original arch, or, at any rate, that it marks the original eastern limit of the nave. The chancel may have been a long one, like that of St. Margaret-at-Cliffe, or, as Mr. W. H. St. John Hope has suggested, there may have been a central tower occupying the space immediately east of the present chancel-arch. The latter view commends itself as being parallel to the probable history of the neighbouring church of Ashford,* and it fits well into the existing plan. It is possible that the parallelism with Ashford only extends to the probability of a central tower, for Ashford Church seems to have been cruciform, at any rate in the thirteenth century, and there are no signs of transepts at Great Chart. Transepts are not wont to be entirely eliminated, leaving no mark upon the plan of a church, so that if the central-tower theory is to be retained we are reduced to imagine at Great Chart a church of the middle-Norman type, of which Boughton Monchelsea is (or was) an example—a short aisleless nave, a central tower without transepts and rather wider in cross-section than in longitudinal section, and a chancel of the common type. Such a plan would seem to suit admirably the requirements of the growth of Great Chart Church.†

There is no sign in the walls of the existing building of any such materials as were commonly used in the thirteenth century. So far

* See a few remarks on Ashford Church at the end of this Paper.

† It is possible that some light might be thrown upon the early history of the Church if some one would measure up and make a careful drawing of a cross-section through the chancel and its two side-chapels, and a block-plan shewing the exact trend of the ground-lines of the several parts. It is significant that in the clerestory wall on the north side there is a set-back of seven or eight inches above the column which carries the chancel-arch, the wall to the east of the set-back being by that amount thinner than to the west. This set-back would naturally represent the amount by which the original chancel-wall or tower was out of line with the nave-wall or nave-arcade, but it does not represent the position of the north-east quoin of the original nave, since it lines with the western face of the gable of the chapel and with the western face of the chancel-arch, whereas the original quoin would line with the eastern face.

I have not detected a single piece of fire-stone, and such could hardly be the case had any extensive alterations been carried out in that century.

THE FOURTEENTH-CENTURY CHURCH.

In the fourteenth century the Church seems to have been almost entirely remodelled. There is a doubt about the date of the main arcades, but if (as I believe) they may be placed in the fourteenth century it may be said that the Church then assumed its present ground-plan, excepting only the line of the wall of the north aisle of the nave and the disposition of the columns of the chancel-arcades and the staircase to the rood-loft.

At the east end of the south chancel-chapel, commonly known as the Goldwell Chapel, there is a three-light window (marked *a* on the Plan), having foliated intersecting tracery and a scroll-label with carved ends, which dates the chapel early in the fourteenth century. There is a good square-headed Decorated window (also marked *a*), perhaps a trifle later in date, in the side-wall towards the west. A single span-roof, probably the original roof, covers this building, which is the earliest part of the existing Church.

The east end of the chancel, the central portion of the east front, with its angle-buttresses and four-light window, is a modern rebuilding. It probably represents work of a date slightly earlier than the south chapel; the peculiar disposition of the buttresses suggests that they originally belonged to a chancel that was not quite so wide as the present chancel.

The northernmost of the three eastern gables is rather taller and wider than its southern companion, and its wall contains a three-light curvilinear window (*b*) of the reticulated pattern, with a good scroll-label with rounded ends.* Its date must fall within the first half of the fourteenth century. (The north chapel is known as the Godington Chapel.)

These works indicate a gradual remodelling of the eastern parts of the Church in the first half of the fourteenth century, the chancel having been first undertaken, then the south chapel, and lastly the north chapel. If there was a central tower it must have been removed about this time. The central-tower theory gains some confirmation from the fact that the west tower is a Decorated

* The mullions of this window and of the square-headed window of the south chapel are Bethersden marble. Two Decorated windows in Ulcombe Church shew this material.

structure of about the middle of the century. The west door has a good continuous moulding of that date, consisting of two wave-mouldings separated by a rather shallow hollow suggestive of a casement moulding, the whole being stopped with a large broach or dagger-stop, the arris of which runs up into the hollow (PLATE III., No. 11). Above the door is a two-light Decorated window, and above that again in the west and south sides there is a small single light, foliated, with ogee head and without label. The belfry-stage is marked off by string-courses, the uppermost being a bold scroll-moulding. The bold rectangular buttresses, the re-entrant angles of which are filled in with masonry, run up in stages to a foot or two above the floor-level of the belfry-stage. That stage contains in each side a two-light window of later date (replacing perhaps an original single light); there is an apparent difference between the masonry of the rear-arches of these windows and that of the smaller windows below as seen on the inside of the tower. There can be no doubt whatever that the tower is a fourteenth-century structure, and the thickness of the end-walls of the aisles shews that they were built at the same time with the intention of giving the tower additional support. It is probable that the whole of this work, intimately associated with the remodeling of the nave, was erected beyond the west end of the older Church.

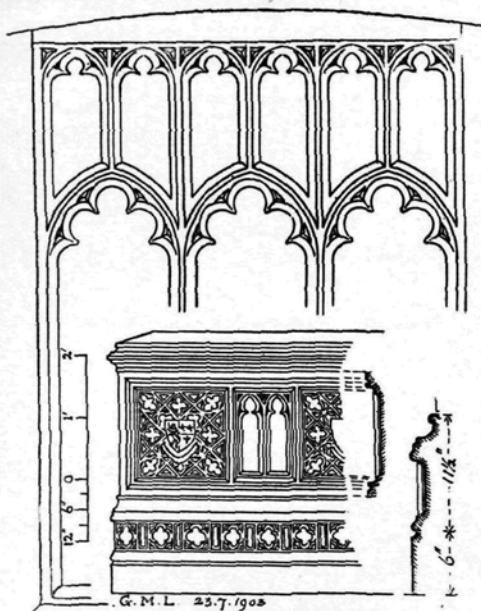
The weather-moulding of the contemporaneous nave-roof (which has been destroyed) remains upon the east face of the tower, seen from inside the nave. The yellow lines in the cross-section* of PLATE I. shew how the level at which the wall-plates of the fourteenth-century roof rested on the side-walls tallies with the present level of the battlemented top of the cross-wall. At that level the roof was canted a little, and thence continued down at a slightly less pitch to cover the aisles, so that a single span-roof covered the nave and its aisles. On the west face of the wall over the cross-arch in the north aisle, a faint double line indicates the slope of the aisle-roof and the width of one of its rafters. Of course it follows that the side-walls of the aisles were much lower than they are now; they cannot have been more than about eight feet high from floor to wall-plate. Their side-windows may have been square-

* I will not vouch for the absolute accuracy of the section. Some of the measurements were very difficult to get, and are guessed. For others, which I had not time to get, I am indebted to Mr. J. Bowman of Great Chart House; among them the important measurement of the height of the collar-beams from the floor of the nave.

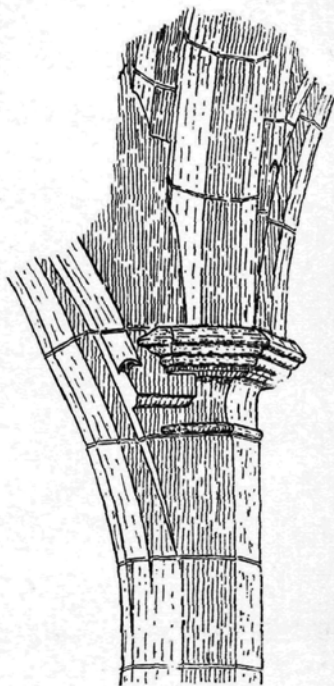
headed two-light windows, like the Decorated side-lights at Icklesham in Sussex, or small single lights like those at Hinxhill, near Ashford. The latter are very much like the small windows of Great Chart tower in the stage just below the belfry.

The width of the north aisle of the Decorated Church, narrower than the present aisle, is indicated by the face of the projecting bit of masonry on to which the cross-arch abuts. The south aisle, a little narrower than its fellow, retains its original width. The south door belongs to the fourteenth-century work. It has continuous mouldings, consisting of a wave and hollow chamfer with dagger-stop (PLATE III., No. 12). The same stop is seen in the jambs of the blocked door that formerly led from the tower into a passage under the ridge of the destroyed roof, of which the collar-beams would form the floor. It also occurs in a curious corbel which supports the wall-plate of the north chapel.

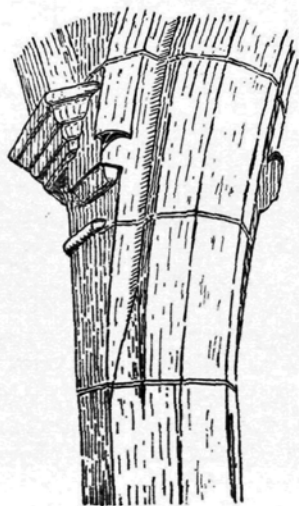
So far as we have gone in our study of the fourteenth-century reconstruction of the Church, we have seen that the eastern part then got its three alleys, each with its span-roof, and we have imagined the western part as having an all-over span-roof abutting upon the west tower and covering low-walled aisles. All this might have been carried out without very much disturbance of what formerly occupied the lines of the present arcades, except indeed at the central tower, if such tower formerly existed. We now come to the vexed question of the date of the present arcades. It is conceivable that (excepting at the central tower) the old arcades were left unaltered for a time, the walls above them being merely raised to carry the increased height of the new roof. Of course the work must have been exceedingly "patchy" in appearance, and something at least must have been done on the line of the present great cross-arch to form a screen between nave and choir. I am warned that it may be affirmed by some that the mouldings of the present arcade, as studied on paper, proclaim it most distinctly to be a work of the middle of the fifteenth century. If this be so, then the make-shift arrangement and patchy appearance must have been suffered to remain for nearly a century; and the next step in the growth of the Church must have been the erection of the present arcades and cross-arches at the same time as the heightening of the south aisle-wall, the re-erection of the north aisle-wall in line with the side wall of the chapel, the insertion of the square-headed windows (marked *c*), and the covering of the aisles with flat roofs—all carried out about the middle of the fifteenth century.



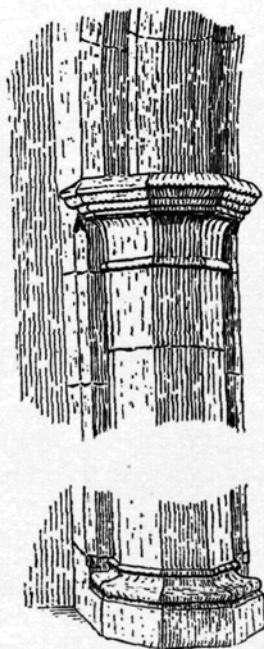
FIFTEENTH-CENTURY WINDOW, AND TOMB
IN NORTH CHAPEL.



NAVE ARCADE :
CENTRAL COLUMN, FROM NORTH AISLE.



NAVE ARCADE :
CENTRAL COLUMN, FROM NORTH CHAPEL.



NAVE ARCADE :
WEST RESPOND, NORTH SIDE,

This view has been advanced to me with force, and I have paid a special visit to the Church to review the *pros* and *cons*, and it is not without some hesitation and misgiving that I feel bound to adhere to my former opinion that the arcades and cross-arches, together with the great tower-arch—for the tower-arch is manifestly of the same date as the arcades—are all contemporaneous with the tower, and that they formed part of the general remodelling of the Church carried out in the fourteenth century. I shall hope to shew that the character of the mouldings is not inconsistent with this opinion. From a structural point of view it is difficult to entertain any other. The tower-arch has not the appearance of having been inserted; it appears to belong to the original design of the tower. The position of the window in the west wall of the tower, as well as the high pitch of the fourteenth-century roof, demands a high tower-arch; and assuming that such an arch was included in the original design, one cannot imagine that fifteenth-century builders would replace it by a new arch of similar proportions. And if the tower-arch is fourteenth-century work, the nave-arcades also are fourteenth-century work.

Cymagrams of the sections of the bases and capitals of the arcades are given in PLATE III. (Nos. 13 and 13A), and they are further illustrated by the accompanying sketches in PLATE II. Are they to be assigned to the middle or third quarter of the fourteenth century, or to the latter part of the fifteenth? They are not uncommon in Kent,* and some day probably a dated example will be discovered, and the question will be finally settled. In the meantime I venture to assign them to the fourteenth century. The mouldings of the abacus and bell of the cap are merged into one, a very common feature of Perpendicular caps; but it is a feature that had begun to assert itself in late-Decorated times. The top of the abacus, instead of being rounded, has a flat slope, which is said to be a mark of the later date; but Paley, in his *Gothic Mouldings*, gives several examples of Decorated caps with bevelled abaci.† The bold bell-base is wide-spreading and of no great height. It has no distinct plinth-moulding, such as is almost invariably found in fifteenth-century bases. The responds of the

* Cf. the example from High Halden in PLATE III., No. 17. Brandon, in his *Analysis* (Section I., Plate 21), figures an example of base and cap very similar in form from Boughton Aluph under "Decorated."

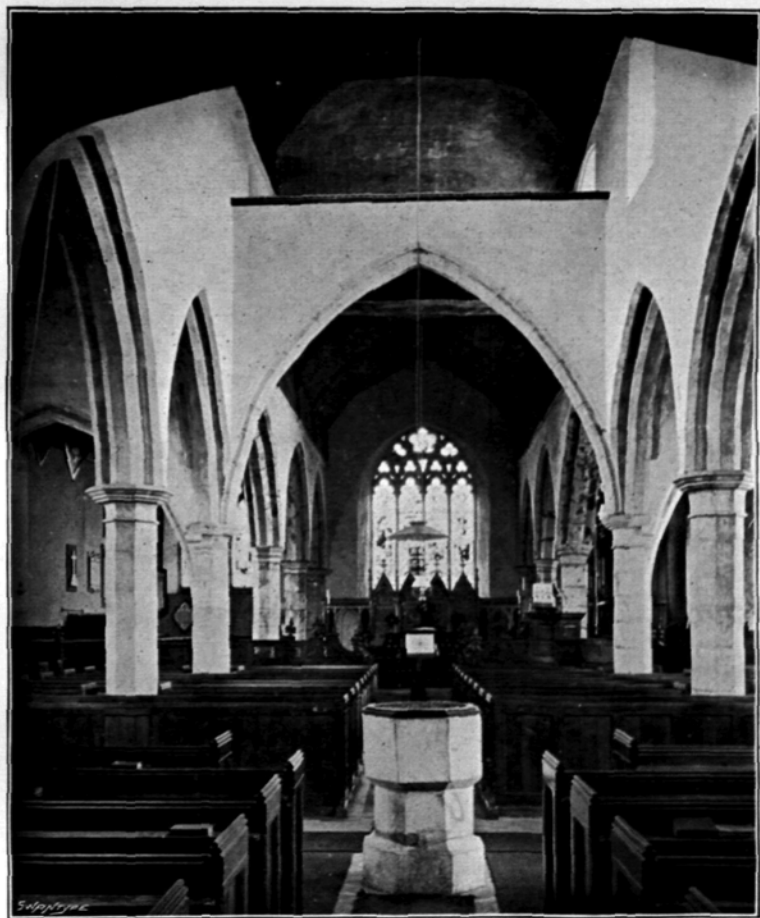
† I believe that the capitals of the early fourteenth-century nave of York Minster shew the same feature.

tower-arch and of the arcades, of which a sketch is here given (PLATE II.), have their edges hollow-chamfered, and the chamfers have carved terminations that are distinctly Decorated in character.

I venture then to think that the architectural details, as well as the general proportions of the building and a natural sequence in the erection of its different parts, demand a fourteenth-century date for the whole of the present Church, excepting those parts as to which all are agreed that they are the outcome of late fifteenth-century alterations. The fourteenth-century remodelling (herein designated Decorated or late-Decorated work) may have spread over many years, but I think it must have been completed not later than the third quarter of the century.

We may now pass on to consider further the main arcades and the great cross-wall with its three arches, assuming that they are work of the fourteenth century. The columns of the arcades stand in two continuous rows from end to end of the Church without break, corresponding in number and disposition (marked *e, f*). Taking the north side for description, the nave-arcade has three equal arches, resting on a western respond and three free columns. The third free column (*e**) supports three other arches, namely, the chancel-arch, the cross-arch in the aisle, and the first arch of the chancel-arcade. All these arches consist of two plain orders with chamfered edges. The lower order of the chancel-arch and that of the third nave-arch spring direct from the capital in the usual manner, while the upper orders are mitred with a minute broach or dagger-stop at about two feet above the cap. See the sketch in PLATE II.

There is conclusive evidence that the first arch of the chancel-arcade originally sprang from the capital in precisely the same way, but the arch has been removed and a later segmental-pointed arch of wide span has been inserted in its place. The curve of the original upper order remains for about three feet from the springing-line upwards, being worked on the same stones as the upper order of the chancel-arch, and the second stone above the cap shews the dagger-stop mitreing. The curve dies into a corbel, from which the upper order of the inserted segmental arch starts, while the lower order of the segmental arch rises from the cap. The form of the curve, when carefully measured and plotted, suggests that the arch when complete was a little lower in height and slightly narrower in span than the nave-arches. The segmental arch is the first of three arches of unequal span which now form the chancel-



GREAT CHART CHURCH :
LOOKING EAST FROM UNDER THE TOWER.

G. M. L., 1903.

arcade. The two central free columns (*f f*) have the same height and diameter as the other columns, but the mouldings of the caps and bases are distinctly later in design. In fact these two columns and the three arches which they support are work of late fifteenth-century date, while the eastern respond, with its base and cap, is precisely like and of the same date as the earlier columns of the nave; so that it is evident that the Decorated arcade originally extended from end to end of the Church, and that in the chancel its arches have been destroyed and the Perpendicular arches built in their place. Working upon the curve of the Decorated arch that remains *in situ*, I find that four arches and their columns would exactly fit into the space occupied by the three existing Perpendicular arches, and that the height of the arches would be the same as that of the present ones, a height which admirably suits the height of the wall-plate of the Decorated roof, a part of which remains.* It is difficult to resist the conclusion that such was the original arrangement of the late-Decorated arcade of the chancel. The columns must have been exactly like those of the nave, and each of the four arches must have had a free span of 8 feet 3 inches on the springing-line, and their apices at the same height as the present arches, a little lower than those of the nave. Reasons for the fifteenth-century alterations will be suggested later on.

While the lower order of the chancel-arch and that of each of the adjoining arcade-arches springs from the top of the capital of the column which supports them, the lower order of the cross-arch at the east end of the aisle springs from out of the side of the same column below the capital. The springing-line coincides with the second joint below the cap, and is nearly four feet below the top of the cap, which is nearly ten feet above the floor-level. The descending surfaces of the lower order die upon the faces of the octagonal column. They are worked upon the stones which form the two uppermost courses of the column, the joints being horizontal throughout. The chamfer of the upper order terminates in a carved stop near the cap-mouldings, which die into the wall-surface, while the latter is stopped on the bell of the cap by a horizontal

* The chord of the arc is 3 feet 3½ inches, and the portion of the radius cut off by the chord, measured as accurately as the position admits, is 1½ inches. This gives a radius of about 9 feet for the upper order of the destroyed arch. The radius required to fit the four arches into the space is 8 feet 9 inches. Allowance having to be made for slight inaccuracy of measurement, this is sufficiently correct to prove the conclusions reached.

moulding which in form is like the lower part of a Decorated scroll. The capital and the adjoining orders of the side-arch are all worked on one large stone, and the work is all carefully executed (PLATE II.).

Much of the foregoing description applies to the arcade on the south side of the nave and chancel. Both the east and the west responds and the three western columns have the same bell-base and the same kind of capital as the corresponding columns on the north side, the only difference being that caps are larger (in vertical measurement) and the impost-level is about five inches higher throughout. As on the north side, the two columns in the chancel with their three arches clearly indicate the fact that they are of later date than the rest of the arcade. The arches are exactly like those on the north side, but the mouldings of the bases and caps are much ruder in form, suggesting a difference not so much in the date as in the workmen. It is not improbable that the owners of the respective chapels each carried out his portion of the work.

Careful measurements of the chancel-arch and the two side-arches have drawn attention to a curious irregularity in their construction. As originally designed they were intended to be lower than they are, and it was not until the springers and the voussoirs next to the springers had been cut, and perhaps placed in position on the column, that the intention to make the crowns of the arches higher was conceived. The consequence of this is that the curve of the arches is greater just above the caps than it is higher up. The centres of the lower curves lie in every case upon the springing-line, a few inches beyond the centre of the span, while the upper curves are struck with a radius of a little more than two-thirds of the span. The original intention would have given the chancel-arch a form not far removed from a semi-circle. The irregularity is absent from the sides of the arches that spring out of the sides of the aisle-walls, suggesting that the columns were first erected. Other points to notice are the absence of the broach-mitreing on the south side and the inter-penetration of the cap-mouldings with the upper order of the side-arch.

The tower, as we have seen, belongs to the same work as the nave-arcades. The caps and bases of the tower-arch are exactly like those of the nave, but it is curious to note that in the tower the larger cap is on the north and the smaller one on the south side—the reverse of the difference noticed in the nave-arcades.

THE FIFTEENTH-CENTURY ALTERATIONS.

We now come to the alterations which were carried out in the latter part of the fifteenth century and the early part of the sixteenth. In the first place a new aisle-wall on the north side was built, nearly three times the height of the older wall and just outside its lines, so that it forms a continuation of the wall of the chapel; and at the same time the wall of the south aisle was raised to nearly the same height. Both aisles were covered with flat lead-roofs, and supported by uncommonly numerous and massive rafters connected with a central longitudinal beam or purlin. In the case of the north aisle, which is four feet wider than the south, stout beams or principals occur at intervals, and are supported by wall-pieces and panel-braces. In the south aisle there were no wall-pieces or braces in the original construction. I confess I have not grasped the method of construction and support in this case, but that the principle adopted was unsound is evident from the fact that it was found necessary at some later time to give further strength by the use of a series of very massive timbers, the feet of which are inserted into the side-wall, while the upper ends are carried by short wall-pieces and braces.* The mouldings of the wall-plates and principal rafters of both aisles are given in the accompanying Plate (III.). Those on the north side consist of a small bowtell and an ogee, those on the south of a hollow chamfer and ogee (Nos. 14 and 15).

Of the same date as the flat roofs are the square-headed two- and three-light windows which appear in the side and end walls of the aisles. Two similar windows were inserted in the side of the north chapel, and one in the side of the south chapel (all marked c).

A more important work, which was doubtless in contemplation when the aisle-roofs were rebuilt, was that of the building of a clerestory to the nave and the erection of a new nave-roof; a rood-loft was erected at the same time. (In the latter half of the fifteenth century, the introduction of the printing-press must have had a considerable influence upon "the people" in the matter of

* The roof still looks unsafe, especially at each end, where the longitudinal beam is coming away from the wall and sinking. The ends of some of the rafters, too, may be rotten. To an amateur it looks as if a couple of additional supports, one at each end, like those mentioned in the text, would go a long way towards ensuring its safety. PS.—I hear that the repair of this roof is now under consideration.

public worship. The use of *Primers* and *Lay-folks' Mass Books*, and other helps to private devotion or public worship, hitherto scarce and costly, became comparatively common. The need of light was making itself felt in many a dark Church, and as the windows of this period were usually filled with painted glass it was necessary that they should be large and numerous. The raising of the aisle-walls to admit the insertion of windows thus became common, and in many cases the addition of a clerestory was carried out about the same time.)

The clerestory at Great Chart is peculiar, inasmuch as it was extended eastwards about eleven feet beyond the chancel-arch, a portion of the choir-roof at the west end having been removed to make way for it. The purpose of this was to allow light to be shed from the clerestory on to the rood-loft, which was placed on the *east* side of the chancel-arch instead of in the usual position on the west side of it. It is difficult to find a good reason for this peculiar arrangement, the more so since it involved not only a trespass upon the rights of the owners of the side-chapels, but also a complete rebuilding of the chancel-arcades.

The stairs to the loft were built on the north side; the entrance and exit are seen in the wall of the chapel.* In order to make room for the loft, which extended apparently all across the building, it was necessary to remove one of the columns of each arcade and the two arches springing from it. Then came the question how the breach should be made good. The space left was too wide to be conveniently arched over by means of a single arch on each side; the architect therefore determined to rebuild the arcades entirely from end to end, replacing the three Decorated columns and their four arches by three new arches with two columns. Even thus it was necessary to make the westernmost arch on each side wider than the others, and a fine imagination of perspective effect prompted the architect to make the middle arch wider than the eastern one.† In order to keep the crown of the widest arch at the same level as that of the others, the architect was obliged to adopt for it the flat-sided form of arch technically called a segmental-pointed arch, and in this arch he was content to use the plain-chamfered voussoirs which came from the Decorated arches which he had demolished. But in looking at these somewhat awkward arches, one on each

* Their position is indicated in the longitudinal section, PLATE I.

† The spans of the three arches are respectively 14 feet 5 inches, 11 feet 10 inches, and 9 feet 6 inches on the springing-line.



SOUTH-EAST VIEW OF GREAT CHART CHURCH.

G. M. L., 1903.

side of the chancel, it must be borne in mind that they were practically hidden from view by the broad roof-loft beneath them. The two remaining arches on either side were built with newly-cut voussoirs of larger size, and with hollow chamfers, according to the prevailing fashion of the time.

It has been previously noticed that the nave-clerestory was extended eastwards over the rood-loft, and that a part of the chancel-roof was removed to make way for the new roof. A massive tie-beam, resting on the ends of the clerestory walls, carries the gable of the Perpendicular roof. The triangular spaces under the beam and within the ends of the clerestory walls on either side of the chancel-roof are filled with nine-inch walling composed almost entirely of Roman bricks. All this may be seen by anyone who will take the trouble to go on to the roof of the chancel. In making good the end of the chancel-roof the fifteenth-century architect inserted the tie-beam seen within the Church. To it probably are framed the ends of the plates which secure the feet of the rafters. The timbers are hidden by a modern ceiling of wood.

The clerestory windows above the rood-loft, one on each side, are three-light square-headed windows of ordinary pattern. In the nave the clerestory has three similar two-light windows on either side above the arcade-arches.*

The nave-roof is a plain collar-beam roof with vertical struts and small collar-braces. It also has five tie-beams: one at each end, one directly over the chancel-arch, and two in the nave. They are so disposed that in four cases the feet of a pair of common rafters, as well as the adjoining vertical struts, could be (and doubtless are) framed into the beam. In one case, however, the beam lies *between* the rafters: doubtless the wall-plates are framed into it.

At the west end of the south chapel there is an alteration in the roof which is worth notice. The pointed roof stops short of the west end by $4\frac{1}{2}$ feet, and that space is covered by a flat roof of the same pitch and design as the adjoining aisle-roof, but (of course) not of the same date. In the side-wall within the same space there is a two-light window (*d*)* of the same pattern as the clerestory windows, but slightly smaller. Possibly this window was related in some way to the rood-loft. For a reason that is not quite clear the fifteenth-century architect removed the west gable of the chapel and about $6\frac{1}{2}$ feet of the roof, and extended the flat

* See the photograph of the exterior of the Church.

roof of the aisle to that amount, heightening the side-wall to carry it. That this bit of roof is not of the same date as the aisle-roof is proved by slight differences in the pattern and scantling of the wall-plates and rafters. The external wall-plate has a joint at the required point, and the added portion is quite different from that to the west. This can only be seen at close quarters by means of a ladder.

The interesting question of the exact line of separation between rector and people in this Church still remains. There can be no doubt, I think, that the great cross-arch marks the eastern limit of the nave in mediæval times. If there was no central tower, it stands on the line of the original chancel-arch; if there was a tower, then that arch stands on the site of its west wall. But the position of the arch does not settle the question. The people's seats run beyond the original limit of the nave, and the westward limit of the choir seats and Godington pew runs across the Church at a distance of 7 feet 9 inches from the eastern face of the chancel-arch; while a slight rise of floor-level and a difference in the character of the paving occurs at $7\frac{1}{2}$ inches further east, and the nave-roof extends nearly 11 feet beyond its original limit.

Perhaps the solution of the question will be found in the acceptance of the central-tower theory. For the purpose of worship the tower-space would be no man's land; and on the removal of the tower the right to occupy that space might very well have been decided by division and the erection of a rood-screen about 8 feet east of the new cross-arch. A new rood-loft built at the end of the fifteenth century would naturally be placed on the same line. This seems to be a natural and feasible explanation, both of the anomalous position of the rood-loft to the east of the chancel-arch, and of the ill-defined line of separation between people and parson in the Church. It would be interesting to learn who has been charged from time to time with the repair of the eastward extension of the nave-roof—rector or churchwardens?

There is a similar case of uncertainty at East Malling Church, where the rectorial pews extend under the chancel-arch westwards to the middle of the easternmost sever of the nave. The entrances to the rood-loft are seen in the piers on the *west* side of that sever.

At St. Peter's, Thanet, there was formerly a rood-loft on the east side of the chancel-arch. The entrance to the loft remains on the north side of the chancel, above the first free column of the

arcade of a chancel-chapel. Canon Scott Robertson believed that there was once an early-English tower on the south side of the first bay of the chancel.* It would be interesting to hear of other examples.†

The Editors have kindly favoured me with an advance copy of a Paper that is to appear in this Volume from the pen of the Rev. Harry W. Russell. It contains some confirmation of the dates assumed in this Paper.

Mr. Russell quotes from Weever the names of sixteen men of whom portraitures formerly existed in a fifteenth-century window in the north chapel, and who were accounted by tradition, "from the father to the sonne," to have been the builders of the Church. Mr. Russell says the name of one of them, Thomas Wred, appears as that of a witness in the Christ Church Registers in 1345, and adds that the sixteen names probably represent benefactors who lived in the second half of the fourteenth century.

In the north chapel stands a fine altar-tomb of William and Alice Goldwell, who died in 1485. Their son was James Goldwell, who became Vicar of Great Chart in 1458, holding at the same time many valuable preferments. He became Bishop of Norwich in 1472, when he obtained from the Pope "an indulgence in aid of the restoration of Great Chart Church, which had been damaged by fire." A broken inscription in a window, quoted by Weever, suggests that he had commenced work at Great Chart before his consecration to the bishopric. Thomas Twysden of Chelmington in Great Chart, by his will dated 12 Oct. 1500,‡ provided that if his children should die without heirs his executors should sell his lands and give "to the most nedefull workys of the said Church xxl." This was a large sum of money, and though the Church did not benefit by it, the provision of the will proves that important work was in progress as late as the year 1500. The conclusion to

* *Archæologia Cantiana*, Vol. XII., p. 379 *et seq.*

† Reader, please send "copy" to the Editors for "Notes and Queries" in the next volume. PS.—The Rev. Walter Marshall, F.S.A., writes, under date 25 May 1903: "Many churches shew the entrance on to the rood-loft high up in the wall, just east of the chancel-arch, but I do not know of any rood-lofts positively placed east of the chancel-arch, except perhaps at Beckley (Sussex), where the upper entrance to the rood-loft (not now existing) is halfway between the chancel-arch and the east wall of the church! In some cases the upper entrance does not prove the position of the rood-loft, because the entrance need not, could not, always have been straight on to the loft itself."

‡ See copy of will in *Archæologia Cantiana*, Vol. III., p. 202.

be drawn from all these notices is that the fifteenth-century alterations were begun about 1460, and were still incomplete at the very end of the century.

Before reading Mr. Russell's Paper I had written the following note upon the Goldwell altar-tomb:—

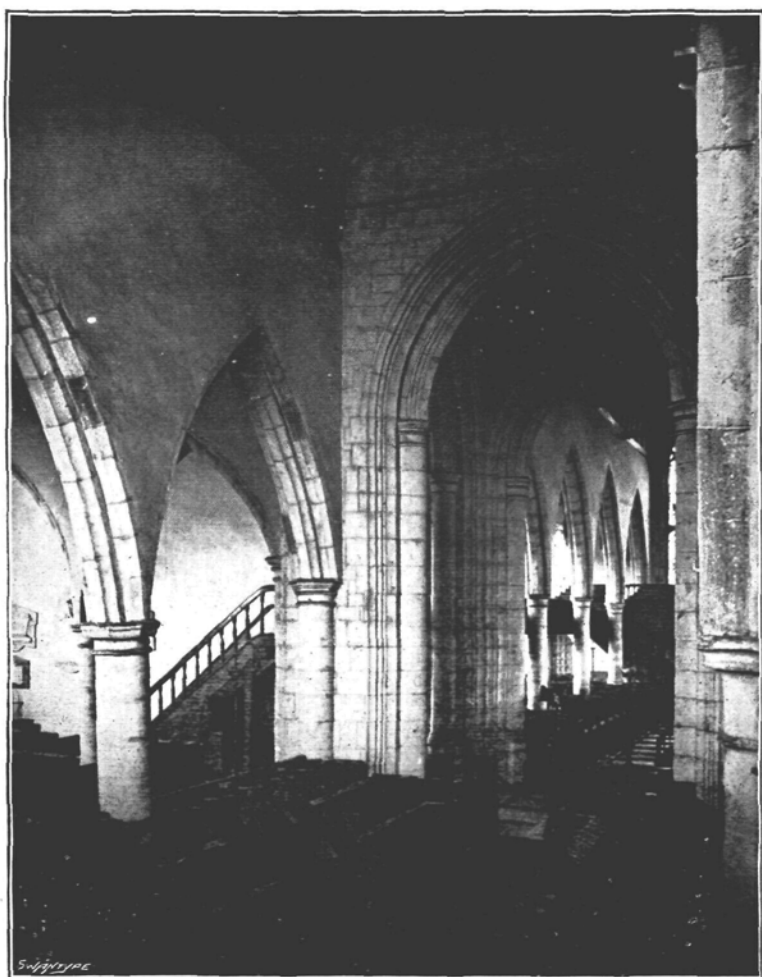
It will be noticed that the plinth moulding has the form of the bell and cushion seen in the bases of the late columns of the chancel-arcade on the north side; and that both the ends and the sides of the tomb are adorned with arcading which bears a strong resemblance to the tracery of the square-headed Perpendicular windows of the Church.* We cannot be far wrong, therefore, in assigning the windows, which are associated with the building of the flat roofs over the nave-aisles, to the third quarter of the fifteenth century, and the nave-roof and its contemporaneous works to the end of the century.

ASHFORD CHURCH.

The neighbouring Church at Ashford has a history which in many respects is similar to that of Great Chart. In the quoins at the junction of the aisle half-arch and the transept on both sides there are several pieces of thirteenth-century stone, and one or two bits of Caen-stone shewing the characteristic face-marks of the bankerman's axe. There was a Norman Church at Ashford, as at Chart. Probably it had a central tower, either with or without transepts. In the thirteenth century there appears to have been some alteration. The upper orders of the late fourteenth-century arcades in the south transept are composed of small voussoirs of fire-stone, possibly *in situ*, probably from arches in a similar position.† This suggests that Ashford Church in the thirteenth

* See PLATE II.

† In Selling Church, near Faversham, the recent removal of plaster from the stone-work of the nave-arcades has revealed a similar composite construction—the upper orders of all the arches consist of thirteenth-century voussoirs of fire-stone, which must have come from early-Pointed arcades of exactly the same form and disposition as the present arcades. The remains of a plinth also of one of the early bases has been uncovered. In the rebuilding or remodelling of the arcades with Kentish rag, either the upper orders of the old arches were retained *in situ* and underbuilt, or the new arches were raised on taller columns and the old voussoirs re-used so far as they would serve. A somewhat similar device was followed by the later-Norman builders at Rochester when they remodelled the early-Norman arches of the nave-arcades: they retained the inferior order and rebuilt the superior order with new voussoirs.



ASHFORD CHURCH :

G. M. L., 1903.

LOOKING SOUTH-WEST, FROM THE NORTH-EAST BAY OF THE CHANCEL.

century was cruciform. Then came a considerable remodelling in the fourteenth century, of which there is abundant evidence in the arcades of the chancel, south transept, and nave.* Then followed the insertion of new windows throughout, and the rebuilding of the central tower by Sir John Fogge *circa* 1475. The fourteenth-century columns of the chancel carry arches of a tall segmental-pointed character, the whole wall on each side having apparently been rebuilt at the same time as the tower. The western bay of the nave is modern, and the aisles have been widened, I believe, in recent times. The accompanying photograph was taken from the north-east chapel.

LOCAL MOULDINGS. (PLATE III.)

Little need be added to what has already been said about some of the mouldings shewn in this Plate. The majority of them illustrate the Papers on Great Chart and High Halden. Others have been included as a contribution to the study of local mouldings, whereby it is hoped some doubtful questions of date may ere long be finally settled. Those examples to which a date in figures is attached are approximately dated by documentary evidence; the dates suggested for some of the others may require revision.

In writing upon Crayford Church in this Volume, I referred to the caps of the nave-arcades of Dartford as shewing a scroll-and-roll moulding. I was writing from memory, and the cymagram which has just been taken for me by one of the school-teachers (Mr. P. Bell) shews that the description is somewhat inaccurate. The arcades, however, are associated with work which undoubtedly is late-Decorated, and, if Canon Scott Robertson's date for them is even approximately correct,† the capital is interesting as an example of the early debasement of the true scroll-and-roll moulding and the early introduction of the bevelled top in the abacus, and thus it would afford confirmation of the early date (middle fourteenth-century) which in this Paper I have ventured to assign to the arcades of Great Chart. The form of the capitals at Great Chart (No. 13; see also PLATE II.), almost always associated with some form of bell-base, is very common in Kentish churches, and very possibly it may eventually prove to be a fact that caps of this form originated at works connected with some Kentish-rag quarry, and that they were supplied with very little variation in form to all parts of the county throughout a prolonged period.‡ The question would be settled if we could organize a systematic collection of carefully-

* See the mouldings in PLATE III.

† Canon Scott Robertson, in *Archæologia Cantiana*, Vol. XVIII., p. 384, expressed an opinion that "the whole work seems to have been completed by the year 1333."

‡ The example from Waterringbury (No. 9) shews a later variation.

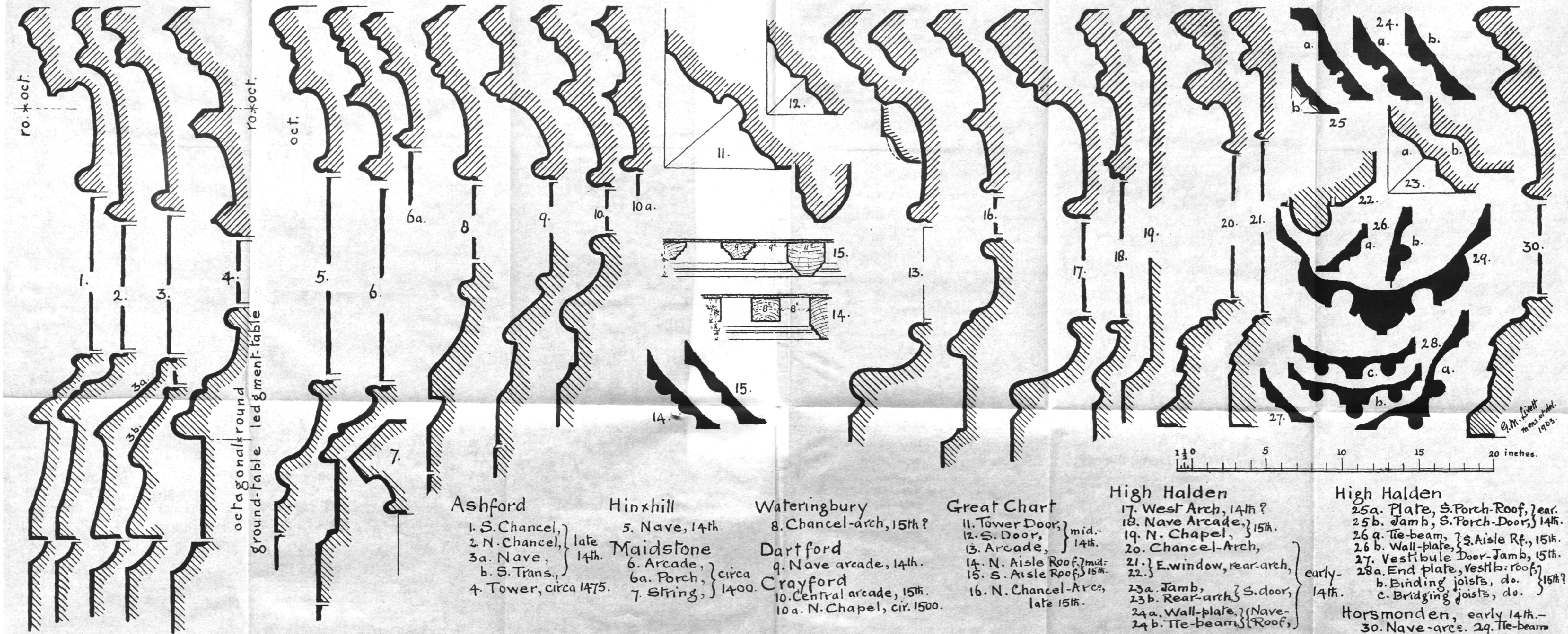
measured sections, taken either with the cymagraph or with strips of lead in the way suggested by the late F. A. Paley in his *Gothic Moldings*.

The group from Ashford is interesting as shewing the evolution of the bell and cushion base and allied forms, of which the early fourteenth-century base at Horsmonden (No. 30) suggests the initial conception.

No. 6, from Maidstone, shews an early example of the fully-developed bell and cushion base, of which Nos. 4 and 16 prove the use nearly a century later.

The Maidstone sections, Nos. 6 and 6A, which are worked in Caen-stone, shew the contemporaneous use of the scroll-moulding and a debased form of scroll in the same building, even in the same capital, *e.g.*, in the abacus and the necking in No. 6. Kentish rag is the material of most of the other examples.

Recurring to the subject of the working of stones in the quarry, reference may be made to a fabric roll of Rochester Castle, dated 1367-8, and printed in *Archæologia Cantiana*, Vol. II., p. 111 *et seq.* Mention is therein made of free-stone from Beer, Caen, Stapleton, Reigate, and Fairlight; of rag from Maidstone; and of a large quantity of wrought stone from Boughton Monchelsea. It appears that this last-named stone was ready-wrought at the quarries before being taken to Rochester. It was used for newels, coping-stones, drip-stones, strings, cornices, base-courses, and other like purposes. The free-stone in this case appears to have been worked at the Castle. But in our country churches in some districts comparatively little free-stone was used in the fourteenth and fifteenth centuries, and I doubt not that much of the stone for windows, doors, and arches was worked at the quarries at Boughton Monchelsea, East Farleigh, and other places near Maidstone. Perhaps a collection of masons' marks, as well as of mouldings, would throw some light on the subject. But the investigation suggested would not be confined to the fourteenth and fifteenth centuries, or to the use of Kentish rag only. I have myself noticed interesting relationship of work and workmen in two instances. The Church of Horton Kirby was undoubtedly built by the same masons as the choir of Rochester Cathedral, using the same moulds and the same kind of stone, early in the thirteenth century; and there are parts of the churches of High Halden, Goudhurst, and Horsmonden which were all designed by one man, and erected with stone from one quarry, early in the fourteenth century.



Ashford

1. S. Chancel,
2. N. Chancel,
- 3a. Nave,
- b. S. Trans.,
4. Tower, circa 1475.

Hinxhill

5. Nave, 14th.

Maidstone

6. Arcade,
- 6a. Porch,
7. String,

Wateringbury

8. Chancel-arch, 15th?

Dartford

9. Nave arcade, 14th.

Crayford

10. Central arcade, 15th.
- 10a. N. Chapel, cir. 1500.

Great Chart

11. Tower Door,
12. S. Door,
13. Arcade,
14. N. Aisle Roof,
15. S. Aisle Roof,
16. N. Chancel-Arch,

High Halden

17. West Arch, 14th?
18. Nave Arcade,
19. N. Chapel,
20. Chancel-Arch,
21. E. window, rear-arch,
22. Jamb,
- 23a. Jamb,
- 23b. Rear-arch,
- 24a. Wall-plate,
- 24b. Tie-beam,

High Halden

- 25a. Plate, S. Porch-Roof, 7 ear.
- 25b. Jamb, S. Porch-Door,
- 26a. Tie-beam, S. Aisle Rf., 15th.
- 26b. Wall-plate,
27. Vestibule Door-Jamb, 15th.
- 28a. End plate, vestib. roof,
- b. Binding joists, do.
- c. Bridging joists, do.

Horsmonden, early 14th.-
30. Nave-arch. 29. Tie-beam