

III.

THE DEVELOPMENT OF INCHCOLM ABBEY.

By J. WILSON PATERSON, M.V.O., M.B.E., F.S.A.Scot.

Before Inchcolm was disfigured by the fortifications erected during the war it was perhaps the most beautiful of the islands in the Forth



Fig. 1. Inchcolm Abbey, before 1883, from the south.

(fig. 1). The rocky promontories at the east and west tail off and merge into a narrow isthmus, forming a natural harbour on the north shore. On this narrow strip of land, sheltered from the east and west, stand the remains of one of the most interesting buildings in Scotland; interesting not only on account of its historical and romantic associations but also in

regard to the buildings themselves, as they constitute, without exception, the only monastery extant in Scotland which shows the complete arrangement of the establishment (fig. 8).

Although the edifice is so well preserved it was not previously possible—owing to the conversion of the larger portion of the monastic buildings into a modern dwelling-house—to determine the extent of the various offices or their true function. Reference to the literature on the subject does not help matters, as, apart from the historical notes, the description of the buildings in the various books is for the most part contradictory and unconvincing. It was not until 1924, when the Earl of Moray placed the remains under the guardianship of H.M. Commissioners of Works, that it was possible to remove the modern works and make an exhaustive study of the buildings. It is my purpose to lay before you the result of the investigation, and with the aid of carefully prepared plans to trace the development of the monastery from its foundation in 1123 to its dissolution in the 16th century. The many alterations and modern repairs made it no easy matter to detect the original work; the plans, however, are in no sense conjectural but are prepared from actual evidence found. In defining the dates of the various additions little help is obtained from historical records, and only very few of these refer directly to the buildings. They are, nevertheless, important, and it is expedient to repeat them here.

A Columban hermit appears to have lived on Inchcolm up to the 12th century, and the *Scotichronicon* narrates¹ “that the Abbey owes its foundation to Alexander I. who in 1123 was driven ashore on the island by a storm, where he and his followers were maintained for three days by the hermit who then made Inchcolm his retreat, and who divided with them his scanty fare of shell-fish and the milk of one cow. In recognition of his safe delivery, Alexander founded and endowed a monastery and brought to it Augustinian canons from the Abbey he had established at Scone. The monastery continued to prosper, and in 1216 received a large addition to its possessions from Allan Mortimer, proprietor of the domain of Aberdour, on the mainland adjoining, who purchased the right of interment in the church by bestowing on the Abbey one half of his estate.”

The island has always been celebrated as a place of burial, and this fact is referred to by Shakespeare in *Macbeth* in connection with the defeat of “Sweno, Norway’s King.”

“Nor would we deign him burial of his men
Till he disbursed at St Colm’s Inch
Ten thousand dollars to our general use.”

¹ MacGibbon and Ross, *The Ecclesiastical Architecture of Scotland*, vol. ii. p. 308.

It is recorded that in 1265, Richard, Bishop of Dunkeld, built the new choir at his own expense, and at his death in 1272 his heart was laid in the north wall of the new choir.¹

The Abbey was plundered by the English many times in the 14th century, and a reference in the *Pluscarden Chronicle* relating to an attack by Richard II. in 1384 states²: "But it came to pass that a great bark out of his war fleet committed many outrageous ravages on St Columba's island of Eumonia, and entirely stripped the said place both of the ornaments of the church and of the furniture of the place; and when the ruffians would have burned down the church and had set fire to a *house adjoining the church*,³ a strong wind blew the flames back upon them and burned and suffocated them almost all; and thus St Columba by a miracle saved his church from being burned down by them."

The Chapel of the Blessed Virgin adjoining the choir was founded in 1402 by the prior, Richard of Aberdeen, and Thomas Crawford, canon of Inchcolm.⁴

Previous to the Reformation the monastery seemed to have lost its importance, and in 1543 Abbot Henry resigned office and the building ceased for ever as a religious house.

There are several interesting allusions to the Abbey in the Act of 1581,⁵ in which it confirms James Stewart as the first Commendator in possession of the "Ile, Abbay, and Mansioun of Sanctcolmis Insh," and later it states that "the said Ile with the Abbey, mansioun, dowcot, and zairdis thairin may be put to some proffitable use" in the hands of "the said James erll of Murray, his airis and assignais, as their propertie in all tym cuming."

The earliest of the remains on the island is the little cell reputed to have been occupied by the hermit who succoured Alexander I. As this structure has already been described in the *Proceedings* by Sir James Y. Simpson only a short description is necessary. It is an irregular stone building with a pointed tunnel vault and measures some 19 feet along the interior of the north wall and 18 feet 6 inches along the south wall; it varies in width from 5 feet at the west end to 6 feet at the east, and measures 7 feet 9 inches in height to the apex of the vault. The

¹ *Scotichronicon*, lib. x., c. 30. Since reading the paper a mural chamber 5 feet 8 inches long by 1 foot wide and 8 inches deep has been exposed in the position indicated above. It appears large for a heart burial, but on the other hand, it is too small for an ordinary one (fig. 3).

² Alan Reid, *Inchcolm Abbey*, p. 78.

³ The italics are mine.

⁴ MacGibbon and Ross, *The Ecclesiastical Architecture of Scotland*, vol. ii. p. 308.

⁵ Alan Reid, *Inchcolm Abbey*, p. 76.

entrance doorway in the south wall is lintelled on the inside, the lintel being carried on projecting stones, while there is a rough arch on the outside face which possibly connected to a vaulted entrance passage. The exterior of the vault is roofed with roughly squared stones. The only window is in the east wall, and the jambs are formed in single stones the full thickness of the wall, and rest on a thick stone sill. The head is formed of a thin stone lintel laid flat. The whole cell is built in mortar; this fact as well as the construction of the vault with radiating voussoirs is not usual in early Celtic work, and it is likely that the cell has been much repaired if not almost entirely rebuilt.

Of the establishment founded by Alexander I. in 1123 nothing remains with the exception of the church, and although this has been very much altered to suit the later requirements, there is sufficient evidence to reconstruct the plan of the building (fig. 9). The church followed the usual Norman lines for a small establishment, and consists of a nave 33 feet 4 inches long by 19 feet 1 inch wide, having a small chancel approximately 21 feet long by 14 feet 7 inches wide. The nave has three doorways, the principal being at the west, a smaller entrance to the cloister in the south wall, and a still narrower doorway in the north wall. Evidence remains of four windows in the side walls of the nave. There would presumably have been a fifth window over the west door, but all traces of this have been removed by the later alterations. It is now impossible to determine the position of the windows in the chancel, or to trace the details of the chancel arch, as the latter was cut away during the 13th-century alteration.

The only architectural details remaining are a simple splayed plinth extending round the whole building; a trigonal string course at the wallhead level, which continued across the west gable, and details of the west doorway. The jambs of the latter are formed in two orders, having a detached nook shaft, with moulded base and cushion cap, the square abacus of which extends into the west wall to form the impost of the arch moulding. The outer order of the arch is not moulded but formed of plain voussoirs. The inner order, which is now missing, was also apparently not moulded. The outer jambs of the other two doorways are missing, but remains of the arches are left, these being formed in two orders of plain voussoirs. The original face work was formed of the usual squared ashlar of the period, but this has been much repaired and renewed. There is no indication that the nave has ever been vaulted. It is possible, however, that the chancel may have been, as the interior face of the walls of the latter incline inwards as they rise.

The first alterations were the addition of a new choir to the east of the present chancel, and the straightening up of the south wall of the chancel in line with the nave wall, presumably to suit the setting out of the first claustral buildings (fig. 9). Search has been made for traces of the latter, but with the exception of a few stones forming the foundations of walls, sufficient evidence has not been obtained to justify a reconstruction. It is probable, however, that the dorter extended southwards from a position abreast of the old chancel, and that the chapter-house extended farther east. No evidence has been obtained of any buildings on the west side of the cloister, other than a raggle or chase cut in the south wall of the nave about 15 feet above ground level; this might indicate the presence of a roof over a walk or over a range of buildings, but one cannot say definitely.

The new choir extended eastwards for a distance of 26 feet 6 inches, and there remains the evidence of two circular-headed windows in the south wall; similar windows would presumably be repeated on the north wall, which is now destroyed. The presence of the windows in the south wall tends to confirm that the position of the first claustral buildings was to the west of this addition and abreast of the old chancel as aforementioned, or, alternatively, that the claustral buildings were only one story high. Later alterations, however, lead the evidence in favour of the former position. The external face of this choir, like that of the nave, has been much altered, but at the south-west angle the original moulded wallhead course is *in situ*. It should be noted that owing to the straightening up of the south wall the axis of the choir is set central with the widened portion of the old chancel and not with the nave.

A certain thickening added to the exterior of the south nave wall was at first a little difficult to understand, and it appeared to be added as an abutment for the later vaults. On closer investigation it was found that this thickening was much earlier, and may be placed not later than the beginning of the 13th century. It was added to stiffen the wall and continue it down to the lowered ground level on the south. This thickening has the same weathered appearance as the lower tower wall, and a similar plinth is carried round both. The two top courses form a splayed weathering, which would indicate that there were no buildings against it at this period. The remains of a circular-headed doorway in this thickening can be traced in front of the original south door, but at a much lower level. To accommodate this the head of the Norman door was lowered by inserting lintels at the new level, and filling up the

intervening space. This lowering was no doubt done to suit the level of the cloister.

As already pointed out, the monastery continued to prosper, and received large additions in 1216. It is apparent that from this date a new lay-out was contemplated, and further buildings were commenced, the earlier additions being the erection of the tower and of the beautiful chapter-house (fig. 9). The position of the latter and the adjoining wall connecting it to the church is peculiar, as it is not set at right angles to the church in the usual way. The setting in this manner presumes the intention to rebuild the cloister, but owing to the existence of previous buildings, possibly the first chapter-house and dorter, it was decided to build the new chapter-house before pulling down the other buildings.

The chapter-house is one of the few octagonal chapter-houses in Scotland. The mouldings of all caps, bases, window jambs, and vault ribs are in the first pointed style. The ribs of the vault have a hollow moulding in the centre of each, and spring from round shafts, $4\frac{1}{2}$ inches in diameter, set in each angle of the apartment. They meet in the centre in a carved boss, having a circular hole through which a light could be raised or lowered from the room above. The doorway is on the west side, and the jambs have detached shafts with caps but no bases. Between the shafts the mouldings of the semicircular arch continue down the jambs, and stop in an unusual way on a broad splay. The outer jambs are less elaborate, and the walls of the later (14th century) cloister are built against these. The stone bench round the walls is set on a broad step $6\frac{1}{2}$ inches above the floor. In the east wall the three recessed seats for the abbot, prior, and sub-prior are formed, two steps higher than the wall bench, and are enclosed with continuous mouldings forming arched heads, and terminating on a splay in a similar manner to the door jambs. The chapter-house is lit by five windows, the three on the east, south-east, and south bays being pointed and moulded; a smaller one on the north-east bay has a plain trefoil arched head in the interior and a simple pointed arched head on the exterior. The outer jambs and arch are a later insertion, and it is probable that the whole window is an addition, while the fifth window in the south-west bay is circular, and placed high up in the head of the bay.

The north wall of the tower was constructed upon the north wall of the first chancel, but the south wall was almost entirely rebuilt along the line of the straightened wall referred to in the previous alteration. The first and later chancel arches were enlarged to form a retrochoir, the pulpitum being under the east arch and the rood screen under

the west. Surmounting the pulpitum is an arcade of three spans, and over the rood screen one of two spans (fig. 2). The tower is 62 feet high, surmounted with a parapet carried on typical first pointed corbels. The tower rises two stories above the church, each story being separated by a string course. The windows in the upper story are each formed of two lancets enclosed within a round arch mould, having the spandrils pierced with simple quatrefoil openings. The first story was originally lit with a similar but smaller window on the north, and by a simple lancet on the south side. A doorway through the east wall opened into the roof of the choir. On both the east and west walls water tabling is formed for the roofs of the choir and the nave, but as there is no water tabling on the north and south walls, and as these walls have lancet windows, it is clear that it was not originally intended to provide transepts. At the south-east corner of the south wall is the doorway leading from the cloister to the church. The door is first pointed in style, having a plain pointed arch and a single detached shaft at each jamb. In the same wall, and leading from the retrochoir, a staircase rises to the first floor of the tower.

The presence of a raggle for a roof in the north wall of the tower led to the discovery of foundations of a north transept with an aisle on its west side. The raggle continues in an unbroken line across the wall of the nave, indicating that the roof of the aisle and transept was in one slope. The transept (which is quite distinct from the existing one) was approximately 21 feet 6 inches long by 16 feet 6 inches wide, and was presumably separated from the aisle by an open arcade as there are indications of foundations for a respond and buttress. The aisle is approximately 19 feet 6 inches long by 10 feet wide, and the west wall being only 7 feet 3 inches high was comparatively thin, being 2 feet thick. The base course is formed of ashlar work, having a very slight splay— $\frac{3}{4}$ inch wide—wrought on the upper edge. This splay apparently continued round both the aisle and transept, as a considerable portion still remains on

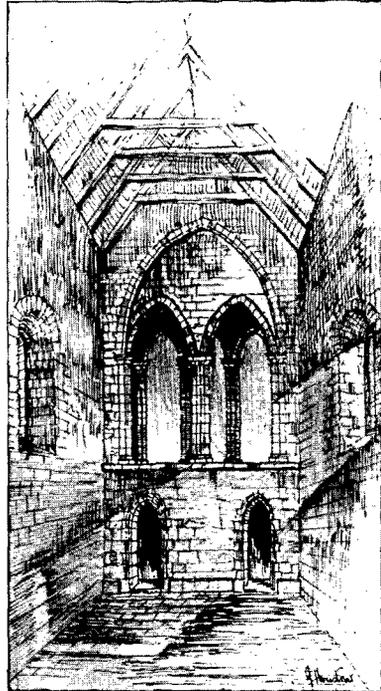


Fig. 2. Inchcolm Abbey: the Nave and 13th-century Rood Screen.

the east and west walls. There does not appear to have been any opening into the transept from the retrochoir, but there is evidence that access was obtained from the nave to the aisle, as the original plinth and wall of Norman work have been cut away at this point, but the wall was again rebuilt to form a window at a later period.

From the historical reference we know that Richard, Bishop of Dunkeld, erected a new choir towards the end of the 13th century. There is not



Fig. 3. Inchcolm Abbey: Foundations of Church showing Mural Chamber in North Wall.

sufficient evidence to show whether he reconstructed the whole of the north wall of the Norman choir, but it is clear that he left a portion of the south wall (fig. 5). The east end of the new choir was then 61 feet from the pulpitum, and it is probable that the latter was also transferred east at this time, or shortly afterwards, to suit the new cloister.

While an endeavour was being made to trace the sedilia of this period, a backing was found approximately 14 feet from the east end (fig. 4). This backing is covered with plaster upon which a beautiful series of figures are painted. Unfortunately the heads of these figures are missing owing to the portion of the wall having been removed at some period. There are seven figures, two of which are swinging censers. The drawing

of the drapery is excellent and is executed principally in line; black, red and yellow colour being employed. At the foot of each vestment is a diaper pattern of black lines on a background of red and dark grey alternately. The panel, which is 6 feet 2 inches long and 2 feet 9 inches in height, is in a very good state of preservation, and is a splendid example of 13th-century mural decoration. The recess which contains the painting is 18 inches deep, and had been built up with

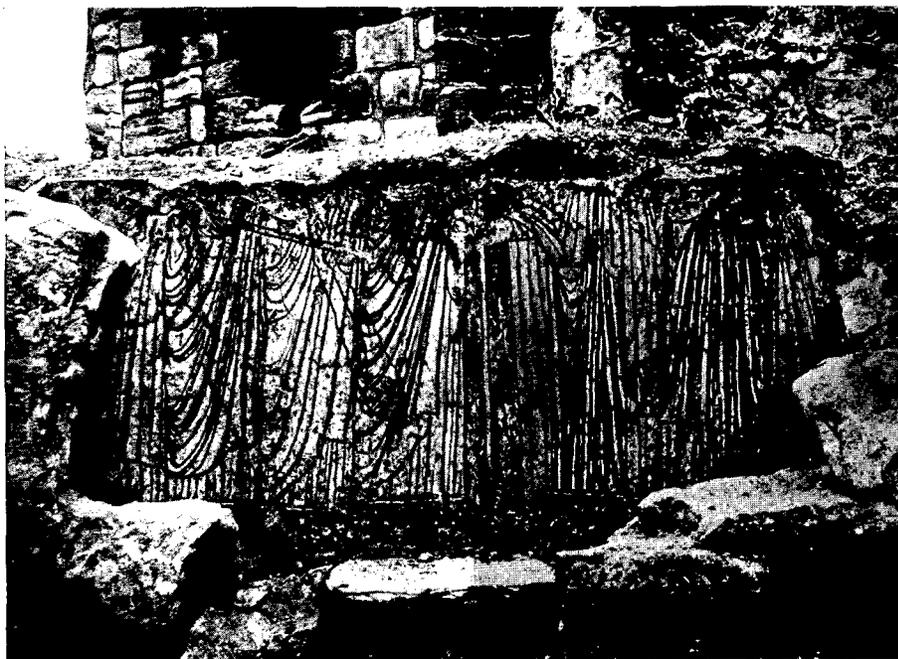


Fig. 4. Incheolm Abbey: 13th-century Mural Painting.

masonry when the Church was extended eastwards in the late 14th or 15th century. In removing this masonry two other stones, measuring approximately 18 inches by 15 inches, covered with similar painting, were discovered. In this case the vestment has a diaper pattern of blue lines on a light ground. The stones have a small bowtel moulding worked on the arris, and appear to have formed part of the jambs or sill of the recess.

During the various alterations and extensions made to the church up to the end of the 13th century we must assume that the canons occupied the 12th-century dorter, as there are no remains which can be identified as the 13th-century dorter. The next stage in the development

of the establishment appears to have been commenced in the 14th century when the enlarged claustral buildings were set out (fig. 10). The plan of these buildings is unusual; firstly, in that the lower story was not occupied by cellars but formed one continuous cloister, in place of the lean-to roof with an arcade round the cloister garth; and, secondly, the eastern range is not set at right angles to the church. The reason for this has already been given when discussing the chapter-house. The choir having now been extended towards the east, there was no reason why the rood screen and pulpitum should remain where they were. They were therefore removed and the old nave and retrochoir were converted into the abbot's house with ambulatory below, barrel vaults being inserted in the old nave and under the tower (fig. 14). The insertion of the vault in the nave certainly preceded the erection of the western range of the cloister, as openings with arched heads were carefully formed in the new vault in order that the original north and south doors could still be used. The latter became blocked when the later cloister buildings were built against it. When the vault was inserted two windows were formed cutting through the first work, one on the north side and one on the south. The presence of the one in the north overlooking the aisle of the 13th-century transept would indicate that the aisle, and possibly the whole north transept, were demolished by this date. The transept, however, would serve no useful purpose in this position since the choir had been removed eastwards, and a new transept or sacristy was provided to the east, but with a projection equal to only one bay of the former transept. The vault under the tower extends the full width of the tower walls, the shafts of the arcades over the rood screen and pulpitum being cut through and the upper parts left and pinned up from the top of the vault. The spandrils of the arcades were also blocked up and formed partition walls in the abbot's quarters. A circular opening 3 feet 3 inches in diameter for bell ropes was left in the vault, and the 13th-century doorway to the cloister was partly built up to form a narrow window opening. Access to the circular stair leading to the upper stories was retained, and a new doorway cut through the staircase wall for entry to the new floor formed on the top of the vaults.

The cloister is 12 feet 6 inches wide and vaulted with a continuous barrel vault from end to end, and as the vault on the south is built into that on the east and the vault on the west into that on the south the sequence of building may be inferred. The vault with its supporting wall on the east is built against the dressed stonework of the wall adjoining the chapter-house, and is therefore a departure from the original plan, and proves that the cloister is later than the 13th-century

work. The windows overlooking the cloister garth are round with splayed jamb and arch, and those on the eastern and western ranges have stone window-seats which are absent in the windows on the southern range. In the east wall of the cloister at the south end is a doorway leading to the cemetery and an opening in the north wall leads to the church. At the junction of the east and south walks are the remains of a stone cresset, and almost opposite this, in the south wall, a door which was later converted into a water-trough or cistern having a channelled stone inlet above to connect to the rain-water pipes and a stone outlet basin below. In the east wall of the western range a staircase leads to the frater and guest hall above. Opposite the staircase is a narrow window, and farther north, in the same wall, a doorway leads into the garden. A new doorway was also cut at the north end to give access to the cloister in the old nave.

In the external angle between the first church and the cloister there is a small wing, the lower portion of which is vaulted to carry a lobby and garderobe. This wing, however, is of one build with the cloister wall, being thoroughly bonded into it. Over the cloister on the eastern range is the dorter, which is 62 feet long by 16 feet wide, and covered with a lofty pointed tunnel vault. The windows are square-headed on the exterior and arched in the interior. In the north wall the round-headed window of the Norman choir was now built up, and a doorway cut through for access to the night stair to the church. The doorway, however, has been altered at a later date (fig. 5). The dormitory does not appear to have had originally a day stair to the cloister, and it is probable that at first the night stair would serve both purposes, as the portion of the church to which the night stair led became part of the cloister. Possibly a timber staircase was afterwards erected in the cloister ascending to the northmost window of the dorter, as this window has been widened and a check cut on the outside jambs for a door. The southmost window on the same wall has also been widened, but the splayed jambs were reset. In the south wall a large round-headed window lit the south end of the dorter, while a smaller window at a lower level in the west corner lit the sub-prior's cubicle. Below the large window a doorway leads across a bridge to the reredorter. Through the east wall an awkward stair leads to an octagonal apartment above the chapter-house. This apartment is roofed with a pointed tunnel vault, a crude method of covering a room of this shape. It has a fireplace and two windows composed of two lancet lights, the smaller window having a circular arch mould over, similar to those in the tower. The presence of the fireplace (the only one in the canons' quarters) suggests that this was the warming-house.

The western range was occupied by the guest hall, to which access was obtained from the cloister stair through a round-headed doorway having bowtel mould jambs. On the west wall at the south end, almost opposite the door to the cloister stair, a similar doorway led to an outside stair giving access to the garden. A raggle cut in the external face of the west wall indicates that this staircase was covered with a roof. The guest hall was lit by two square-headed windows in the west wall and two in the east wall. The northmost window in the latter was later



Fig. 5. Inchcolm Abbey: View from North-east showing 15th-century Night Stair to Dorter.

built up and converted into a fireplace. A doorway at the north-west angle leads to the garderobe and lobby, which in turn give entrance to the abbot's camera formed within the first nave, the early windows of the latter being built up and new windows inserted to suit the new requirements. The remains of only one window of this period exist. The east wall of this apartment is formed by the blocked arcade over the rood screen; a doorway, however, was left in the blocking to give access to the room under the tower, through which access is obtained to the staircase leading to the cloister below and to the tower above.

The frater, like the dorter and guest hall, has a pointed tunnel vault, and extends the whole length of the southern range. It is entered from

the staircase formed in the angle with the western range through a round-headed doorway similar to that of the guest hall, in fact, the one moulding forms the jamb of each opening. At the east end the high table stood on a raised dais, the wall behind being panelled and surmounted with a canopy. The chases for the panelling and the lines of the canopy can still be traced on the old wall-plaster, and built out from the south wall, supported on two piers and an arch, is the frater



Fig. 6. Inchcolm Abbey: Exterior of Frater and Reredorter.

pulpit. The platform on which the lectern was placed is 2 feet 9 inches above the dais, and reached by a short flight of steps formed in the wall. The pulpit window is circular-headed, having originally had two orders of mouldings, but the inner is now missing. Over the window a semi-circular hood mould of deep cavetto section terminates in two carved stops (fig. 6).

The window lighting the high table is square-headed, the jambs are splayed and have raggles for glass in the upper half only. The remaining three windows were pointed and had deep cavetto moulded jambs and arches. The internal jambs form a very wide splay, and support flat arched soffits. Traces of a circular window in the west gable exist,

the detail of the hood mould being similar to that over the pulpit window.

In the first instance the west end of the frater was used as a kitchen, the hearth probably being in the centre of the floor, as an opening in the vault is suitably placed to act as a smoke vent. In the south wall is the usual slop sink at the floor level, and at the west end of the north wall a hatch served the guest hall. In the 15th century, when the large fireplace was inserted, a partition wall was built to screen off the kitchen, and as the hatch was now blocked by the fireplace a new doorway was cut between the kitchen and the guest hall. From the type of mouldings in the refectory windows, in particular the pulpit window and those west of it, it would appear that it was late in the century before this portion of the cloister buildings was completed.

Let us now consider the buildings to the south-east of the cloister (fig. 11). The arrangement is at first a little difficult to understand, but on closer examination works out in a logical fashion. As we have already noted, the doorway in the south wall of the dorter leads to the reredorter. The first reredorter was a small rectangular building two stories high, and connected to the dorter by a narrow timber bridge, which is quite a usual construction. The stumps of the stone corbels supporting the bridge can still be seen at the bottom of the jambs of the dorter doorway. The reredorter no doubt had a wood floor, and the open drain, which is 4 feet 6 inches wide, extended the full width of the chamber. Near the base of the south wall are two segmental arched openings through which the sea at high tide entered and flushed the drain, a perfectly good arrangement. It is evident, however, that at a later date silting had taken place, or the level of the tide had receded and so failed to reach the drain, with the result that the reredorter had to be extended farther south in order to get effective cleansing. This was done, and an almost identical arrangement was erected 19 feet farther south, and the bridge was replaced by an arch and the dorter extended over it (fig. 6).

It is possible that another reason for the extension of the reredorter was to obtain a larger dorter, but as there never was a large establishment at Inchcolm it is perhaps reasonable to accept the former explanation. Even now the sea does not reach the new reredorter except at very exceptional tides.

In the new reredorter a vault carried the floor and another formed the roof. The axes of the vaults being parallel with the south gable of the extended dorter it was possible to have a large window in this gable, as the roof over the reredorter was constructed at right angles to that of the dorter. The dorter extension has three square-headed windows in

the west wall and possibly had originally the same number in the east wall; the latter, however, is now demolished and therefore all evidence is lost.

A section of the west wall, including a portion of the vaults adjoining, had been subsequently rebuilt. This is clearly indicated in the jointing of the masonry. There appears no reason for this except that it may have been destroyed or damaged during one of the many raids upon the monastery, or that it had collapsed owing to insufficient foundation,



Fig. 7. Inchcolm Abbey: View from the East.

much of the ground at this side being made up largely of sand. When rebuilding it was straightened and set parallel to the east wall. .

The space on the ground-floor level between the first reredorter and the second was at first used as a passage having large open arches at the east and west ends. In the 15th century when additional buildings were erected at the east these arches were partly built up, doorways formed, and a timber floor inserted 5 feet 6 inches above the ground level, access to this floor being obtained through a doorway from the first floor of the new buildings.

The building to the east referred to consists of a series of chambers with windows and fireplaces and was probably used as the infirmary. From the 14th century onwards infirmaries ceased to be open halls and were cut up into a series of chambers, generally with fireplaces in each. The eastmost chamber may possibly have been used as a chapel. The

pointed window on the east gable tends to support this theory, but as there are so few features it is difficult to be precise. The westmost chamber has been divided by a timber floor into two stories, to which access is obtained by a circular staircase which also descends to the cellars below.

From the level of the timber floor direct communication is obtained from the dorter. This staircase could be used by the canons for entry to the cellars and kitchens without passing through the chambers to the east. Access to the cellar and kitchen from these chambers was obtained by an external staircase, for which the sunk area still remains. The lower story of this range is divided into two vaulted compartments; the smaller in the west end, being entered from the staircase adjacent to the dorter, and the larger by a door in the east end and also by the external staircase. At the north-east corner of the larger room there is a very fine large oven. The range of cellars is lighted by square-headed windows in the south wall.

We have seen that the pulpitum was removed to the east in order to allow the cloister to continue uninterrupted under the tower. This no doubt contracted the choir to such an extent that it was decided to extend it still farther, and it would appear that in the 15th century the church as a whole was removed bodily to the east (fig. 12). We know from the historical notes that in 1402 the Lady Chapel was founded. This chapel was apparently built as a transept to the new church. As will be seen from the previous plans there was little space to erect a south transept except to the east of the chapter-house; there was therefore every reason for removing the church bodily to the east, and it is possible that practically the whole of it was rebuilt at this time. The fact that mention is made only of the foundation of the Lady Chapel does not present any difficulty, as it is possible that the altar or altars which were already dedicated and which stood in the previous transept would be transferred to the north transept of this new church. The new church is cruciform in plan, the north and south transepts being equal in width and projection. In the new work the walls are wider and all of the same thickness where they extend beyond the end of the 13th-century church. The west end of the new church was built on the pulpitum base of the former church, and it is just possible that the space between the tower and this west end eventually became an open court, as a staircase added in the next century has all the appearance of being built as an external feature.

The west end of the church being now clear of the claustral buildings the stair from the dorter would not lead into the church; it would therefore be used as the day stair only, and it was necessary to construct

a new night stair. This difficulty was overcome by altering the window in the north-east end of the dormer into a doorway and building a stair leading down to a doorway cut in the wall of the church, west of the new pulpitum. This staircase was covered with a lean-to roof, the raggle for which exists. No trace of the high altar remains, or of the altars in the north transept. There are, however, the remains of one of the two altars in the south transept, and the mensa of another, with the usual five incised crosses, has been reused as a gravestone in the floor. In the south wall, near the base of the altar, there is an ambry and a piscina with a trefoiled arched head. The second altar stood to the north of the existing one and its piscina still remains. The transept was roofed with a pointed tunnel vault, only a portion of which now stands. The opening between the transept and the church is 9 feet wide, and the bases of the piers are of 15th-century detail.

At the point where the east wall of the transept adjoins the presbytery there remains one jamb of the sedilia. Only the foundations of the remainder of the church now exist. From these, however, it is clear that the entrance to the north transept was of similar width to that of the south. A considerable portion of the original stone paving, both in the church and transepts, remains in position.

In addition to those already described further important alterations were carried out in the 15th century, notably the provision of a covered walk along the north side of the cloister garth. To form this two semi-circular openings were cut through the cloister walls, and a light screen wall or arcade with five buttresses was built to carry a timber lean-to roof. The foundations of the wall and buttresses remain, and the raggle cut in the walls indicates the height of the arcade and the pitch of the roof. This addition enabled further cellar accommodation to be provided in the now discarded north ambulatory, which at its best must have been poorly lighted.

Three additional vaults, all lofty and pointed in form, were inserted in the tower, the soffit of the lower vault being built in line with the 13th-century arch (fig. 14). The chamber thus formed between the first and second of these vaults, and now forming the third floor in the tower, was converted into a dovecot, and the window on the south side altered at the same time. The windows in the east and west walls were blocked, and holes for nests cut in all the wall faces. The dovecot being at the original first-floor level had access from the 13th-century stair, while a shaft was left in the vault at the south-west angle through which to reach the top floor. The topmost vault, although now partly destroyed, would have risen well above the parapet level, and would be covered with either a slated or a stone roof. The insertion of the vault on the

top story partly blocks the window on the north side, while the one on the south is completely built up. The addition of the vaults was a daring piece of work, and in order to buttress the tower a "transept" (if we may call it such) was built on the site of the 13th-century one. This was a wise precaution, as the tower has an inclination of 12 inches to the north. The character of this addition, with its huge mass of masonry in the lower story, indicates that its first object was structural, the accommodation so obtained being too small to justify its erection for this purpose alone. Both stories are vaulted, and the upper has a garderobe in the angle. In the abbot's camera the doorway leading to the lobby was at this time built up and converted into a fireplace, and a new entrance formed immediately to the south.

In the 16th century a large circular staircase was added at the east end of the abbot's quarters to give better access thereto (fig. 13). The windows in this staircase having raggles for glass and the general appearance of the building suggest that the space or court to the west of the church had by this date become unroofed. From this staircase access is had to the first floor of the tower, and adjacent to this doorway there are the remains of another doorway to the north. The purpose of this door is not clear, but as there are joist holes cut in the external face of the east wall of the tower at this level, these suggest that a timber gallery extended from this doorway to the north wall of the church. The size of the joist holes is too small to assume that the whole court was floored at this level. The staircase continued some distance higher to a door cut in the upper part of the screen wall of the 13th-century arcade, which led to a new timber floor inserted at the springing-line of the 15th-century vault, the crown of the latter being cut away to give greater head-room.

Against the south wall of the cloister another large staircase was built as a rectangular tower, giving access to the frater. The tower originally had a parapet carried on corbels, characteristic of this period. The upper part now contains a small apartment having two windows and a fireplace.

Several other small buildings were erected on the site about this time, one immediately to the north of the church; this, however, is of late date, the foundations being at a much higher level, and oversailing the early work.

A portion of the extended dorter was converted into a small house and the remainder taken down, a wall-walk formed at floor-level and the east side crowned with battlements. These alterations, and possibly the addition of the large staircase to the frater, are post-Reformation.

We have now completed the survey of the whole group of buildings,

and followed the development step by step. Let us therefore review the situation and relate the findings to the dates given by the documentary evidence. Although it is not possible to give a definite date to each successive alteration, it is now possible to assign the approximate periods.

Owing to its insular position it is unlikely that a large number of workmen would be employed, and consequently the work would be slow and carried out in small sections. This is borne out in the evidence, and we find that when large extensions to the church were in progress little was done to the domestic buildings, and *vice versa*.

Between 1123 and the end of the 12th century the church was erected and a new choir added. The architectural details of these are typical of the period. A cloister must also have been built at this time although few remains exist.

In the 13th century the tower was added, the chapter-house and north transept built, and the choir extended; these were probably commenced in the order given, the details of the mouldings in the tower being of the transitional period and certainly earlier than those of the chapter-house. The date of the new choir is known, being founded by Prior Richard in 1265.

We have seen that a north transept was added to the 13th-century tower and taken down before the north ambulatory of the 14th-century cloister was formed in the church. It is therefore reasonable to assume that its date is about 1250.

The 14th-century work embraced the rebuilding of the claustral buildings with the various offices. We have already proved that the western range was later than the north cloister ambulatory, and that the latter occupied the 13th-century nave, while the eastern range was built against the facework of the 13th-century chapter-house. These facts and the conversion of the dorter window into a doorway for the new night stair to the 15th-century church definitely place this group between these two periods. We have confirmation of part of this arrangement in the *Pluscarden Chronicle*, where it refers to "a house adjoining the church" being set on fire in 1384. This house would probably be the abbot's house which, by the architectural evidence we have seen, had by this time been formed in the tower and nave. The floors in the tower were of wood, and there being direct access to the church roof it would be quite natural to start a fire in this place. The burning of these floors also gives a reason for their subsequent reconstruction in stone.

The additions in the 15th century embraced the rebuilding of the church, the erection of the new north ambulatory, the infirmary, and the insertion of the vaults in the tower.

The date of the rebuilding of the church presents no difficulty, as the foundation of the south transept is recorded as 1402 and the architectural details are of that period.

There is little doubt that the vaults in the tower, forming the dovecot and the so-called "transept" to stabilise the tower, were erected in this century, as it certainly preceded that of the 16th-century staircase. Further, it is implied in the Act of 1581 that the dovecot existed before the monastery was deserted in 1543.

The 16th-century pre-Reformation work is relatively unimportant, consisting of the addition of the two staircases and certain outbuildings, and it is possible that the latter and the staircase to the frater may be post-Reformation.

A characteristic feature of the buildings is the pointed tunnel vault, which after its introduction in the 14th century was used in all subsequent work.

In conclusion I wish to express my thanks to Mr C. R. Peers, C.B.E., M.A., Chief Inspector of Ancient Monuments, for his criticism and help in sifting the evidence, to the Clerk of Works, Mr James Lamb, and the foreman, Mr John Macdonald, for the careful way they have carried out the works of preservation, so that no evidence was lost, and to Mr John Houston who prepared the drawings.

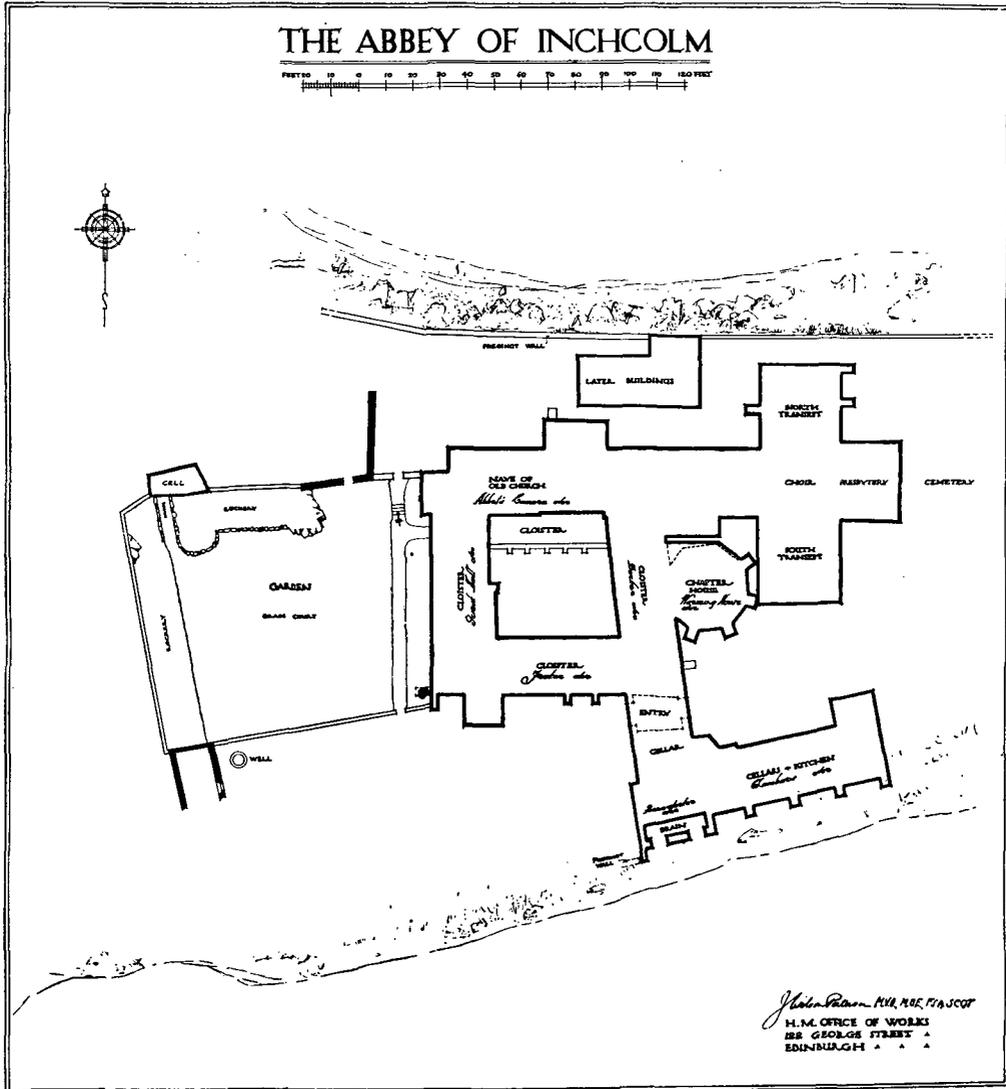


Fig. 8. Inchcolm Abbey: Block Plan.

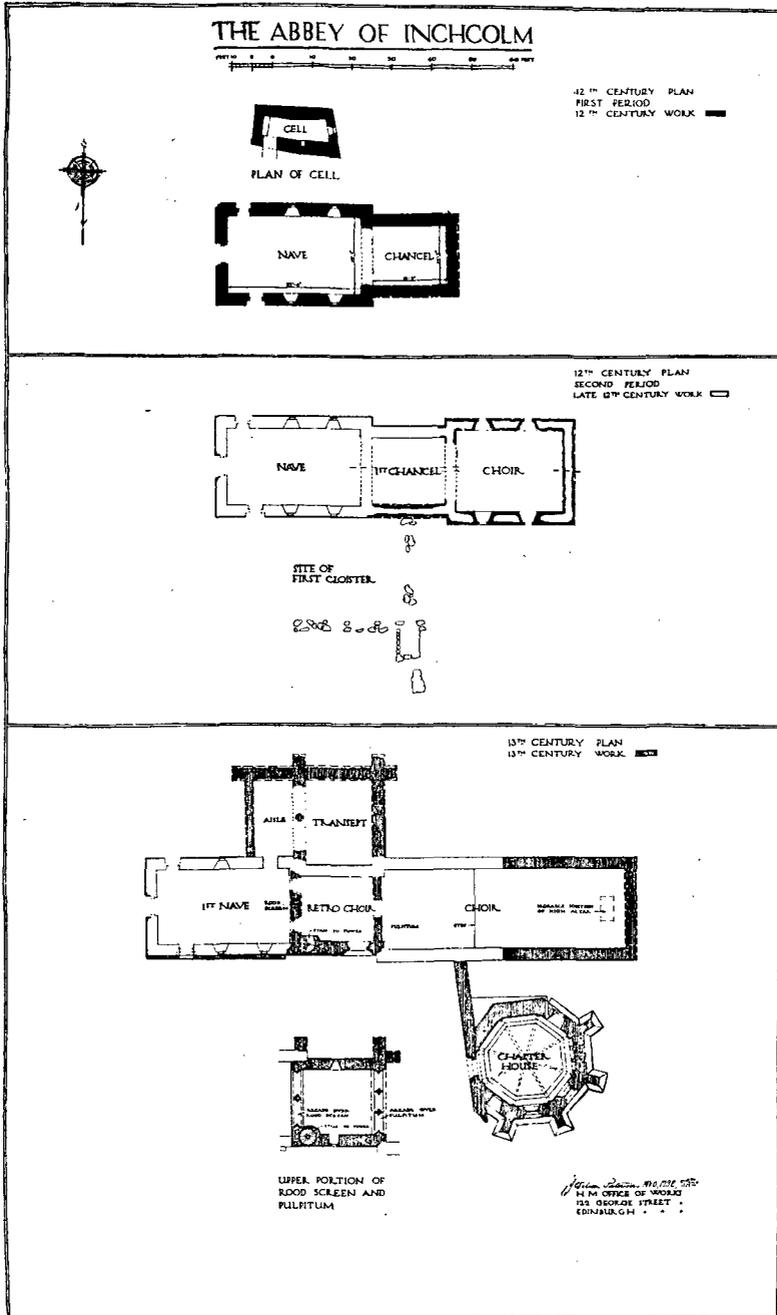


Fig. 9. Inchcolm Abbey: 12th and 13th century Plans.

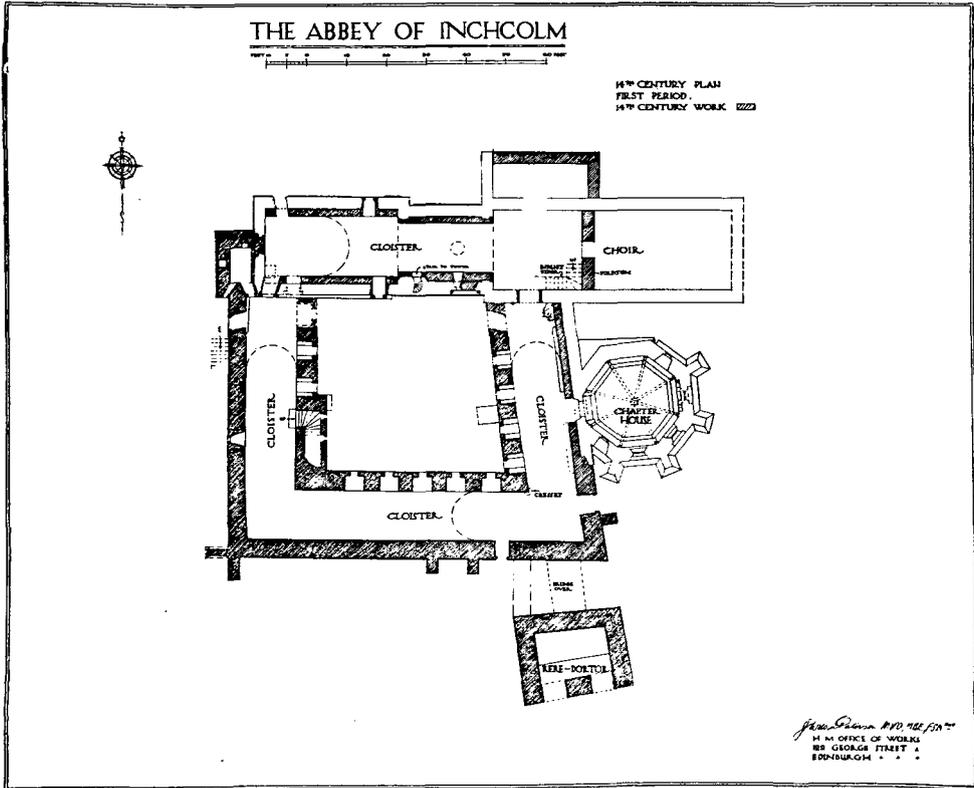
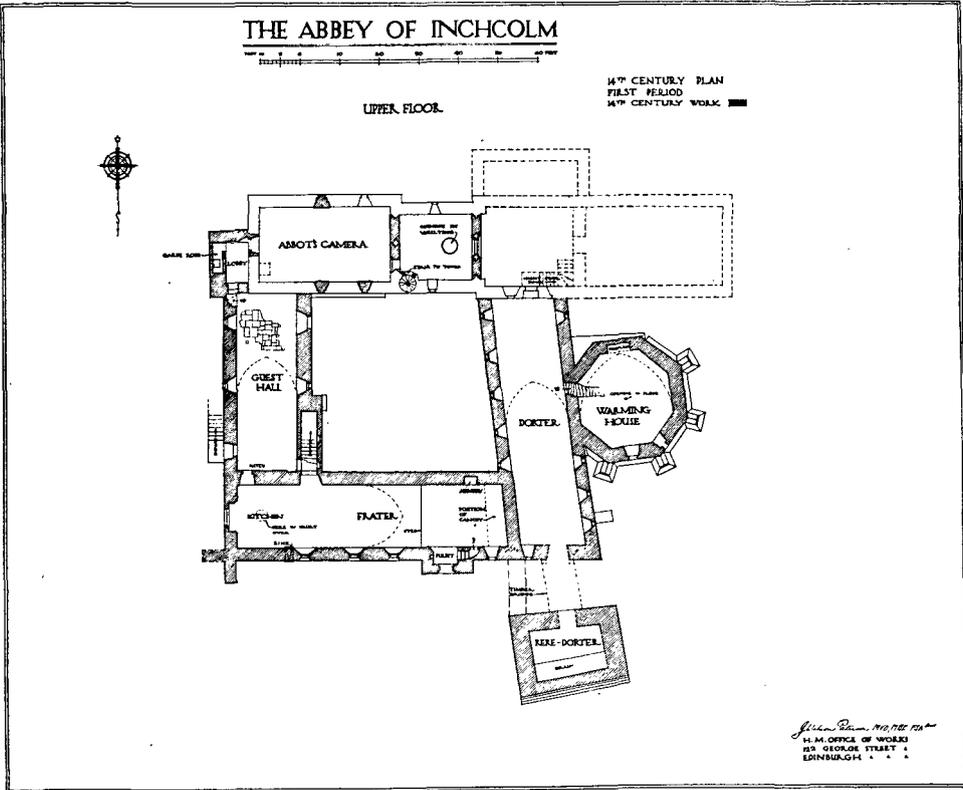


Fig. 10. Inchcolm Abbey: 14th-century Plans.

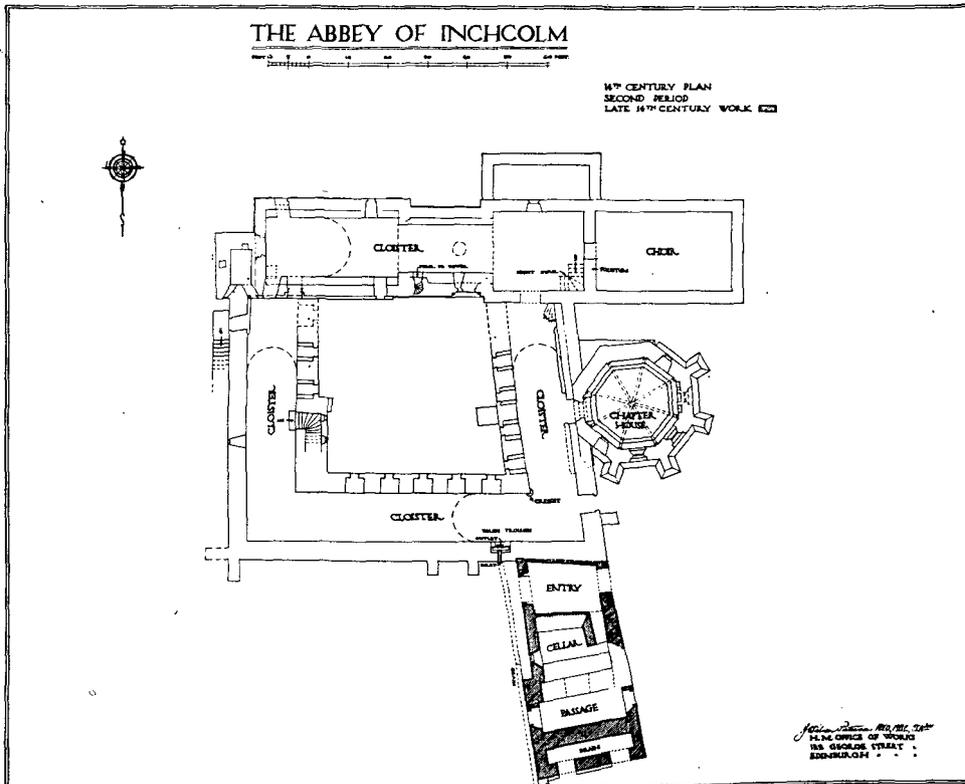
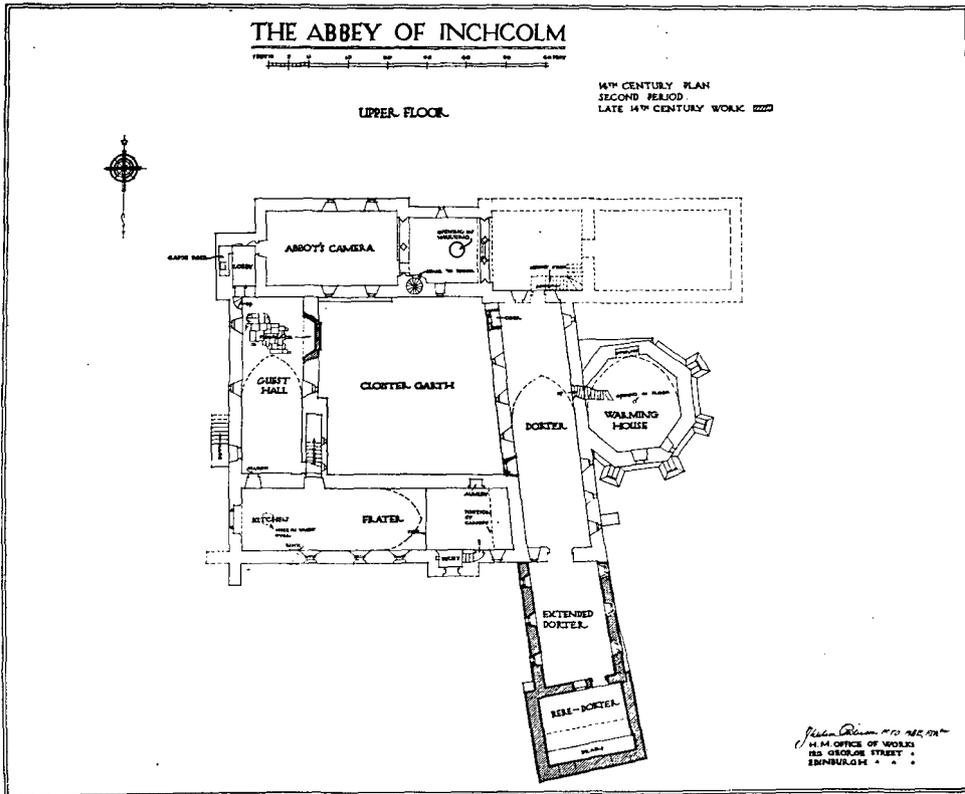


Fig. 11. Inchcolm Abbey: 14th-century Plans, showing later additions.

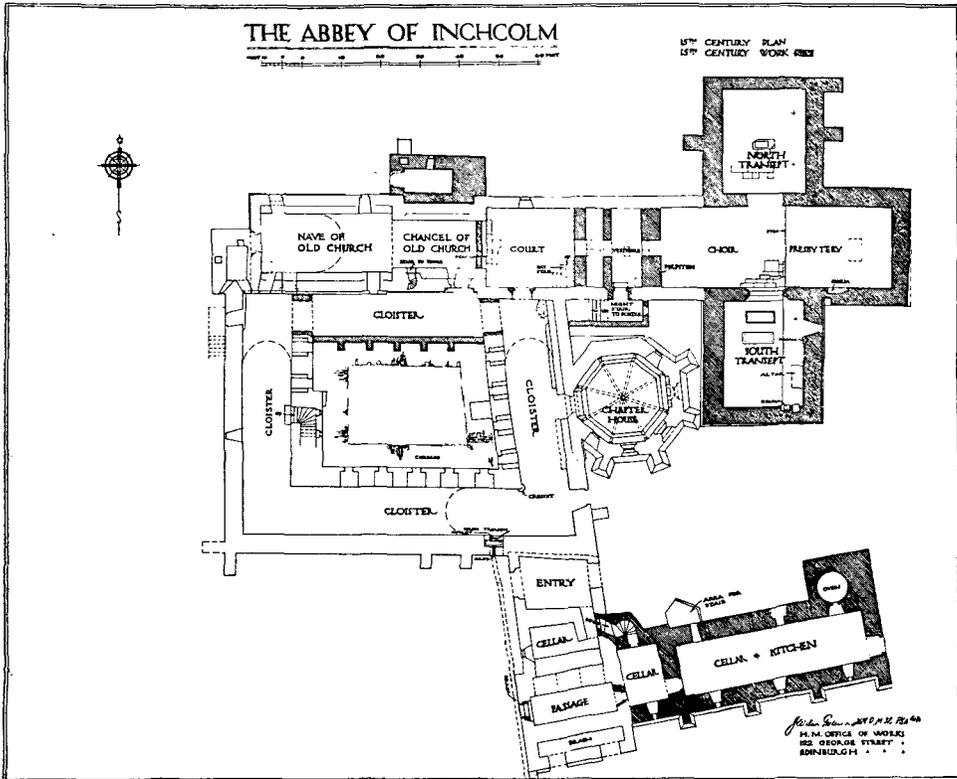
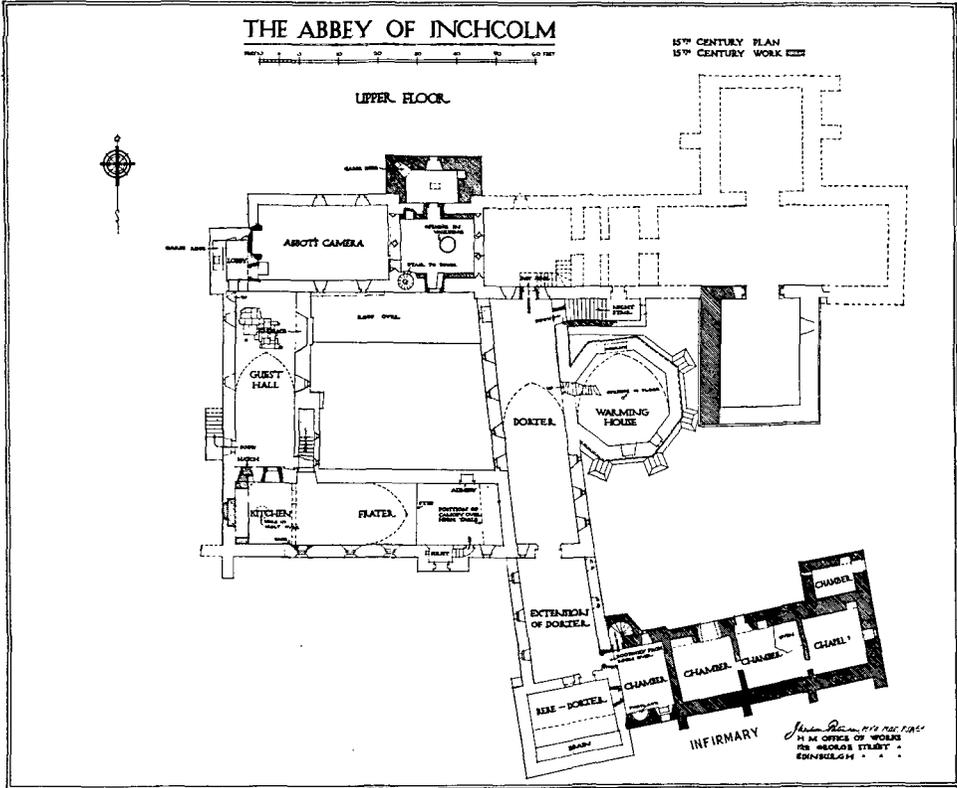


Fig. 12. Inchcolm Abbey: 15th-century Plans.

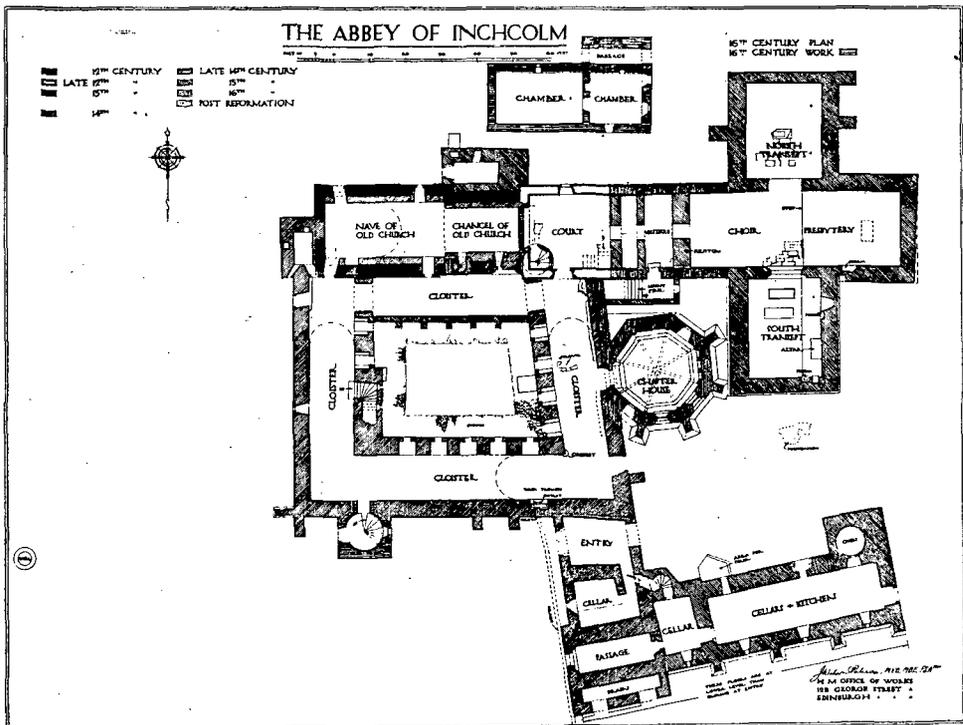
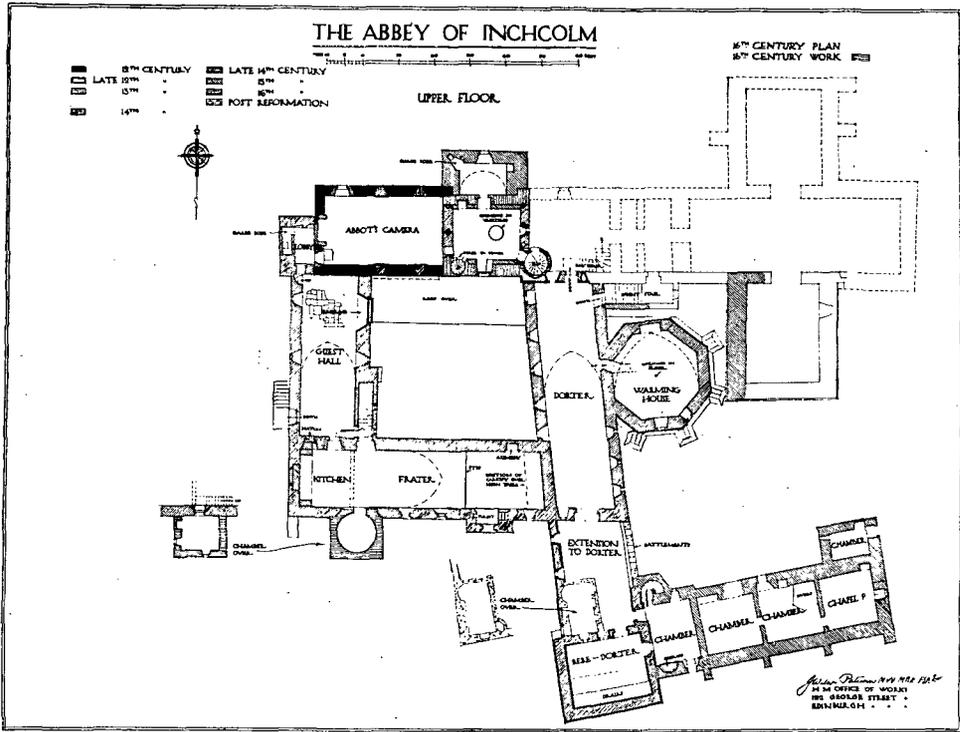


Fig. 13. Inchcolm Abbey: 16th-century Plans.

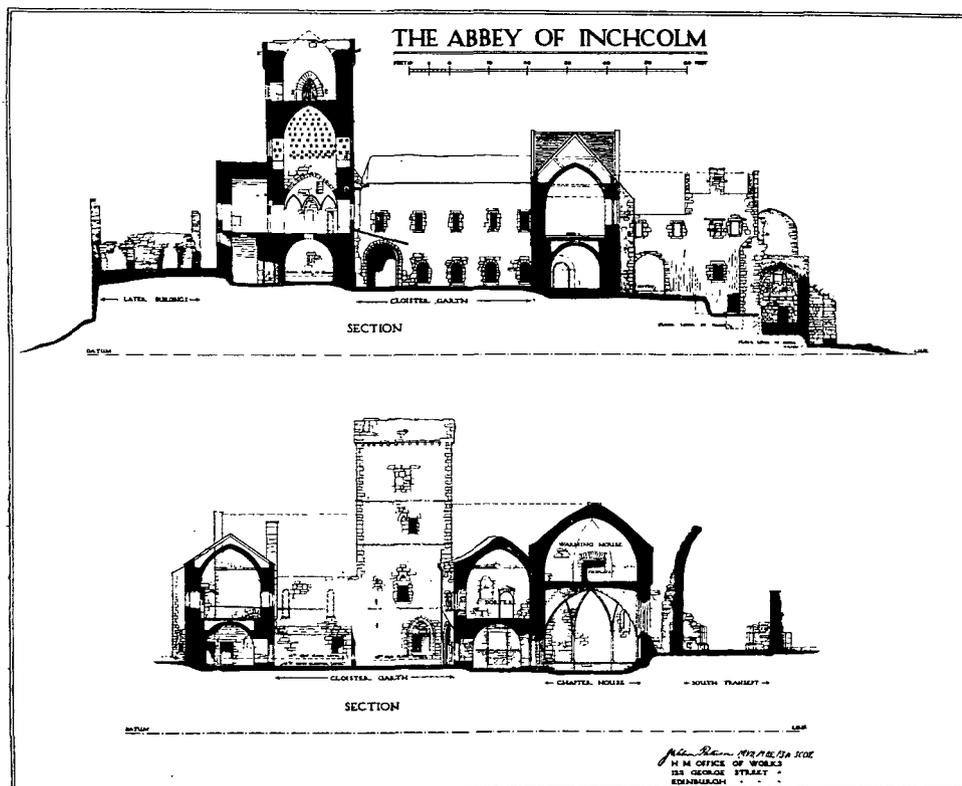


Fig. 14. Inchcolm Abbey: Sections.

MONDAY, 12th April 1926.

SIR JAMES BALFOUR PAUL, C.V.O., LL.D.,
in the Chair.

On the recommendation of the Council, there were elected Honorary Fellows of the Society:—

MARCELLIN BOULE, Professor in the Muséum National d'Histoire Naturelle, and Director of the Institut de Paléontologie Humaine, 1 rue René Panhard, boulevard Saint-Marcel, Paris 13^e.

Professor Dr philos A. W. BRØGGER, Bestyrer av Universitetets Oldsaksamling, Tullinløkken, Oslo, Norway.

O. M. DALTON, M.A., F.B.A., Keeper of the Department of British and Mediæval Antiquities, British Museum, London, W.C. 1.

Professor E. FABRICIUS, Göthestrasse, 44 Freiburg im Breisgau, Germany.

Sir ARTHUR KEITH, M.D., D.Sc., LL.D., F.R.C.S. (Eng.), F.R.S., Conservator of the Museum and Hunterian Professor, Royal College of Surgeons of England; Past-President of the Royal Anthropological Institute of Great Britain and Ireland, and of the Anatomical Society.

Commendatore RODOLFO LANCIANI, K.C.V.O., D.C.L., 2 Via Nerva, Rome.

Dr R. PARIBENI, Director of the Institute of Archæology of Rome, Museo Nazionale Romano, Rome.

A Ballot having been taken, the following were elected Fellows:—

FREDERIC SUTHERLAND FERGUSON, Dunedin, 4 St George's Road, Palmers Green, London, N. 13.

Rev. P. J. FLOOD, D.D., Sacred Heart Rectory, Old Dalrnock Road, Bridgeton, Glasgow.

JOHN GILMOUR, Willowdene, Auchinairn, Bishopbriggs, Glasgow.

Major JAMES ALEXANDER FREDERICK HENRY HAMILTON, 47 Castle Street.

THOMAS MACLELLAN HUNTER, Solicitor, Union Bank House, Stranraer.

NORMAN M. JOHNSON, B.Sc., L.C.P., F.R.S.G.S., Headmaster, M'Lean School, Dunfermline.

Rev. DUNCAN MACRAE, 26 Douglas Crescent.

Mrs MILDRED E. MAITLAND, Cairnbank, St Andrews.

JOHN REOCH, Bank Agent, 16 Mansion House Road, Langside, Glasgow, S. 1.

ALEXANDER ROBERTSON, 2K Portman Mansions, London, W. 1.

The following Donations to the Museum were intimated and thanks voted to the Donors:—

(1) By JAMES LAING, 1 Alma Place, Laurencekirk.

Bronze Mortar, bearing the inscription SOLI DEO GLORIA ANNO 1733, and foliaceous designs.

(2) By W. A. SHAFTO, M.D., Dundas Street, Bo'ness.

Jet Ring of rectangular section, with two perforations on the edge, measuring $1\frac{1}{32}$ inch in diameter. There are faint traces of a lozenge design of incised lines round the periphery and on both sides of the ring; found amongst the soil in making the seventeenth green, "The Graves," on the West Lothian Golf Course, near the summit of Airngath Hill, Bo'ness, where several mediæval and Bronze Age burials were discovered. (See subsequent paper by J. Graham Callander, F.S.A.Scot.)

(3) By JAMES S. RICHARDSON, F.S.A.Scot.

Platter of Samian Ware and Beaker, found together by the donor, 2 feet below the surface, in the sand, about 300 yards from the shore, on the southern outskirts of Wimereux, near Boulogne, France, in September 1918. The platter is 7 inches in diameter at the mouth, $3\frac{9}{16}$ inches across the base, and $1\frac{7}{8}$ inch in height, and bears the maker's mark, MVX(TVL)LIM, on the inside; Dragendorff 31. The beaker is of cream-coloured ware coated with brownish-black slip, and measures $3\frac{3}{4}$ inches in diameter at the mouth, $5\frac{1}{4}$ inches at the bulge, $1\frac{13}{16}$ inch across the base, and 6 inches in height, the wall being decorated with two rows of roulette pattern above the bulge and one row below.

Leather Shot Flask with brass nozzle and adjustable gauge for the charge of pellets, both sides of the leather bag having tooled on them a man riding on a pony, wearing a Balmoral bonnet, holding a gun at the ready, and having a game-bag hanging at his left side, in front of the pony being a dog; from Aberdeen.

Block of Light Grey Flint, measuring $4\frac{1}{16}$ inches by $3\frac{3}{8}$ inches by 2 inches, from which flakes have been struck off round the greater part of the periphery; found at Gullane, 21st April 1908.

(4) By CHARLES E. WHITELAW, F.S.A.Scot.

Old Knife and Fork with bone handles, the fork having only two prongs.

Old turned wooden Egg-cup, $2\frac{1}{16}$ inches high.

The following Donations to the Library were also intimated:—

(1) By FRANK MILLER, F.S.A.Scot., the Author.

Andrew Crosbie ("Pleydell"). Second Edition. Annan, 1925.

(2) By THOMAS SHEPPARD, M.Sc., F.S.A.Scot., F.G.S., F.R.G.S.

Hull Museum Publications, No. 141. Record of Additions, No. LXVIII.

(3) By the Trustees of Mrs HONYMAN GILLESPIE of Torbanehill,
through JAMES URQUHART, F.S.A.Scot., the Author.

Memorial of William Honyman Gillespie of Torbanehill. Edinburgh,
1926.

(4) By E. HERBERT STONE, F.S.A., The Retreat, Devizes.

Some Notes on Stonehenge. Devizes, 1926.

It was announced that the following Books had been purchased for
the Library:—

Pola: I Monumenti Romani. Vol. IV, No. 1. By Bruna Tamaro.
Trieste.

Leptis Magna. Vol. I. By Pietro Romanelli. Rome, 1925.

Osebergfundet. Utgit av den Norske Stat under Redaktion av A. W.
Brøgger, Hj. Falk, Haakon Schetelig. Vols. I and III. Kristiania, 1917
and 1920.

The following Communications were read:—