VI.—NEW VIEWS ON WARDEN, BYWELL AND HEDDON-ON-THE-WALL, CHURCHES.*

By Edward Gilbert.

[Read on 24th April 1946.]

WARDEN.

The belfry windows of the church tower at Warden-on-Tyne, bear on the history of the belfry window in England. The Anglo-Danish belfry window is double-headed. Baldwin Brown, for reasons which seemed good to him, placed these windows exclusively in the reign of Edward the Confessor.[1] This view was rejected by Sir Alfred Clapham,[2] who assumes that west towers date in England from the tenth century, and had the double-headed openings from the beginning.[3] He does not, however, consider the difficulties of the view, of which the Warden belfries are one.

The view put forward by Baldwin Brown demands that there should have been an earlier form of belfry window than the double-headed in England, since there is no reason to suppose that there were no belfry windows in England from about 950 onwards. Consequently when Hodges[4] declared that Warden tower was Anglo-Danish, and its belfry windows though modernized externally were ancient internally and of one single square-soffited order, the

* Photographs by Edward Gilbert, drawings of figures by Margaret Dittmar.

[1] *Arts in Early England*, II, p. 385.
[2] *English Romanesque Architecture*, I, p. 118.
[3] *Ibid.*, plate 7, p. 39.
[4] *Reliquary*, April 1893.

evidence was welcomed as possibly filling the awkward gap, and providing an earlier type of belfry window. I examined these belfry windows in January and April 1946. The workmanship on the inside is indeed rough, but not ancient. The windows are plainly not semi-circular, as is seen in plate II, fig. 1. What they are is not so easy to say. To the eye they look four-centred; in the plate they look pointed. The Anglo-Saxon arch is circular in form and perhaps occasionally elliptical. I know of no case of the segmental or four-centred, and there can be no doubt that these windows are not Anglo-Saxon. The date of the tower is uncertain. The argument for an Anglo-Saxon date is mainly the wall-thickness of 2′ 10″, but this is thicker than the other Northumberland towers of the type, and could be Anglo-Norman of an early type. It provides a suggestion of Anglo-Saxon date, but is not, I believe, at all conclusive. I have myself found in the Danelaw churches of less thickness than this which are pure Norman, as Great Waltham, Essex, with a north wall of 2′ 6″.

Hodges[5] also calls attention to the fact that the tower arch is slightly splayed. He connects this with the west wall of the main chamber in St. Wilfrid's crypt, Hexham. But this door was cut back for a purpose, which was to let more pilgrims get a view. It was functionally a window, in all probability, and hence the splay is normal. The Anglo-Saxon door is never splayed. The Norman and still more the Gothic door is splayed, and this detail here argues rather against the Anglo-Saxon date of the tower than for it. There is a splayed and plain door of thirteenth century date at Bywell St. Peter.

The features here are not very favourable to an Anglo-Saxon date. The tower arch is small and crude, and entirely both in jambs and arch, in the Norman Romanesque manner. The arch is in two rings of uncut stone, which is not a late Anglo-Saxon feature. The windows of early date are three. On the first stage south is a lancet in

[5] *Ibid.*

Norman Romanesque manner, and on the second stage west is another (fig. 1). Of course Norman Romanesque manner is no criterion of Norman date. This should be remembered. Moreover, the small window at the third stage south has monolithic jambs, which are Anglo-Saxon Romanesque in type (fig. 2). Inside, however, this window is of the usual Norman manner with rubble vault and angle-dressings. The quoins (plate 1, fig. 1) are degraded and not in the manner of Wharram-le-Street, Appleton-le-

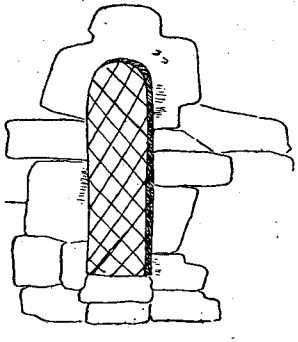


FIG. 1.

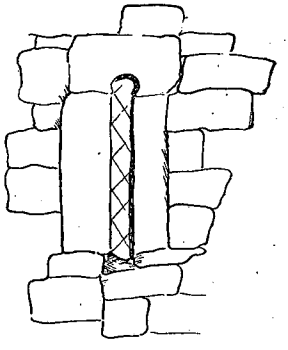


FIG. 2.

Street, and Billingham, which are late Anglo-Danish with good quoining. It should be noted, too, that contrary to Anglo-Danish practice there is not any doorway from the nave to the first floor of the tower. Warden may well be Anglo-Saxon, but it would be rash to base any arguments on the fact.

QUOINS.

The evidence of quoins in interpreting a church is of greater importance than has perhaps hitherto been conceded. There is no scientific terminology for dealing with quoins. Yet we must have one if we are to discuss them adequately. Baldwin Brown used such terms as "Stow-fashion," and these are both insufficient and unscientific.

I propose, therefore, to use a few simple terms. An ordinarily cut stone has length, breadth, and height, two faces, two sides, and two ends. I propose to call the longest measurement of a stone the length, the next longest the breadth, and the least the height, no matter how the stone lies. Otherwise I find confusion occurs. Thus, if on end, the length is a vertical measurement. What Baldwin Brown calls stow-fashion, i.e. stones with faces alternately on one and the other side of the angle of a quoin, I propose to call side-alternate (fig. 5), such stones lying on their sides. If the quoin-stones alternate in the same way and lie on their faces, I call it face alternate (fig. 4). There is a chronological difference between the types. If the cross section of the quoin stones is square, and they alternate as above, I call the quoining dovetailed (fig. 3). Similar stones set on end create pillar quoining (fig. 6). If the stones have square faces and are laid on face, the quoining is clasping (fig. 7). For notation I use S for a stone on its side, F on its face, X for a stone of square cross section on its face or side (the same), P for a pillar stone, and C for a clasping stone. By this notation long and short quoining, which consists of pillar stones and small clasping stones in turn, should be marked PCPCPC (fig. 8). No doubt this is complicated, but it is, I believe, the only way of dealing scientifically with the matter, and will be simpler in the long run. Of course the size and cut of the quoin stones affects their appearance and has chronological significance. Stones can be big, medium, or small. Generally speaking the Anglo-Saxons liked big quoin stones. They can be well-cut, fairly cut, or uncut. In good periods or architecture, the stones are generally well cut and regularly laid according to some system. In bad periods they are generally poorly cut and laid without system. But this rule is not without exception, and this evidence, like any other, has to be used cautiously. It would be universally true, I believe, that in a good period using well-cut regular quoining, a church would not be built with uncut irregular quoins,

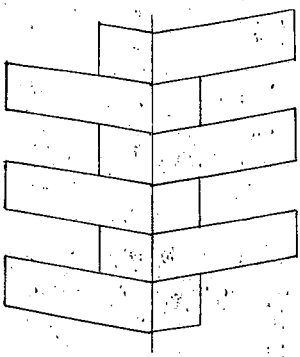


FIG. 3.

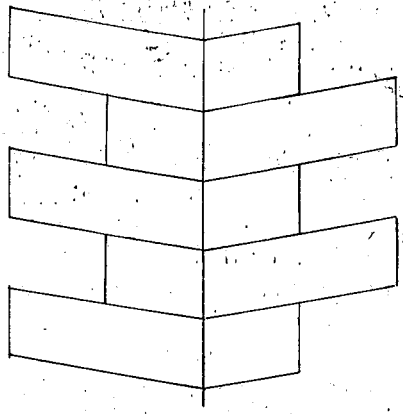


FIG. 4.

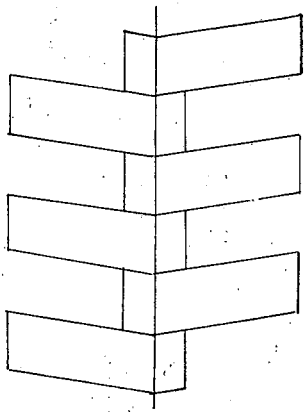


FIG. 5.

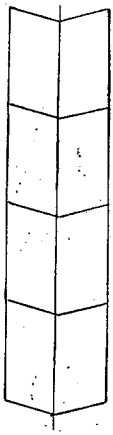


FIG. 6.

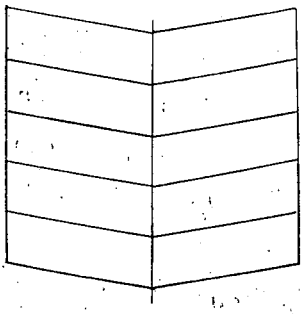


FIG. 7.

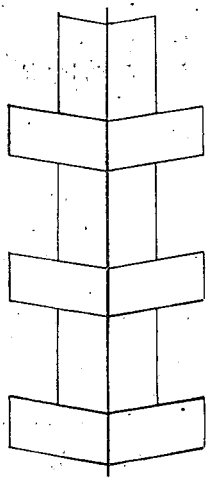


FIG. 8.

and *vice versa*. But good periods can occur where it is the fashion to use uncut quoin stones.

The Roman builders had no special quoining.[6] Where the Anglo-Saxons re-used Roman stones they did so to suit their own ideas. I do not believe that the Saxon builders ever allowed their material to dominate their artistic conceptions or their building practice. The use of fine stone quoins in stoneless counties such as Norfolk is one of many arguments pointing to this conclusion. I think it would be most hazardous to assume that the Anglo-Saxons used quoin stones of a certain shape because they came to hand. The affinities between churches on different sites proves the contrary.

CORBRIDGE.

Before proceeding to the main subject, which is the Bywell churches, a word must be said about Corbridge. Here there is a church of which the core of the present nave and the porch, which supports a later west tower, are accepted as seventh century by all the authorities mentioned above. In regard to the porch this is borne out by the quoins which rise sssssssssss, every stone being on side, well cut and megalithic. This is remarkably good quoining, and as it equates with similar work at an early date at Monkwearmouth, Jarrow and Escombe, it reinforces arguments already considered conclusive.

In this west porch is a blocked west door (plate I, fig. 2), which has long and short jambs. There is one rhythm of long-short-long, and the work is crude. The arch is of small stones not cut to voussoir shape, or very rudely so, and there is a similar relieving arch. There is little sign of saltire ornament on either arch to-day. This doorway equates in its jambs with the west arch at Monkwearmouth, and with the Escombe doorways, though it is cruder than either. There is an early west door at Monkwearmouth

[6] Baldwin Brown, *op. cit.*, p. 53.

with an unvoussoired round arch, and the lack of imposts marks nearly all these early doorways, in fact all of them. This door is accepted as early by all three authorities mentioned above, and there seems no good reason to doubt its early date. The saltire ornament could have been inserted, though the cable moulded arrises at Monkwearmouth suggests that we could not exclude the possibility of an original date for such a feature if it really existed.

Over the west door is a window which is rather more of a problem. Three more such windows existed in the north wall of the nave, and traces of two are visible. The one in the west porch is single-splayed, the arch is cut from a very big monolithic lintel and the jambs are in three small roughly cut stones. It is 19 inches across externally. There are some difficulties here over the early date. All the other early windows in the north have monolithic jambs. Further, though the position of the window is paralleled at Monkwearmouth, we have no example of a window lighting a first stage of a porch. As against the first difficulty, which is the worst, the early west window at Bradwell-on-Sea has not got monolithic jambs. Therefore this window may represent a phase of building actually earlier than the earliest work at Monkwearmouth, Jarrow, and Escombe. As against the second difficulty, the window may originally have lit a second stage of the porch. In that case the tower arch is not original. Considering that all the other early porches have doorways or small arches to the nave, this is by no means improbable, indeed rather the reverse. On the whole therefore there is no good reason to doubt the early date of this window, but we are led to consider it very early indeed, say *c.* A.D. 669.

BYWELL ST. ANDREW.

Bywell-on-Tyne is the chief subject of this paper. It is one of the most beautiful places in England, and has a rare wealth of interest for the student of the Dark Ages. I

believe, as I shall show, that there are two good Anglo-Saxon churches showing remains here, and if so, only Deerhurst, also beside its own noble river, can be compared with it. Bywell St. Andrew has a west tower (plate III, fig. 2) that is a well-known example of the Anglo-Danish tower, and belongs to the rather early type which has the square hood carried down the jambs to its original openings. Such a feature is barbaric, and also southern, since Northumbria did not take kindly to barbaric building. The placing of cubical corbels just above the level of the imposts and at the crown of the hood is most characteristic of English barbaric work. The two openings of this kind here are a doorway at the third stage south, and the belfry windows. There is a tower at Billingham similarly treated, and the belfry opening at Billingham (plate IV, fig. 1), is closely akin, though it has hollow-moulded imposts to Bywell's square-cut imposts. The clock obscures the crown of the hood, with a cubical corbel, and also a circular soundhole in the spandrel of the arch. At Bywell there are two more such soundholes flanking the hood. The jambs of the window are in Norman Romanesque manner, and the mid-wall shaft is of Norman type and without cap or base. It should be noted, however, that these windows are really constructed rather as doorways in regard to the jambs. Hence the Norman manner is of no importance in suggesting a Norman date. On the other hand, the barbaric hood is illogically used. The æsthetic significance of this feature is really to outline the extrados of the arch, and here there is no extrados in the belfry window, which has twin arched lintels. I think this proves that the architect here, who could have been the same as at Billingham, was operating with a feature which was not fashionable when his style came into being. It is one of the little points which supports the suggestion that the barbaric manner is chronologically anterior to the Anglo-Danish tower. In a sense it is plain that the architect did not really understand his fashion either. At Deerhurst

there is a flat-headed square hood, which is ugly, but shows that its perpetrator had a logical mind, and understood his fashion.

SMALL OPENINGS.

These differ so much from those discussed above that it would appear they are insertions. On the first stage south is a lancet window of Norman Romanesque type headed with a roughly arched lintel of triangular shape, and jambed in three stones. At the second stage west is a similar window (fig. 9), which according to Hodges has a carved Anglian stone in the splay, now hidden. It has four stones to the jambs externally.

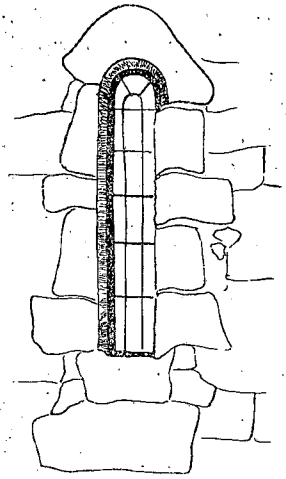


FIG. 9.

The doorway at the third stage south, mentioned above, is curiously treated internally. It has three oversailing imposts, rounded on the under edges and covered with a lintel. Between the under-impost and the jamb on the west is a black pebble. A similar feature occurs at St. Wilfrid's crypt, Hexham. This seems to be a coincidence. At the second stage east is a doorway, all the dressings being gone. Thus the tower has a separate entrance for each stage, also as at Deerhurst, and elsewhere.

ARE THERE TWO DATES IN THE TOWER?

The first nine stones of the tower quoins are in a poor sandstone which has weathered grey. It is a good-looking stone of a colour much favoured by Anglo-Saxon builders, and the quoins run up ssxssssc s and are quite well cut. These stones are big, and sometimes very big. The one visible in plate III, fig. 1, over the gravestone is $43'' \times 9'' \times 18''$. It is one of the biggest quoinstones I know. This quoinwork approximately corresponds in height with

the first stage of the tower, and belongs to a good building period. Above it, however, we get XSSXSFFFFFFCFSSSS. This work is varied in size, some stones being quite small, poor in cut and generally irregular. It can be described as degraded. It is work done without care at a time when standards were low. The suggestion therefore is that the upper stages of the tower are added. To those unfamiliar with quoin evidence the suggestion may seem slight, and it is fortunate that it is well supported. The masonry of the upper parts is quite different. Of the first stage the masonry is in the same grey-weathered sandstone as the quoins, and is in very fair technique. Above we have sandstone which is or has weathered brown externally and internally is a highly coloured red sandstone, which the vicar thinks is local material. The stones here are very much worse cut, more irregular in size, and with a noticeably rough uneven face. In face the masonry reflects precisely the same degradation in standards as the quoins in the upper stages. A third point which the architect will especially note is that the walls of tower and nave are the same thickness, viz. 2′ 7″, implying that a tower was not in the first plan. This evidence seems to me convincing. Were the hypothesis of re-used material brought forward to support a single date for the whole tower, it would be difficult to suggest the source of such, since this tower is the first on the site, beyond reasonable doubt. If the hypothesis of two dates for the tower is accepted, this involves an original west adjunct, without external doorway, nor window. This would be of the same date as the first stone nave, of which the west quoins remain, though the fabric has gone. These quoins are identical with those of the lower part of the tower, both in fabric and very close in technique, running sssssss xxxxxx. It is impossible to say what such an adjunct was used for, but the type is surely Anglo-Saxon.

DATE.

The date of the work here cannot be considered without

reference to the whole series of Anglo-Danish towers, and their typological development for which the material is not to hand. If, provisionally, Sir Alfred Clapham's view that the type goes back to about 950 is accepted, and personally I believe the evidence is more likely to bear this out than the reverse, then it seems that this tower in its upper stages is early in the development, because of its affinities with barbaric building. It seems to be proper to think that the work most remote from the Norman manner is most remote in date. Thus there would seem to be a suggestion that the upper parts of the tower might date about A.D. 1000. It is therefore interesting to hear that there is a strong local tradition of building here between A.D. 950 and 1000. Should this turn out correct, then the nave and west adjunct must be earlier, and since there is not any evidence yet that building was better in the early tenth century than the late tenth century, it would seem that a date in the ninth century would seem probable for what was, in all probability, the first stone church here.

BYWELL ST. PETER.

This church which stands close to the Tyne, which washes the churchyard, is one of those beloved by the genuine Anglo-Saxon student, which yields complexity after complexity the deeper it is studied. This is in itself a mark of an early church, as aspirers after the secrets of such churches as Monkwearmouth and Jarrow know, sometimes to their cost. It is, however, put down by Hodges as Norman,[7] with emphasis; and Baldwin Brown, if he saw it, which is doubtful, came to the same conclusion, and is naturally followed here by Sir Alfred Clapham. Neither of the latter authorities mentions it. It consists essentially of an aisleless chancel, a nave with a south aisle, and a west tower. The chancel has a vestry on the north and a chapel

[7] *Reliquary*, April 1893.

at the east end of the north wall of the nave. The south aisle has also a chapel at the east end.

The oldest part of the building is the north nave wall, and interest is concentrated on this, where not obscured by the chapel, which in any case is less in height. This north wall has its original quoins at the east end, as does the south wall. The quoins of the latter are hidden by wash. The north quoin is external, and remarkable. Its north face is hidden by the chapel, but assuming that it alternates with the visible one, and this is not a large assumption, this quoin runs up sssssssxs for about 12 feet. Above is degraded quoining, but of similar material. The lower quoins are megalithic and mediumly cut. They are not only plainly Anglo-Saxon, but seem early. The suggestion in any case is that the upper walling is added. Now, once again, the person unfamiliar with quoin evidence will probably doubt its validity, and once again it is supported, for the masonry changes at about the same height, the lower being devoid of red sandstone or nearly so, while the upper part is predominantly or entirely of this material. The lower part has brown and green sandstones. Apart from the decided change of material there is not much difference in the walling, all of which is fairly well cut and squared and can be described as rough ashlar, the bed being about 7 to 8 inches high.

In the upper part of the wall are the remarkable windows sometimes erroneously described as clerestory, but really simple nave windows. They are, however, very high placed, the sills being 20 feet from the ground. This is not their only peculiarity. At first sight they remind one of the Corbridge window discussed above, and this is borne out by measurement. The strikingly big arched lintel in fig. 10 is 50″ across and 22″ deep, others are 36″ across and all are megalithic. The Corbridge window's lintel is about 40″ across. The width of the aperture externally is 19″ at Corbridge, and 17-21″ here owing to a slight splay. The jambs are predominantly in a monolithic manner, but

not completely so. In the window figured (fig. 10) the two big jamb stones are of different material, one being red sandstone and the other a grey one.

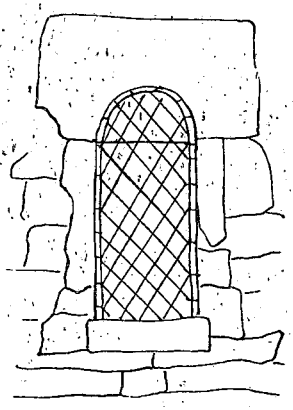


FIG. 10.

It would appear that this work is strikingly non-Norman. It would be extremely hard to parallel the height of the windows in Norman work, whereas the windows at Monkwearmouth in the west wall of the nave are just of this kind of height. The megalithic lintel arched under is not at all Norman for a window of this size. I do not know of a single example, whereas the real affinity, as shown, is with Corbridge, and also with Jarrow and Escombe. Another church which has such is Brigstock in Northants, and while this is normally dated late Anglo-Saxon, this is purely provisional. It is a matter of personal interest to me that my late wife, Sylvia Gilbert, who had a very extensive knowledge of Anglo-Saxon churches, always maintained to me most positively that Brigstock was an early church, at a time when I was by no means inclined to admit the possibility. Such lintels are, I believe, also Roman. I seem to remember them at Chesters. Similarly the monolithic type of jamb is not Norman. The normal Norman window has no jambs distinct from the walling, and the unusual one has two or three or more stones of about equal height. I do not know any Norman door jambed in the monolithic manner. On the other hand the Monkwearmouth windows and doors are so jambed, while the closest affinity of all of this window is to the north doorway at Jarrow, and is in my opinion a peculiarly striking one. It is shown in plate IV, fig. 2. The date of this door is unfortunately as uncertain as that of this window, but it is not Norman.

In the lower part of the walling are four voussoirs of an arch. These are of the diminutive size of the Corbridge west door "voussoirs." But these are better made and are really voussoirs. The jambs are hidden by a brick facing to the wall, if they exist.

In the north wall of the chancel (fig. 11) is what appears to be a re-used and now blocked doorway. It has jambs in

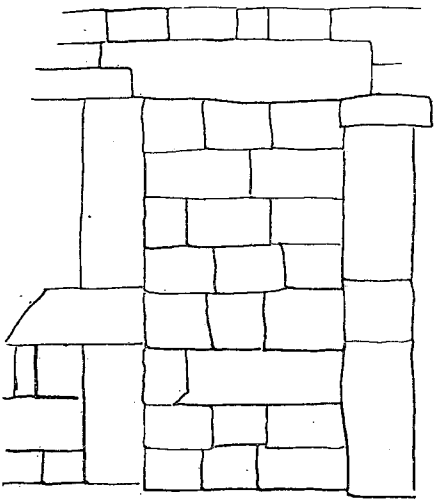


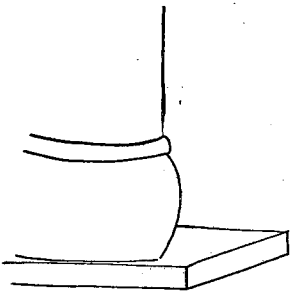
FIG. 11.

a single rhythm of long-short-long, and this again is certainly early as at Monkwearmouth and Escombe, very doubtfully late-Anglo-Saxon, and not Norman at all. The door seems to have all its stones renewed except one, which appears ancient. It finishes with a big lintel which is renewed. This door is now external.

THE ARCADE.

The peculiarities of the church do not end with the north wall of the nave. Internally the south arcade is of tall, round pillars in a rebuilt wall with transition caps and

bases. This arcade, however, is in relation with the windows discussed above, and the east respond has a most remarkable base (plate II, fig. 2) which appears to be a form of the bulbous base and is crude. It is very difficult to see this base as late twelfth century, and the natural suggestion is that it is eleventh century, when the crude rock-like effect



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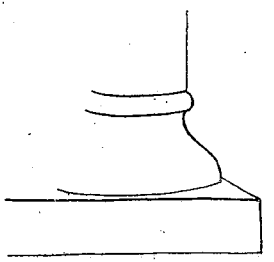

FIG. 13.

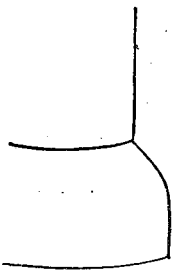

FIG. 14.

was sometimes aimed at. It might, of course, be early eleventh century. In any case the suggestion is that the present arcade, largely rebuilt, replaces at second or third remove an eleventh century original of which the base survives in situ. For comparison, other eleventh century bases are given. Fig. 12 is from Monkwearmouth, fig. 13 from Jarrow, and fig. 14 is from Stanhope, where it is under a transition arcade also. The Bywell base is typologically later than Monkwearmouth, of which the date is uncertain

but probably 1074, but earlier than those at Jarrow and Stanhope.

PLAN.

The present nave is 54′ × 19′ 2″. Originally it was longer. The west tower is built partly on, and partly in, the old nave. It is on the south and west walls, but falls short of the north wall which is destroyed. There remain, however, on the line of north wall footings 8″ wide, and these run the full length of the tower and return to meet it. What is even more remarkable is the cross footing 11′ 4″ from the west wall. Assuming these footings represent the original walls, and that is not difficult, we are presented with an original nave about 66′ 8″ long and 19′ 2″ wide, with a compartment at the west end which from its shape 11′ 4″ (E.-W.) by 19′ 2″ (N.-S.) suggests a narthex. The walls of this nave were 2′ 2″ wide. These figures are highly interesting. The nave so formed is as near as may be to the long nave at Monkwearmouth, and the walls are equally of the same type, though a little thicker. The Monkwearmouth nave is given differently by different authors, but Baldwin Brown gives it as 65′ × 19′.[8] Such a long nave, equally with such thin walls, is not Norman, and the comparison with Monkwearmouth is surely significant.

It should be noted, too, that if there was an eleventh century arcade here, it seems to have stopped against the tower, since the west respond seems ancient. This would also suggest that the long nave was older than the eleventh century.

CONCLUSION.

There can be no doubt that all this evidence is most interesting, but it is not very easy to assess. I should be inclined to ask first whether we have sufficient evidence to conclude an early stone church on the site. Now it is well known that Bishop Egbert was consecrated at Bywell in A.D. 803. This can hardly have been at St. Andrew's,

[8] *Op. cit.*, page 121.

which is only a little parish church, and would have been unsuitable for so great an occasion, if it existed, of which there is no suggestion. St. Peter's, on the other hand, is of a size and proportions highly congruent to those of the early monastic centres. To this literary evidence is added:

1. The early plan with its affinities with Monkwearmouth, and its narthex, which is an early Christian feature, and southern, not common in the north, and representing chronologically a development from the west porch of the earliest early Christian buildings[8a] in England.
2. The thin walls.
3. The survival of features, especially the early windows, all showing early suggestions, and with positive resemblances to work at Corbridge.
4. The church was shortened in the eleventh or twelfth century. This rarely, if ever, happened to a tenth or eleventh century built church.

It will, I believe, hardly be doubted that there was an early stone church on this site. This does not prove, however, that there is anything above ground of this church. It will, of course, be supposed that the windows and the arch in the lower part of the nave north wall are survivals of an early church, either rebuilt as they were or near. In order to determine whether any part of the existing structure is an early church in situ we have to ask how we explain the evidence in favour of two dates in the north wall. This evidence is sufficient. It would be highly improbable that the workmen forgot how to make a quoin properly at the same time as running out of "re-used" material for their walling, and it will not, I believe, long be doubted that the wall is of two dates. Once it is admitted that this is so, and that there was an early stone church on the site, it becomes probable that the lower part of the wall is an actual remain of the early church in situ. The date of the upper wall is not so clear. It might be a rebuild of

[8a] The Christian church at Silchester of Roman days had a narthex, and so perhaps had St. Augustine's, Canterbury.

the eleventh century, following the destructions of the late ninth century, and at a period when building here was good. Such a period in the eleventh century existed, though its date is unknown. Against this, however, is the similarity in technique of lower and upper walling, and the height of the windows from ground.

The upper wall may alternatively be early and not much later than the original. In favour of this is the form of the quoining, the early affinities of the windows, the similarity of fabric technique above and below, the almost certain shortening of this wall in the eleventh century period, the height of the windows from the ground. To explain the rebuilding it could be suggested that the church was ruined in the disasters of 793 and 794, of which we know little, and that the ordination of Egbert might quite well have marked the restoration of the church. That is pure hypothesis, of course, but the view in no way rests on it.

The difficulty about seeing the upper and lower walls as both of eleventh century build is that either the early stone church must be denied, which is difficult, or else a pure hypothesis that the lower walling is a rebuild must be maintained, and the view must rest on this. In addition, on this view, the lower walling, or the upper, must be near to the upper part of St. Andrew's tower in date, and this again is very difficult in view of the dissimilarity of technique and fabric. I think this view ought to be dismissed, and of the other two the view that lower and upper wall are both early seems the easiest. Were this agreed we should have here a remain of interest little surpassed on any other site in England.

HEDDON-ON-THE-WALL.

The nave here is of Anglo-Saxon fabric, and the S.E. quoin survives on the E. face. It has been asserted this is in long and short. This is a point of some importance, because it bears on the question of whether long and short was used in Northumbria. If so, it was exceptional, and

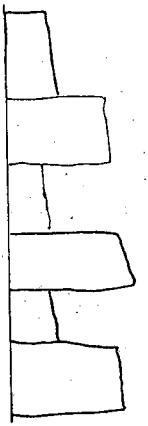

FIG. 16.

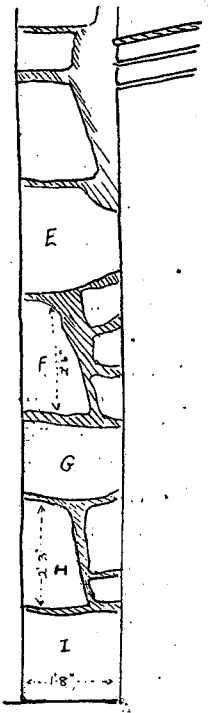

FIG. 15.

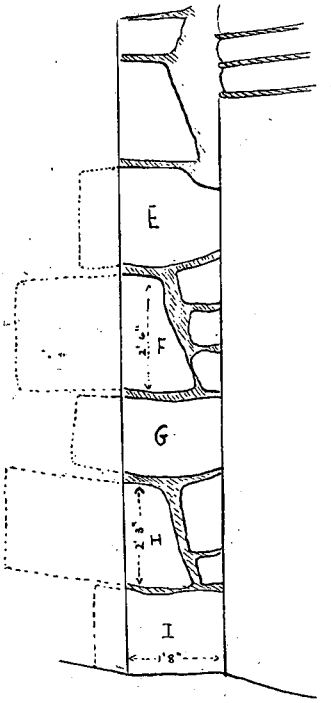

FIG. 17.

except at Whittingham, where it is imperfect, the evidence suggesting long and short has in my experience broken down under closer investigation. Baldwin Brown's comments on the subject are not easy to follow.[9] At line 2, page 459, he says "Heddon-on-the-Wall may present an early example of it (L&S) showing it in the making." At line 16, however, he says definitely, though hardly clearly, "the work could not be called long and short." Moreover, he gives the conclusive argument that the so-called long stones are no "longer" than the so-called short stones. It may be helpful to amplify this, as the case at Heddon is really more unfavourable to the hypothesis of long and short than Baldwin Brown admitted. I have not thought it necessary to photograph the quoin, as the sketch in Baldwin Brown is admitted and (fig. 15) agrees with it. The stones in question are marked EFGHI. Long and short does not depend on the contrast of horizontal and vertical rectangles as in fig. 16 showing an ordinary Norman side alternate quoin on one face only at Kirk Leavington, North Riding. If viewed from one face only, all side alternate quoining looks like this. Long and short consists of pillar stones and small clasping stones alternately, and the pillar, or long stones, occupy from twice to seven times the length on the arris of the quoin. Here I and G, supposed to be short, occupy as much quoin as F and H, supposed to be long, while E, supposed to be short, actually occupies more. In fact this is not long and short quoining, and by a simple hypothesis (fig. 17) of the hidden south face of the quoin, shown in fig. 20, it could be the ordinary side alternate megalithic Anglo-Saxon quoining as occurring elsewhere in the valley, and is possibly ninth century, as Baldwin Brown supposed.

My thanks are due to the rev. canon Holmes, vicar of Bywell, the rev. H. B. Richardson, vicar of Warden, and the rev. canon Blackburn, vicar of Heddon-on-the-Wall, for permission to photograph at their churches.

[9] *Art in Early England*, II.

Fig. 1. WARDEN-ON-TYNE: TOWER QUOINS.

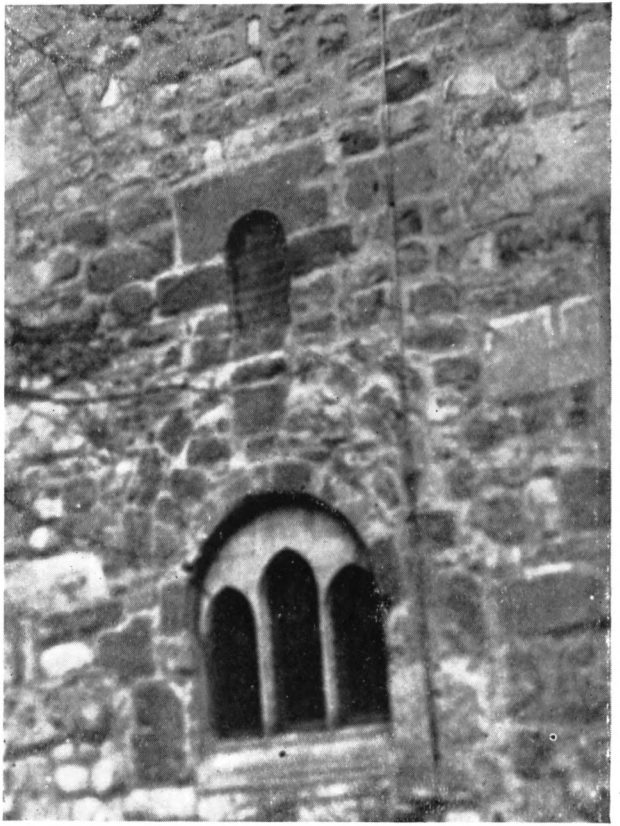

Fig. 2. WEST PORCH, WINDOW & HEAD OF BLOCKED DOOR, CORBRIDGE.

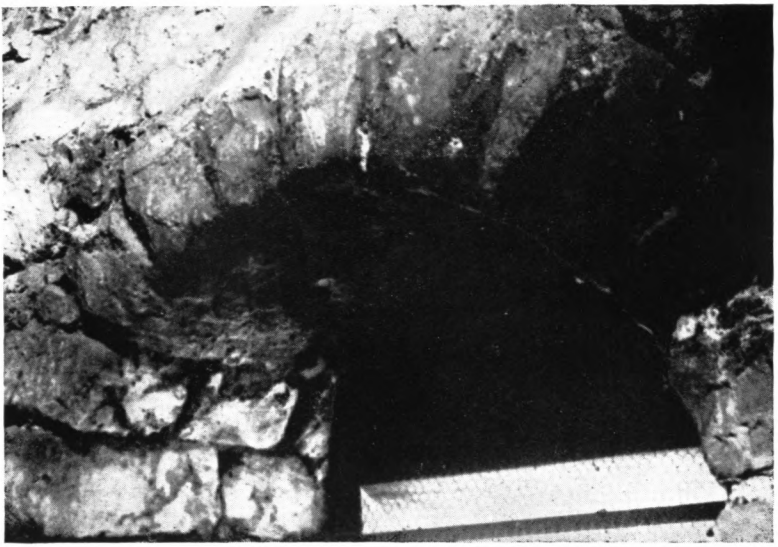

Fig. 1. BELFRY WINDOW, WARDEN CHURCH.

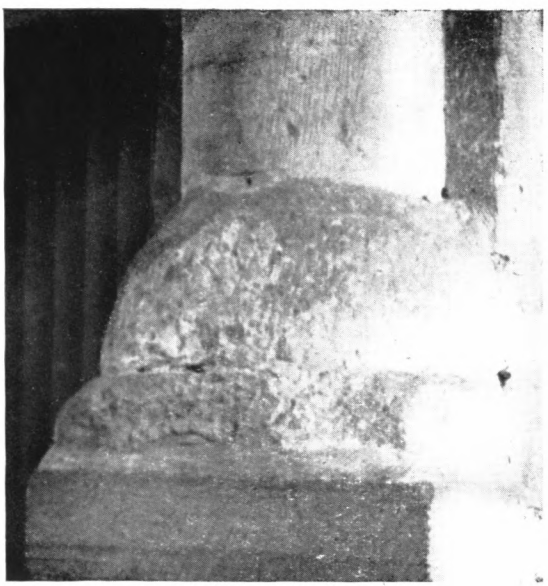

Fig. 2. PILLAR BASE AT BYWELL St. ANDREW.

Fig. 1. BYWELL St. ANDREW: QUOINS

Fig. 2. TOWER, BYWELL St. ANDREW

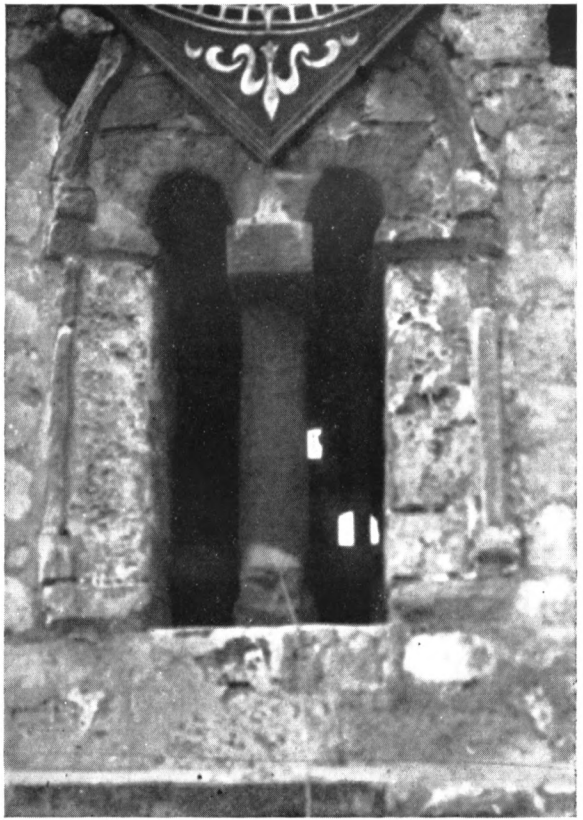

Fig. 1. BELFRY WINDOW, BILLINGHAM.

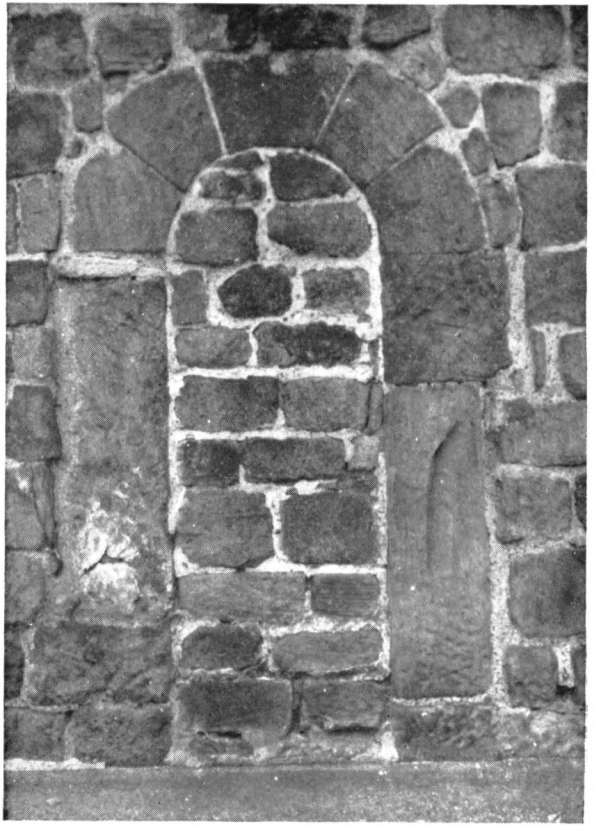

Fig. 2. BLOCKED NORTH DOOR, JARROW.