

ART. I.—Notes on the remains of the Conventual Buildings at the Augustinian Priory, Carlisle, now the Cathedral. By J. H. MARTINDALE, F.S.A., F.R.I.B.A.

Communicated at Carlisle, April 19th, 1923.

TN the autumn of 1922, certain settlements were observed in the vaulting in the crypt under the Fratry. These. on examination, were found to be serious, and apparently increasing: thus necessitating steps to be taken immediately to prevent the collapse of the whole of the vaulting. The subsidence was greatest in the western bay, in the end column of the centre row, but it was also apparent in all the five columns down the centre of the crypt. The Dean and Chapter had the whole of the five columns very carefully and securely underpinned with reinforced concrete, and all the ribs and cross arches in the vaulting gently wedged back to their original position, and there securely jointed and fixed in cement. The upper part or back of the vaulting and the pockets or haunches were also very carefully grouted in cement, and all cracks filled and made secure.

During the execution of the above works, fragments of pottery, horns, etc., were found, of which a record is given in the appendix to this paper. But certain discoveries were also made giving indications of the plan and arrangement of the earliest monastic buildings, which owing to the great destruction which took place in Border warfare, have always been a little unknown, uncertain, and never very fully described.

The Priory was a House of Regular Canons of the Order of St. Augustine, founded early in the 12th century, probably by Henry I. As the late Chancellor Prescott states, "it may have replaced an earlier foundation, but the evidence is very vague" (The Statutes of the Cathedral.

p. 2). The order was not introduced into the north of England before about III5.

The general arrangement of the buildings seems more or less to conform to the usual plan and arrangement adopted in all monastic buildings. Here, they were placed on the south side of the monastic church, and this had great influence on the future enlargement of the church, during the several rebuildings after it was created a bishop's see. By the Rules of the Order, the Canons had a common dormitory and common refectory, which marks one of the principal differences between the plans of houses of Regular and Secular Canons. The other buildings were arranged more or less similarly in all the orders.

The plan of Carlisle may perhaps be compared with and interpreted from the plan of Bristol, another Augustinian House and Cathedral which has been so excellently investigated and explained by Mr. R. W. Paul (Archæologia vol. 63). The foundation of Bristol was probably a few years later, but comparing the plan of the most ancient or Norman parts of the church, as drawn by Mr. Paul, with what we know of Carlisle, the similarity is very singular and striking, especially in the church, where we have the comparatively shallow transepts with apses on the eastern sides, identically the same, and again the vestibule to the chapter house.

My object in these notes is to try and identify or explain the remains of the monastic buildings in the light of any recent discoveries, and to confine myself to these parts, not touching on the church proper.

The conventual buildings seem to have suffered most during the siege of Carlisle in 1645, when the materials and stones mentioned later were removed to the Castle by Genl. Leslie to form the bastions for artillery. In the Chapter minutes, Decem. 18th, 1669, we have a very full account of the state of the Dorter block at that time:—

Whereas the building called the Dormitory was pulled down and

totally ruined in these late times, by reason whereof the stone arches underneath are much decayed and in danger of falling to the great hazard of that part of the Church adjoining to it. That for the securing of the two arches next to the Church and the preventing further danger, all the arches except those two adjoyning to the Church be taken down, and those two arches secured by buttresses, and such other means as skilfull workmen shall direct, provided the wall between the south syde of the Church and the east end of the Fratry be left intire, and for the better ornament of the places within the precincts of the said Church, which by taking down the said arches might in some measure be impaired, that the ground where the said arches stood be assigned to the fourth Prebendary for a garden to be annexed to his house (*The Statutes of the Cathedral*, p. 50).

The above description of the state of the buildings 265 years ago, will, I think, enable my notes to be easily followed and understood.

Take the plan (Fig. 1.) and start from the modern door in the south wall of the south transept.

The Dorter or "Dormitory" as it is called above and its sub-vault, as usual, extended south in a direct line from the south transept, for a total length of some 116 ft., that is some 12 ft. beyond the south wall of the present Fratry: the angle of this return wall is in situ and the width is also clear, 33 ft. The east wall of the Fratry and the continuation wall to the Cathedral was the west wall of the Dorter, against which was the east walk of the Cloister. The present brick wall enclosing the premises of the residence of the First Canonry, with the arched door to the Chapter House, fixes the line of the east side of the Dorter.

On the ground floor immediately adjoining the south transept, was apparently a slype or passage, some 8 or 10 feet wide, with a pointed arch from the east walk of the cloister, and another on the east wall, giving access to the cemetery, east of the monastic buildings. It apparently was vaulted in two bays (see Nutter's view, fig. 3) and on the south side had a stone seat, and small locker or aumbrie in the division wall, but these may be not quite

correct, as the ground is shown at the raised level. These are shown on Hearne's view, 1802, and Nutter's of 1835 (figs. 2, 3). It must be remembered that the original ground-floor of this block of buildings was some three or four feet below the nave floor.

Adjoining this was evidently a room or sacristy about 13 feet wide, and this was entered by a small semicircular arched door from the Cloister, with a solid wall between it and the remainder of the space running south, which was the sub-vault of the Dorter and was six bays long. The seven corbels and springers for the vaulting, which was quadripartite, together with the wall ribs, remain on the west side. The Slype and room adjoining, or whatever was left of them, were apparently destroyed at the restoration of last century. The wall is shown by Hearne and Nutter and also in plan on the Ordnance Survey as existing up to the end of the transept.

The springers of the northern bay which formed the vestibule to the Chapter House show the diagonal ribs of the vaulting as moulded; all the others are simply splayed. This west wall next the cloister is some 4 ft. thick, and is pierced in the sixth bay by a double cinquefoil arched door with tracery spandrel, forming the entrance vestibule to the Chapter House, which is central with it on the eastern side. I give an illustration (fig. 6) of this doorway, as it is today, and it is shown by Hearne and Nutter.

The present ground is filled up some four feet above the old floor level. No door or communication is traceable to the Cathedral in the end wall of the transept at this level. and apparently the only means of communication with the church were the processional door from the cloister to the south aisle of the nave and the door to the night stair from the dorter on the upper floor. On the east side of the sub-vault, the arched door of the entrance to the Chapter House remains *in situ*, thus giving us the exact width of this block of buildings (fig. 7). It is a pointed

moulded arch, 5 ft. 6 in. span, with a shaft and capital in centre on each jamb. On its E. face (fig. 8) the return angle of one side of the octagonal Chapter House with its angle shaft remains *in situ*, thus giving the exact internal diameter of the Chapter House, namely 28 feet.

There also remains half of the trefoil head of one panel of the wall arcading of the Chapter House (fig. 8). A large number of the stones from the Cathedral were discovered during the works at Carlisle Castle, and returned to the Dean and Chapter by H.M. Office of Works in 1014 (these Trans., N.S. xv, 190). Among these were stones belonging to this Chapter House, including several of the internal octagon quoins, with nook shaft worked on, and two capitals, also one basestone, and sufficient arch stones of the wall-arcading to complete one side. The last confirmed the exact length of the side walls of the octagon and proved that there were five wall-arches on ach face. There are also several springer stones for vaulting which do not fit the vaulting in the sub-dorter, so may most probably belong to the Chapter House. One seems to be for the top of a column, thus seeming to indicate a central column in the Chapter House.

In most cases the Chapter House door opens directly from the east walk of the Cloister, but here we have a vestibule, the full width of the Dorter building, the same as in the Augustinian Houses at Hexham and Bristol and at Cistercian Furness, except that in these last cases, the vestibule only occupies half the width of the Dorter, the Chapter House itself projecting into the eastern half.

The main ground-floor entrance to the sub-vault was a door from the Fratry slype, between it and the crypt, under the Fratry. This remains, but was blocked on the Slype side at the restoration in 1880, the space being converted into a heating-cellar. The day stair to the Dorter went up over this door, and at the head another

bricked-up door gives the entrance to and level of the Dorter floor (fig. 9).

The day stair was entered at the foot from the east walk of the Cloister, the wall being recessed to get the width (see Nutter's view and fig. 10). From the landing of this day stair (which was one straight flight), a small circular stair exists in the south wall, and continues up to give access to a single room on the two floors, over the Slype at this east end of the Fratry, and also to the roofs. The Dorter was apparently a room, 89 feet long by 26 feet wide, the remaining space over the Slype and sacristy next the south transept being apparently rooms separated by a wall. On the end wall of the Fratry block, to the south of the Dorter entrance door, is a small trefoil-head light, originally giving a light to the Dorter; but this is all that remains to indicate the type of window.

The height of the building is very clearly fixed by the roof corbels in the east wall of the Fratry (fig. 9) and the label over the gable of the roof on the south transept, which was not obliterated when the new south door was inserted.

The night stair and door, as usual, were at north end, and entered into the transept, as at Hexham. The door was shown by Billings, before the modern work was erected, and no doubt correctly. It is now blocked on both faces.

From the south walk of the Cloister, a pointed-arched door immediately to the west of the door at the foot of the day stair gives access to a slype right through to the south (fig. 10). From this slype, on the west side, two doors with a descent of three steps give access to the crypt or vault under the Fratry. I think they are not both of quite the same date.

The crypt is 77 feet long from east to west by 26 feet wide north to south. It is divided into two aisles by a centre row of five columns, forming six bays. The

columns have no capitals, the vaulting ribs springing directly from the shafts, which are octagonal, and have simple single splay bases. The columns are 20 in. diameter and 2 ft. 4 in. high. The vaulting here again is quadripartite and has simple hollow splayed diagonal ribs, with mitred intersection at the apex, except in the eastern bay where there are two bosses at the intersection, with the initials of Prior Gondebour. There is a door with a small circular mural stair in the south-west angle, giving access to the upper floor. This projects slightly on the west and is shown in fig. 3. The present external west door is an insertion about the end of the 17th cent., as appears from the following minute:

Ordered by the Dean and Chapter that a convenient meal garner be made in the Low Fratry for the farmers of our tithe meale from the first row of pillars then to the north wall, and a doore be broken forthe in some part of the said walls, and stepps made to goe into the same, and the farmers are to be at the charges of making arks or other convenient places for putting their meal in. May 17th, 1684. (The Statutes of the Cathedral, p. 83.)

The grooves for these "arks" may still be seen in the soffit of the ribs of the vaulting of the western bay. In Hearne's view this door is shown with a porch.

This crypt was lighted by six windows on the south side, one in each bay. The one in the fourth bay from the west is probably ancient; it is square-headed, both external and internal, with square internal jambs, and has a deep chase on the inside of the western jamb for a shutter. All the other windows have been modernised and the internal jambs splayed.

In the course of the repairs to the subsidence, it was found the builders had made very little, if any, attempt to form any masonry foundation to the piers below the visible base; wooden piles had been used in the very spongy earth, on which they are placed. The singular point is that, a few feet deeper, a solid foundation would have been found.

Between the third and fourth columns from the west, a stone drain was discovered crossing the crypt in a diagonal direction from south-east to north-west: it was some 5 ft. 7 in. deep below the present floor of the crypt and was formed with good masonry sides, the courses being stepped; at the bottom the drain was about 7 in. wide, and at the top, 2 ft. The masonry finished about Ift. 10 in. below the floor (fig. 11). This was undoubtedly the drain or sewer from the sanitary buildings of the earliest monastery, which would be situated to the south of the dorter before described and in which direction it clearly tends. That it was much earlier than the vaulting of the crypt is proved by the foundation piles above mentioned, for in the case of the third pier these piles were actually driven into the black mud with which the drain was choked. It was therefore out of use in the 15th century. The drain, which ran from south to north, has now been cleared and can be inspected. The direction of this drain if continued south-east will touch the south end of the sub-vault of the Dorter and the exact position in which we would expect to find the rere-dorter.

The late Rev. Mackenzie Walcott, in his Memorials of Carlisle (1865) says: "at the south end of this cellerage (Dorter sub-vault) was another line of buildings at right angles built over an Early English groined crypt, which contains a water drain." I am not sure whether he refers to a block of which there were then remains, or to this Crypt of the Fratry: but I hardly think it can be the latter or we should have had some further record and knowledge of the drain as now discovered. In any case it confirms the theory of the use.

The upper floor or Fratry proper was divided and fitted up as a Chapter House, as appears from a Chapter Minute 15th Dec., 1668 (*The Statutes of the Cathedral*, p. 83). It seems to have been divided into three rooms:—Singing school, Chapter room and Library, and so remained

until the restoration of last century. I show a very clever sketch by the late G. E. Street of the interior before the restoration (fig. 12). This sketch was prepared as a reply when the Society for the Protection of Ancient Buildings had criticised the proposals. I will not enter into the controversy, which appeared in the *Architect*, Feb. and March, 1880, but simply gather any information I can from it as to the state of the building.

It would appear that the north wall, exactly as one would expect, was solid up to the clerestory windows: this is confirmed by the corbels to support the pole plate at the top of the cloister roof, now in situ. The two windows had been inserted about 1699. This is the exact date of the "Registry," see infra. Of the two external doors with steps in front from the cloister (fig. 13) one was inserted or altered by Sir Robert Smirke, in the ancient doorway from the western walk of the cloister; the other, nearer the centre of the building, was possibly of c. 1660. There is a Chapter Minute, 1705 (quoted in The Statutes of the Cathedral, p. 58):—"We are directed and advised by our said Visitor to take down that useless Porch before the Fratry, and to employ the stone, lead and timber towards the building of a Vestry on the south side of the Cathedral where the Vestry was formerly built " (see Nutter's view, fig. 15). This "useless porch" may refer to the south walk of the Cloister, and therefore all these insertions were to meet the uses and subdivision of the 17th and 18th centuries. The sketch (fig. 12) also shows two niches removed from the north wall to their old position on the east wall. There also appears to have been a division wall, with fireplaces in it, across about the centre of the Fratry (see plan, fig. 13), and this wall seems to have been built on the vaulting of the Crypt. Possibly "the eccentric stone props" mentioned by Mr. Street to support the vaulting in the Crypt, were inserted to support this wall.

There may have been an entrance to the Fratry from the head of the day stair to the Dorter at the east end, but it is not very clear. The Fratry, when used for the dining room of the Canons, was served from the monastic kitchen in the block of buildings now forming the Deanery, and there was a bridge or arch of communication at the south-west angle. Two lockers or hatches remain in the west wall. The reading room on the south wall, formed by thickening the wall externally, carried on arches, is a beautiful and perfect example of a Refectory lectern, and well known. In the mural passage from it to the east rooms is a shoot-stone for a drain, again delivering over the drain below.

A most interesting light is shown on the state of this Dorter block of buildings 225 years ago by a packet of sketches and documents, 10 in all, in the possession of the Dean and Chapter: only one is dated, "Rose Ap. 22 1693. Signed Jno. Nicholson." One is a request, probably in reply to a suggestion, to Dr. Thos. Smith, Bishop of Carlisle, to rebuild or fit up this block of buildings as a Library, and there are certain very sketchy plans of the proposed work. By the kindness of the Dean and Chapter, I am allowed to give the letters and reproduce the plans; in addition there is a detailed estimate of the cost of the proposed work, giving particulars or description. The estimate seems to have been sent by Jno. Nicholson, Ap. 22, 1693, to Dr. Todd.

From the plans, it would seem the monastic Dorter walls were at this time standing to at least their present height, and probably on both sides. The length, 24 yards, is exactly the space from the end wall of the south Transept to the Fratry, but does not extend across the east end of the Fratry. It would therefore seem that the proposed work would have destroyed or did destroy the three south bays of the Dorter. Further, the proposal was to erect either a centre line of columns "or a wall"

down the centre of the Dorter sub-vault to support the floor of the new library, which was to be on the first floor, that is, the old level of the Dorter, and the door and night stair into the south transept of the Cathedral were to be retained. There were to be seven two-light windows facing west to light the Library, and one in the south or end wall. There was to be a battlemented parapet to east, west and south sides, and the north abutted against the end of the south transept. Apparently there was to be an arch next the transept, this confirming my suggestion that there was a slype between the Cathedral and Chapter House.

Also the entrance to the Chapter House vestibule was to be retained, and the new wood stair mentioned in the estimate was placed between this and the slype, where I suggest was a room, to give access to the Library. The height of the new building was to be 12 yards to the parapet, which would bring it about the level of the sill of the window in the gable of the south transept, and about the apex line of the ancient roof, that is, higher than the side walls of the original Dorter.

The Elevation clearly shows the ancient pointed arch door to the slype as retained. The next small door to the sacristy was to be altered, as also the entrance to the Chapter House vestibule, and made into square headed openings with dressings of a classical character. The first was to be the entrance to the stair leading to the new Library, and the second to the meal garner on the ground floor which was to replace the "Arks" under the Fratry. Over this is shown a niche finished with a mitre, and over the other a high classic escutcheon. The windows for both floors are two-light, with classic broken pediments, alternately pointed and segmental. One of the sketches has a note that there are only to be seven windows on the side, and a further note indicates the room or space over

the slype, retained as a study. Fireplaces and a chimney-stack are indicated.

So much for the proposed new Library. What about the old materials proposed to be used? I don't think we should assume there was any intention to destroy any part of the present Fratry; the proposal simply indicates that a very large amount of both stone and timber etc. had been stored and piled up in the Fratry block. The only item of destruction is the proposal to take up the flagging of the cellar in the Fratry, that is the present Crypt. At that time therefore, the Crypt was floored and in use.

Mr. Street's sketch tends to confirm this: he marks the roof as 1679, and other parts before the end of the century, so that it would hardly be expected to pull down work only 12 or 15 years old.

The following were the members of the Chapter when these proposals were made, and the occupant of the first Canonry succeeded Dr. Smith, 10 years later, in the episcopal see.

The Dean was William Graham 1686 to 1704 1st Canon William Nicolson 1681 to 1702 2nd ... Arthur Savage 1660 to 1700

3rd ,, Arthur Savage 1666 to 176

4th ,, Hugh Todd 1685 to 1728

This proposed Library was never erected, but I cannot find any record in the Chapter Minutes giving the reason. The estimates may have been too high, but Bishop Smith, about six years later, in 1699, erected the building to the west of the Deanery, now used as the Bishop's Registry. Had the building been erected or the old one retained, possibly the useless iron tie-rods in the walls of the triforia of the south transept would never have been inserted.

PROPOSAL ABOUT YE BUILDING A NEW LIBRARY TO WCH. MY LD. BP. HAS GIVEN 100 LB.

1. To have it built twixt the corner of the church, and the corner of the Fratry, on ye east side, about—24 yards in length.

- 2. The bredth to be ye same with that of ye garden.
- 3. Cloister to be under it, & windowe . . . . for them in ye west wall.
- 4. The Cloister to be supported by pillars, as in ye Fratry the upper room is, or by a wall drawn along ye middle of ye Building, and, meal garners to be in ye back part of it.
- 5. All the stone & timber in ye Fratry, above ye first floor to be used in ye building of the Library, & the Porch & lead to be used to that purpose; & ye stairs sett to ye door of ye Fratry.
- 6. If we want stones, ye E. side of ye Library to be built of Brick. If of stone some to be fetchd from Wedderal, and to be viewd there to-morrow at ye Court.
- 7. Flaggs for the Cloisters to be taken out of ye Cellar in ye fratry.
  - 8. Meal garner under ye Registry.
- 9. The work to be begun with presently, & workmen agreed with by ye week.

Rt. Revd. and ever Honourd Diocesan

Wee recd. your Lordpps kind message to us by Dr. Todd Your Lordpps Chaplain, and return our most humble thankes to your Lpp for it; and for all other yr great Favours and benefaccons to this your Cathedrale.

(Your Lordppe has done so many and so great Acts of Piety and generosity to this place that you have heald in a great measure those wounds the Civile War made and may be justly esteemd the Great Benefactor a second Founder of this Colledge).\*

The place proposed for a Library is the most convenient of any: it almost fronts the Gate and the Deanary too and haveing been formerly filld with a building it looks as if it beggd to be repaired by some charitable hand. The timber and stone that are in the Fratry which were put up there to make a Magazine in the late usurpaction are a perfect Lumber, and take from the beauty and convenience of that great Room where the Dean and Prebendaries and all the Members of the Church used to meet and dine upon solem occasions. But the materialls when taken downe will be very serviceable in the new Building (and will go a great way toward the finishing of it).\*

Wee are very sensible both how usefull and creditable a good Library would be. There are still some of the Prebendaries and others of the Clergy upon the place who would have the constant

<sup>\*</sup> The sentences in brackets are crossed out.

benefitt of it, and upon occac'on others of the Diocesse might be helpd and advantagd by it. Mr. Savage, our Sub Dean has been very librale in giving some books of very good value, and all of us would contribute according to what wee have, to so publick a work. But yr Lordpps kind offer of those many excellt volumes which you have collected at great expence would make (it the best)\* a very good and compleat(est) Library (in the North of England. Your Ldpp is eminent thro the whole Church for acts of generous Piety and magnificence and the compleating this Treasure of learning will be of universal repute and lasting Honour to you. And God who rewards what is done for his publick service and the generall good of his Church: in a special manner would reward you for it with greater Glory in Heaven amongst those Sts who were blessings to the generac'ons they lived in by their exemplary Holinesse and such charitable works.)\*

Thus My Ld you see wee have a convenient place, some materialls and great encouragemts for a Repository of Learning in this Remote part of the kingdoome wee live in and are very sensible of how great advantage it would be to your Ldpps Diocesse but notwithstanding all this upon computing all the particular expenses of the building wee cannot but let your Lordpp know that wee find our selves (wee are) unable to bring it to perfecc'on without more assistance than wee have at p'sent or of ourselves can possibly afford. Yr. Lordpp knows the Revenues of the Church are but small and employd, in maintaining the members of it in a very poor way and should wee allow fifty pounds and a small fine or two when they fall which wee should not be unwilling to do, that would not finish the whole work. Wee have a great desire to see such a Work of Piety done in our time but wee have a caution of an unwise builder who did not consider the cost and what censure was passd upon him when he was not able to finish. Wee doe not say this as if we despaird of ever haveing the work goe forward or that wee in the least presume to intimate so much as to move your Lordppe for any Larger Charity, for what you have pleasd to offer us is very generous and more then what wee could expect: only wee humbly lay the matter before your Lordpp who wee hope will approve our inclinations and likewise not (discomend?) our caution.

The Bearer will inform your L'pp of all the Particulars of the matter. Wee have only this to add that wee wish your Lp a long andhappy life and that wee are with all Duty and Respect

Your Lps. most obliged & most obedient sons & (humbl) servants
The Dean & Chapter of Carlisle.

<sup>\*</sup> Words in brackets crossed out.

## AN ACCOUNT OF THE EXPENCES CONCERNING THE ERECTING THE NEW LIBRARY.

For 24 yards in length and 10 in Front in height 240 yards in all, at 1s. 6d. per yard Rough Ashler work Agreeable to that of the Church next to it, back side	£ 12	s. 00	
a yard thick the first story and $2\frac{1}{2}$ foot above as at			
Rose	12	00	00
Battlements round 57 yards at 4s. 6d. per yard	12	16	6
End wall 9 yards broad and 12 height with found-			
ac'ons at is. 6d. per yard	08	15	6
For 9 windowes above 3 in the outer and 6 in the			
inner part at 5s. per window, and 8 and a door at			
5s. each	04	05	O
Windows on the Back side, 9 as on the Front	02	05	О
Rustick corners above comon rate say	02	00	О
A wall along the middle of the Cloyster, 5 yards			
from the foundac'on at 1s. a yard 15 yards long	03	15	0
Water table ready in a manner or to and a			
Cornish under the Battlemts, 24 yards arch in			
the front and 24 in the Back side and 10 in ye end			
at is. per yard	OI	18	0
Two partitions one twixt the stairs and cloister and			
the other above 7 yards and 4 high 28 yard next		- 0	
the outer and inner Library	01	08	О
pillars and wall in the Chapter House and			
putting in the floor again, and plaining it in the			
Library		00	_
For Roof 5 pair of principals, hips and other work	11	00	U
there, with Ballusters at the staires and stairs in all	Т.5	00	00
For lime for building, plaistering & latting	-		00
For sand and hair to mix with lime		00	
For Deals besides wt may be had in the Fratry		00	
For laths for the upper ceiling in the Library and	·		
lower over the Cloister and Back rooms at 28, 100			
in all 4000	04	00	00
For nails for the floor 2000 at 10d. a 100 1 and 2			
ceilings 40000 at 3s. a 1000 6l	07	00	00
For Brick for the inside above and below 46000 and			
bringing in at 10s. a 1000	23	00	00
To Labourers for bearing and leading stone from the			
Quarry and from Wetherall if occasion be at 6s. a			
cart load	12	10	00

T 1			
For slates from Shap bringing and lying on at 12s. a			
rood, 40 rood besides mosse etc		00	00
For the plaistere work		00	00
To the labourers for carrying of rubbish	03	00	00
For Plumber's work useing the lead over the portal			
of the Fratry and for lead which will want to joyn			
on the Church for spouts and gutters etc	30 (	oo	О
For wood for the roof principals and other wood			
with carriage	20	00	0
Glaseing all the windowes with iron bars and casemts	10 (	00	00
Repaireing the windowes and walls and glazing the			
windowes in the Fratry	15	00	0
For flagging the cloister besides the flaggs we have	-	00	
£2	79	13	00

## APPENDIX.

The following objects were discovered during the repairs in 1922. They were nearly all found in the drain, not in any floor or surface excavations.

Fragments of Roman tiles, with the maker's stamp, "MP" (ligatured).

Handles and neck of amphora.

Roman pottery of the 2nd and 3rd cent. A.D.

Samian ware, 2nd cent.

Several horns of deer, and bones, also a horse's skull.

A mason's chisel was found some 18 inches below the floor, not in the drain.

Several timber piles, and cross pieces, some of oak and some of fir.

These are all labelled and on view in the Fratry.



Fig. 2. CARLISLE CATHEDRAL, drawn by T. Hearne.

Phot. F. W. Tassell & Son.

TO FACE P. 16.

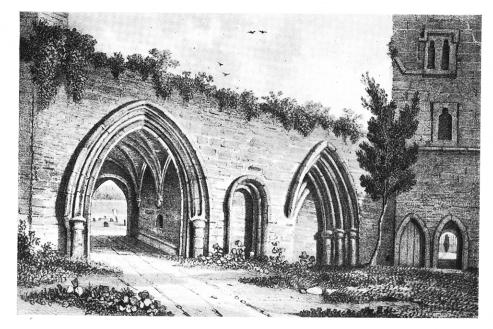


Fig. 3. THE CLOISTERS, CARLISLE; drawn by M. E. Nutter.

Phot. F. W. Tassell & Son.

TO FACE P. 16.



Fig. 4. Corbels and wall-ribs, W. side of Dorter sub-vault; showing the whole six bays.

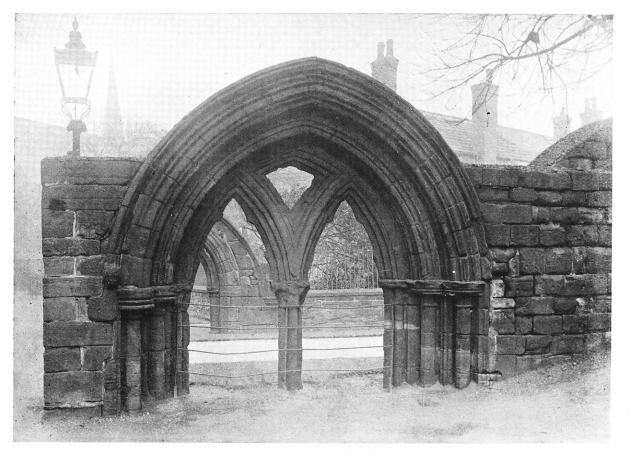


Fig. 5. Double entrance-door from E. walk of Cloister, to vestibule of Chapter House.

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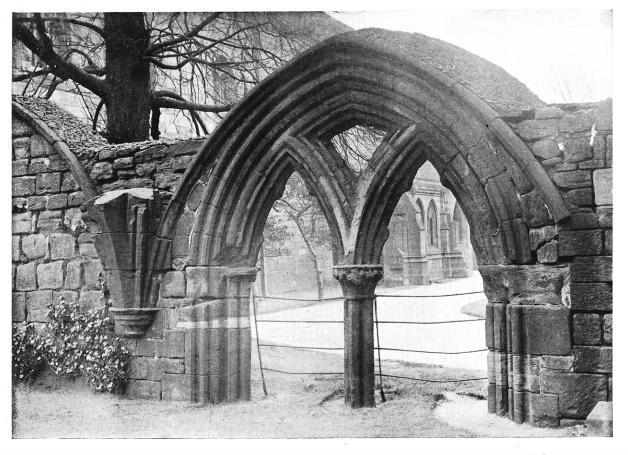


Fig. 6. Corbel to vaulting, Dorter sub-vault, and entrance to Chapter House vestibule from Cloister. The corbel shows the splay ribs and the moulded ribs to vestibule.

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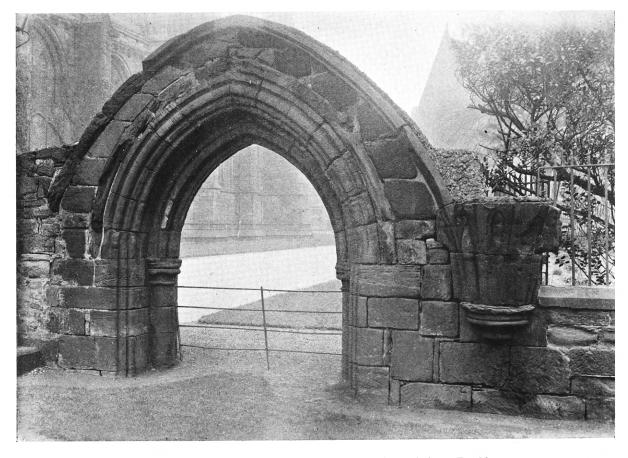


Fig. 7. Entrance to Chapter House, and only corbel on E. side.

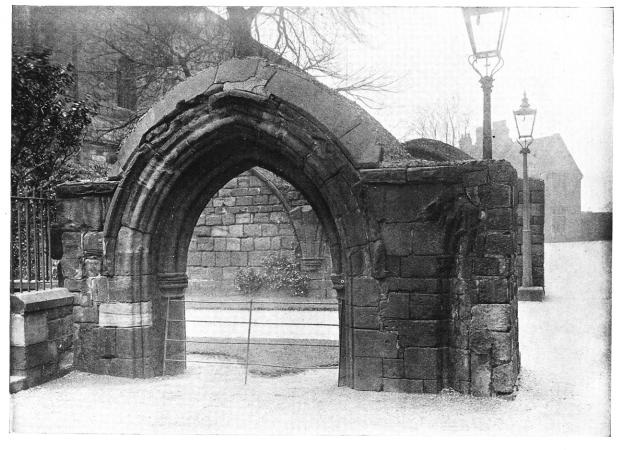


Fig. 8. Inside of door to Chapter House. Angle shaft and wall-arcading on right, giving side of octagon.

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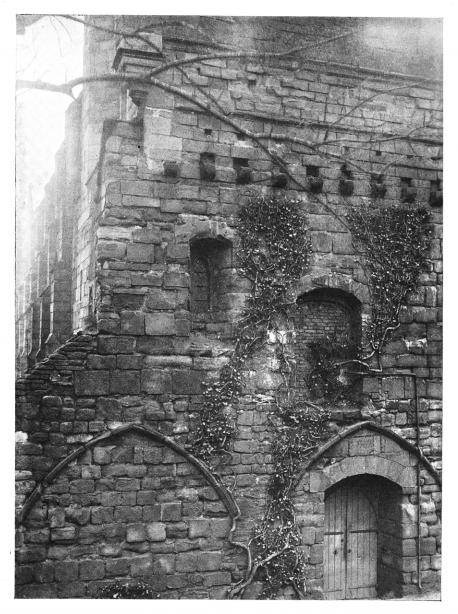


Fig. 9. East wall of Fratry, showing door to Dorter sub-vault from Slype, and on the first floor the entrance to Dorter from day-stair (now blocked); also window and roof-corbels of Dorter.

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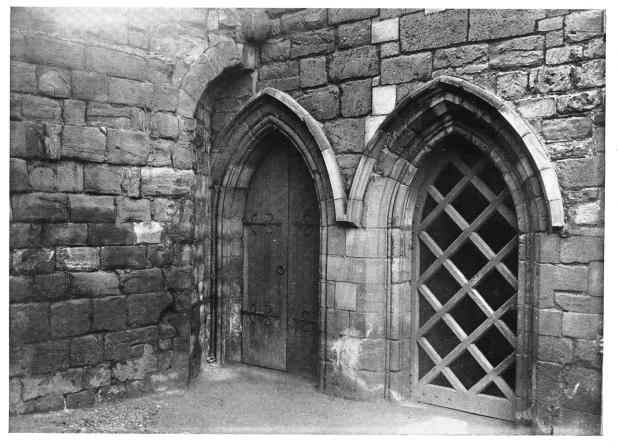


Fig. 10. Doors to Day Stair (left) and to Fratry Slype (right). Phot. F. W. Tassell & Son.

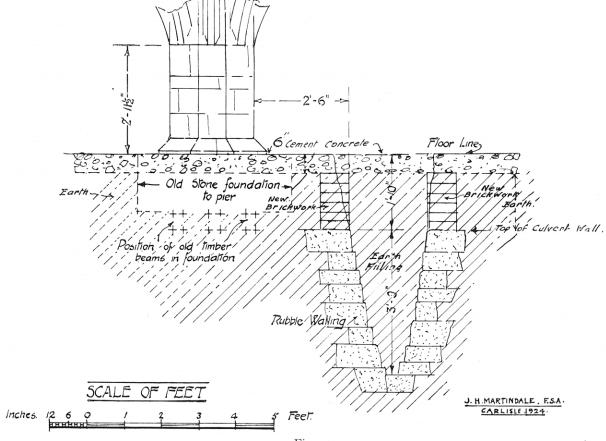


Fig. 11.

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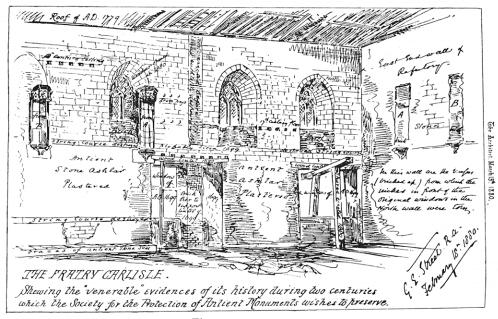
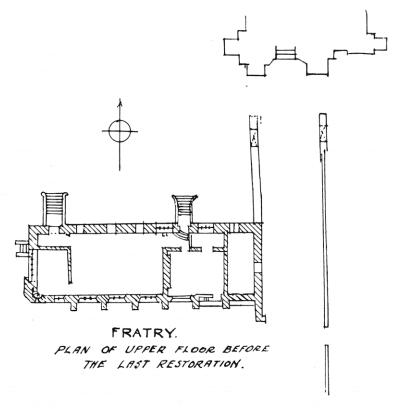


Fig. 12, TO FACE P. 16.

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Scale of Feet

50

100 feet:

Fig. 13, TO FACE P. 16.

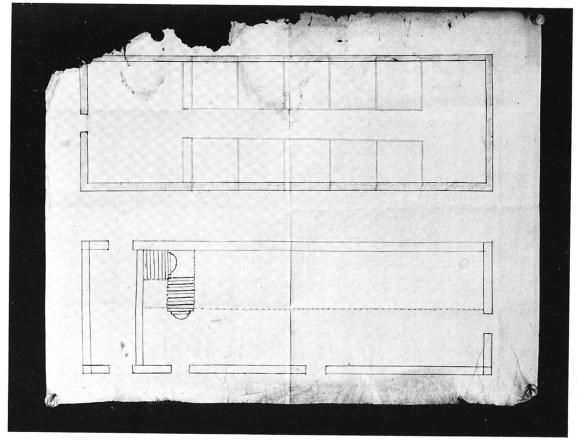


Fig. 14. Plans of Library proposed in 1693. The lower plan is for the ground floor; the upper for the Library floor. The lower edge is the west.

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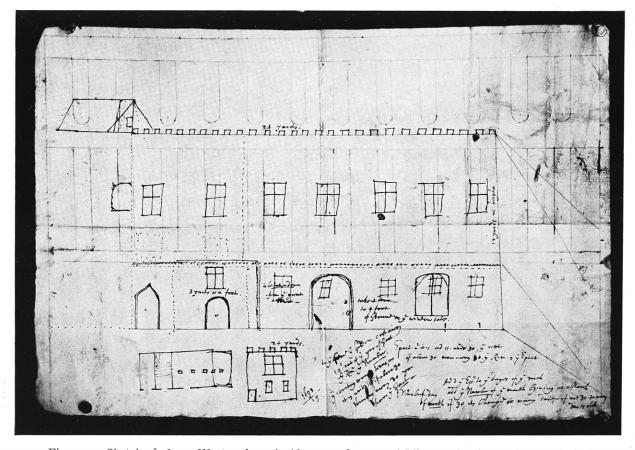


Fig. 14a. Sketch of 1693. West and south side, etc., of proposed Library, showing ancient work then standing, and indicating old openings and other details of proposed works.

Phot. F. W. Tassell & Son.

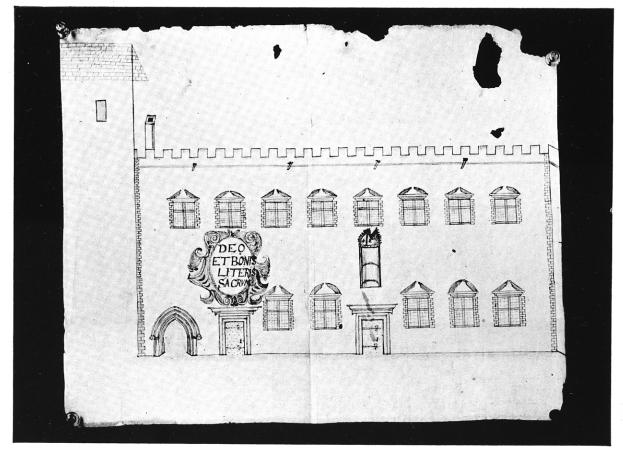


Fig. 14b. West elevation of proposed Library, 1693, showing Renaissance character of proposed work and arch to Slype retained.



Fig. 15. Carlisle Cathedral from the Abbey; drawn by M. E. Nutter, 1835. Phot. F. W. Tassell & Son.

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Fig. 16. Stones from the Chapter House taken to the Castle 1645 and now restored to the Crypt. Phot. F. W. Tassell & Son.

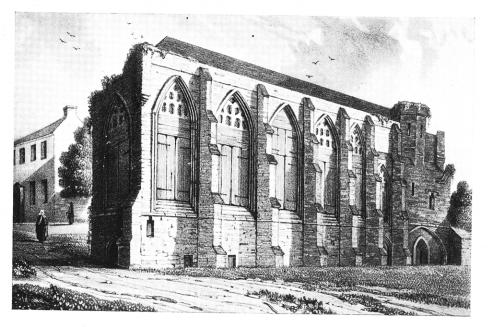


Fig. 17. "The Refectory in the Abbey," by M. E. Nutter.

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TO FACE P. 16.