

V.—THE DONJONS OF CONISBOROUGH AND BOTHWELL.

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The great round donjons, free standing or nearly so, which form the leading feature of a number of the larger British and Continental castles built in the late twelfth and the thirteenth century, rank among the noblest pieces of military architecture which the Middle Ages have bequeathed to us. Nowhere in all Europe is there anything more impressive of its kind than the donjon of Château Gaillard, with its lofty talus-plinth and its brow-beating crown of buttress-machicolations (fig. 1). Nowhere in Europe was there anything more masterly in design and more superb in execution than the now destroyed donjon of Coucy, of which G. T. Clark truly wrote that it was "probably the finest military structure ever built":

"Nothing can be grander than the conception of this tower, nothing more complete than the execution of its details. All is gigantesque, as though for a race above the ordinary stature of man."¹

In Britain, where the scale of things is smaller, there are nevertheless some very good circular donjons, of which that at Pembroke Castle perhaps impresses us most by its grand site, stark simplicity, and sheer rugged strength, but the two finest, as specimens of architecture, are the donjon of Conisborough Castle on the Yorkshire Don, dating from about

¹ Clark, *Medieval Military Architecture*, vol. I, pp. 447, 485; cf. Viollet-le-duc, *Description du Château de Coucy*, ed. 1861, pp. 20-1.

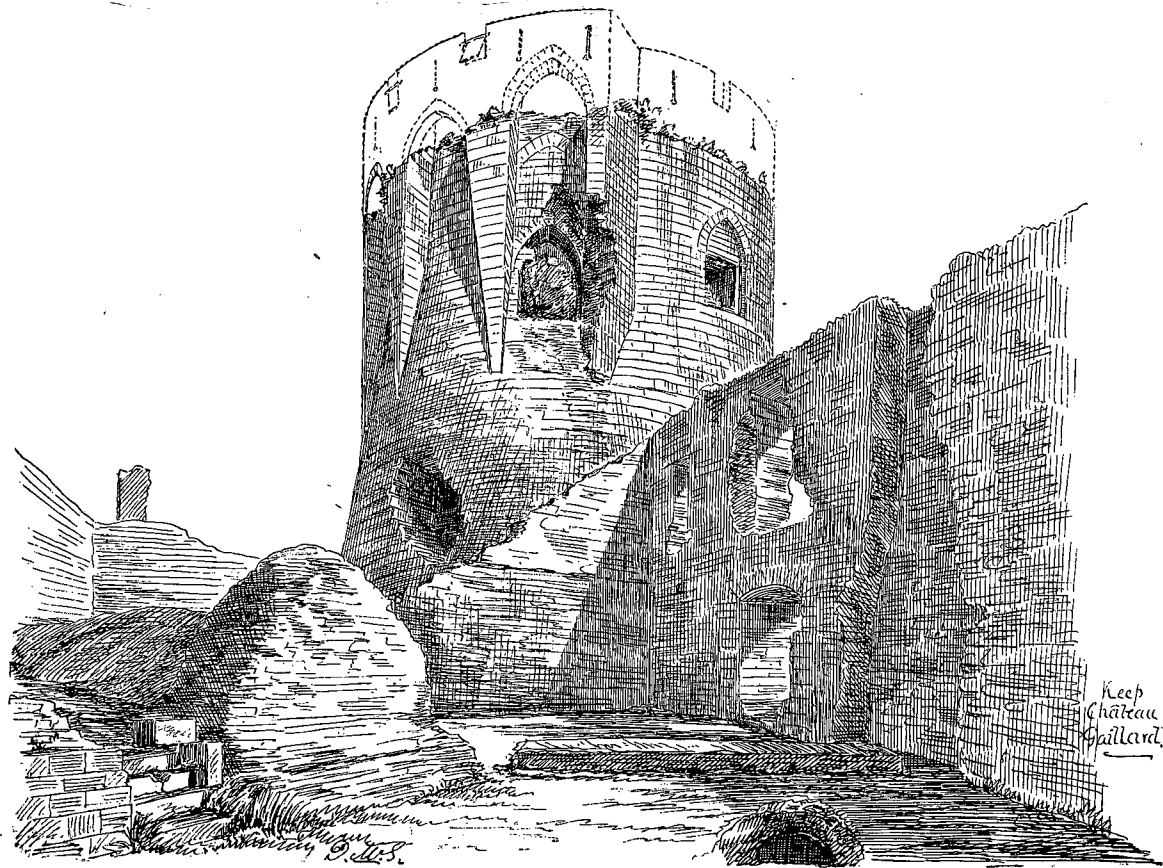


FIG. I. CHATEAU GAILLARD.

1170 (plate IX), and the donjon of Bothwell Castle on the Clyde (plate X), built probably near a century later, and therefore one of the last of its class, as Conisborough is perhaps the earliest. These two splendid towers invite comparison. Such is the purpose of the present paper.

Of course the cylindrical donjon is a development from the square Norman keeps. A round tower possesses three advantages over a square one. In the first place, volume for volume it is more economical in masonry, since it avoids the extra thicknesses of walling at the angles. In the second place, a round tower can readily be dome vaulted on every floor, and thus made fireproof. Moreover, such dome vaulting imposes an equal stress on the outer wall all round; whereas in a square tower, if this is sought, the axes of the vaults have to be reversed on each storey, involving an intricate construction.² Most advantageous of all, a round tower presents to the assailant no angles, which always are weak points, attracting the miner or the sapper, and moreover are ill to command from the timber war-heads with which such towers were usually garnished in time of siege.

Conisborough Castle is fortunate in having had consecrated to it one of Clark's classic papers, in which his remarkable powers of description are strikingly revealed. If a few errors may be detected in his account, these serve but to throw into relief the general excellence of his portrayal. Moreover, his paper is illustrated by the admirable series of measured drawings (figs. 2 and 3) made for the Yorkshire Archæological Society by A. S. Ellis. Concerning these drawings, we need do no more than repeat the verdict of Clark himself: "It may be said of them and it is no slight praise, that they are worthy of the important fortress they are intended to illustrate."

The late Sir William St. John Hope considered the Conisborough donjon to be "one of the finest pieces of twelfth-century masonry in existence", and has recorded his opinion of its date and builder thus: "not improbably, from

² This was done, for example, in Coxton Tower, Morayshire.

its likeness to the great tower of Orford Castle in Suffolk, which was in building from 1170 to 1175, and onwards, about 1170, by Hammeline, Earl of Surrey, the husband of the heiress of the Warrennes".³ With the proposed dating none will disagree: but I consider the likeness to Orford more apparent than real. It may be well to deal with this matter at the outset of our inquiry.⁴

Practically the only thing that Orford and Conisborough really share in common is the fact that both are, in principle, circular donjons—although the external outline of Orford is in fact multangular. The six symmetrically disposed projections which break the cylindrical outline of Conisborough are strictly buttresses. Their function is architectonic; and it is only incidentally that one of them is made use of to contain a chapel. At Orford, by contrast, the three large rectangular projections are wings designed to supply additional accommodation—two kitchens, a chapel, and a variety of ingeniously practised closets, opening off the large halls in the central structure. One of these wings, indeed, is a regularly designed forework, such as is commonly found in the rectangular Norman keeps. In Scotland such wings, containing living-rooms, were called "jams", and Orford Castle accordingly would have been designated a "jammy house".⁵ At Orford one spiral stair, ascending from base to summit, serves all the floors, and another spiral stair communicates between the lower hall and a mezzanine closet in one of the "jams". This is an entirely different scheme from what we find at Conisborough, where there is but one system of stairs, curving round in the circular wall of the tower, and arranged in flights starting from opposite sides on each floor, so that anybody ascending the tower has to cross each main room in turn. Such an arrangement, of course, has much to commend it on security grounds. For the rest, Orford, like Conisborough, provides

³ *Archæological Journal*, vol. LX, p. 388.

⁴ For descriptions of Orford Castle see *Archæologia*, vol. XXIX, pp. 60-9; *Trans. Suffolk Archæological Institute*, vol. X, pp. 205-30.

⁵ So "the jammay hous of Seytoun"—*Hist. of the House of Seytoun*, p. 37.

in its main apartments the standard tower-house accommodation—cellarage in the basement, common hall, lord's hall, and a fighting deck above. Kitchens are attached, in one of the "jams", to both the halls, and there is an oven on the fighting deck, as at Conisborough. As often in Norman keeps, the chapel is on the first floor of the forework. The latrine accommodation at Orford is planned on a more lavish scale than at Conisborough, and its domestic arrangements are more advanced. On the other hand, the architectural detail appears to be earlier, or at least more archaic, than in the Yorkshire tower. Generally speaking, the Orford donjon looks much more nearly akin to the rectangular Norman keeps, whereas Conisborough seems to mark a new departure.

This is not the place, nor would it be of profit, for me to attempt a fresh description of the donjon at Conisborough. To introduce our present discussion, suffice it to reproduce the condensed account given by Clark in the introductory portion of his work:⁶

"The best example in England of the kind of tower which succeeded to the rectangular and shell keep of the Norman period is the keep of Conisborough, which, though containing certain Norman ornaments and details, belongs to the Transition period. It stands on the summit of a natural hill, and forms part of an earlier *enceinte* wall, which has been clumsily broken to admit it. The tower, about 90⁷ feet high, is cylindrical, about 50 feet in diameter at the base, and 40 feet at the summit, but the cylinder is supported exteriorly by six buttresses of great breadth and bold projection (plate IX). There is a basement domed over, with a central hole above the well. The only entrance is on the first floor, about 12 feet from the ground. The upper floors and the roof were of timber. The staircases are in the wall, winding with it. There are two garderobes, two fireplaces, no portcullis, and in the upper part of one of the buttresses is an oratory. The room was a cone, but sprang from a ring wall, about 3 feet within the battlement wall and the

⁶ *Op. cit.*, vol. I, p. 152.

⁷ 70 feet, by mistake, in the printed text, *ad loc.* The correct figure is given at p. 438.

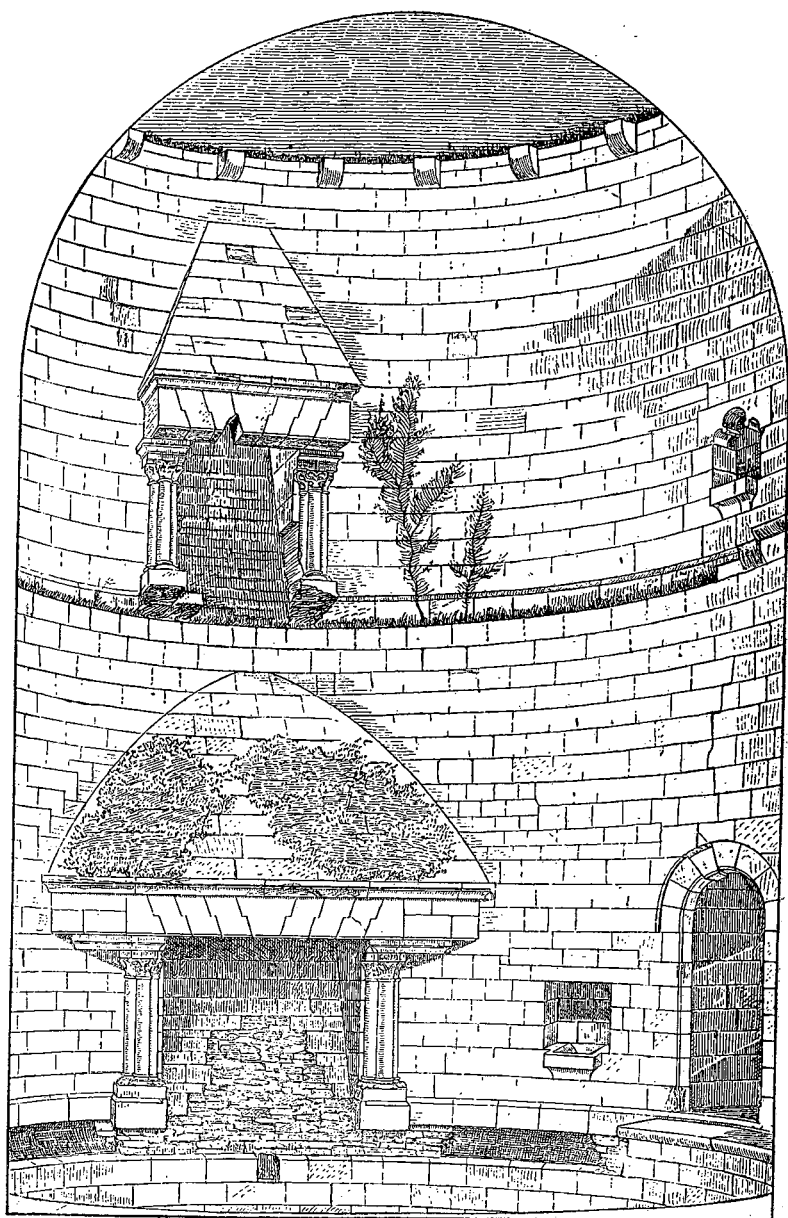


FIG. 2. CONISBOROUGH CASTLE.—INTERIOR OF THE KEEP.
(From the Window Recess on Second Floor.)

rampart walk. By this means the tower could be defended without a *brétasche*, which could not have been the case had the roof rested on the outer wall."

The more one considers this astonishing structure, the more one is driven to speculate what exactly was its purpose. That the quest for security bulked large in its ordainer's mind is obvious. The vast thickness of the walls; the door on the first floor, reached only by a ladder, or at most by a movable bridge; the excessive amount of space devoted to storage;⁸ the way in which one has to cross the hall in order to reach the stair leading up to the battlements—all these and many other features of the building reveal how much its design has been controlled by considerations of defence. Yet it is hard to accept Clark's view that the tower was intended to be used only in time of siege. Its two splendid fireplaces (fig. 2), the beautiful oratory, and the lavers and garderobes all give the impression of continuous habitability by persons of consequence. In fact the tower is a noble residence. Obviously it is designed as the dwelling-place of the lord of the castle. It secures his privacy, and, if need be, his safety. It emphasizes his aloofness from the common throng of his household. Above all things, in its towering height and superb masonry it flaunts his feudal pride. No doubt there were hall, chapel, and the other components of a lordly residence in the buildings against the curtain walls; and the foundations and the *disjecta membra* of these show that they were designed monumentally in a rich architectural style. No doubt also, these *corps de logis* were more convenient dwelling-places than the great tower. We may concede that in normal times the lord might well prefer to dine and pass the day in the great hall and *camera*, even if he retired to the tower to sleep. Yet the tower remained essentially the lord's resi-

⁸ "In a single tower, whether rectangular or cylindrical, intended by its passive strength to defy attacks and to wear out the patience of a blockading force, an ample store of provisions was of the first consequence, and to their storage all the spare space was necessarily devoted." Clark, *op. cit.*, vol. I, p. 148.

dence, as well as the place of strength in which he could shut himself up at a moment of stress.⁹

To a Scotch baron or laird there was naught derogatory or unusual in living in a "tower-house". So it was perhaps easier for the author of *Ivanhoe* than for the English engineer-antiquary to conceive of the donjon at Conisborough as the normal residence of its lord. By contrast,

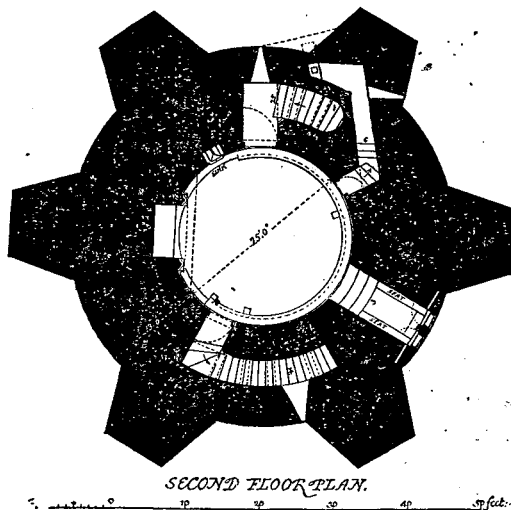


FIG 3.

the donjon of Château Gaillard—Cœur-de-Lion's *pulchra filia unius anni*—partakes little of a residential character. First and foremost it was conceived as the *dernier ressort* of the fortress.¹⁰

Viewing our Conisborough tower, therefore, as a residence, we find it to be a complete habitation in itself. The

⁹ As Dr. Bodo Ebhardt writes of it: *der Bau diente Wohn- und Verteidigungszwecken zugleich—Der Wehrbau Europas in Mittelalter*, vol. I, p. 160.

¹⁰ "Les assiégés, après avoir perdu la première et la seconde enceinte, et s'être même vus forcés dans la citadelle, pouvaient se réfugier, en petit nombre il est vrai, dans le donjon, et là, par un dernier effort, retarder le triomphe du vainqueur." A. Deville, *Histoire du Château Gaillard*, p. 37.

two lower storeys contain ample cellarage, no doubt provided on so lavish a scale in the case of blockade. On the second floor is the great hall, above this the *camera* (fig. 3), while the topmost flat would be available for servants, and, in time of war, as a fighting deck. Here also, as the oven shows, the cooking would be done. It may be taken as certain that there was a trap-door in each floor, so as to enable water to be hoisted from the well in the basement.

So analysed, our tower resolves itself into a medieval house of simple, indeed scanty accommodation, consisting essentially of hall and *camera*. Only these are upended for security reasons, instead of being built on one level as in the normal domestic plan. I agree with Clark that the tower was intended to house only a small company—in time of peace, the lord's *familia* or personal attendants; in time of war, a picked garrison of specialists who may well, as Clark suggested, have numbered no more than ten or a dozen men.

The six great buttresses applied to the round tower are remarkable. In the rectangular Norman keeps, the clasping buttresses at the four corners have their explanation both on general structural grounds, and also because they strengthen the angles, which are always the *point d'appui* favoured by the assailant with mine, pick, or battering-ram. But a round tower requires no such structural strengthening. Moreover, from a military standpoint the six buttresses are a positive disadvantage. They impede the command of the basal walls, both from the summit of the tower itself and from the adjoining curtains—all the more because the tower has clearly not been intended for defence by a timber war-head.

What then are we to make of these buttresses? Of course we might regard them as in a sense vestigial organs—survivals from the traditional Norman habit of building the oblong keep with angle buttresses. But in that case we should have expected four, not six. An alternative explanation may be that in the original conception the tower was

intended to be dome-vaulted on every floor like many of the cylindrical donjons in France; and that the buttresses were designed to resist the enormous thrust of the three or four vaults which would thus have been proposed. In this connection it seems relevant to point out that the masonry of the entrance floor room is much more uniform and regular than in the storeys above, where the blocks vary more in height and joggled jointing is occasionally evident. This suggests that a pause in the work of building took place after the tower had reached first floor height; that during the interruption the decision to vault the tower was abandoned—perhaps on the score of cost—and that thereafter the tower was completed, unvaulted and with an internal facework of somewhat inferior finish. The reduction of width in the staircases of the three upper flats, for which there is no structural warrant, appears also to be a feature pointing to a scaling down of the conception.

Another circumstance suggesting an interruption and change of design in the building of the tower is the alteration in the treatment of the doors. Whereas the inner arch of the main entrance is curved to suit the rounded wall of the tower, the corresponding arches above are built straight. Thus their outer margins are sunk behind the curving wall face, while the central portion projects. As Clark remarks, this produces a clumsy effect, surprising in so finished a piece of architecture. In the Middle Ages it was customary to dress the stones at the quarry. We might thus explain the anomaly on the assumption that the voussoirs were cut there by a mason in insufficient liaison with the job. But it is hard to imagine that so naïve a blunder was made in a building enterprise which in every other respect has been conducted with such patent mastery. Is it not at least as likely that in the original scheme the upper floors of the tower were to have been multangular—a shape well suited for a groined vault—and that the arches in question were prepared for one of the straight sides? The vaulted donjons at Coucy and Dirleton have such multangular vaulted in-

sides; while at Coucy the angle towers have circular *souter-rains* and multangular upper storeys, just as I conceive may have been first intended at Conisborough.

It is dangerous to overstrain evidence in support of a conjecture. Yet there is still one more feature about the castle to which I think one might appeal as evidence for a change in design. No visitor can fail to be struck by the way in which the wings of the hall fireplace are prolonged beyond the jambs until they die into the curving wall. Owing to this peculiarity, both the lintel and the hood which it carries have a top heavy appearance that mars the proportions of what is otherwise a fine architectural composition. Now the central or joggled part of the lintel, without the lateral extensions, is just of the right span for the jambs which support it, and, divested of these extensions, corresponds precisely to the lintel of the fireplace above. Such a fireplace would neatly fit into one of the bays of our presumed multangular hall. It is tempting to imagine that the fireplace, or at least its lintel and jambs, were originally devised for a hall of this shape, and that, when the change to a circular plan was substituted, the master mason deemed it desirable to anchor his lintel and hood into the wall on either side, with the unsatisfactory result that now strikes the critical eye. If this be so, the experiment was not repeated on the upper floor, where the fireplace is much more pleasing in scale and proportions.

The chapel in Conisborough tower is a most remarkable structure. Its narrow door clearly shows that it was the private oratory of the lord, entered from his *camera*. It is quite different from those castle chapels, such as Affleck or Towie Barclay in Scotland, which are on the hall level, and open from it by a wide arch, so that the general company in the hall could attend the service. In such cases the hall served in effect as the nave, the chapel itself being the chancel. The two piscinas at Conisborough, one on each side of the altar stance, appear to be unique, both look contemporary. Together, they will have served the same

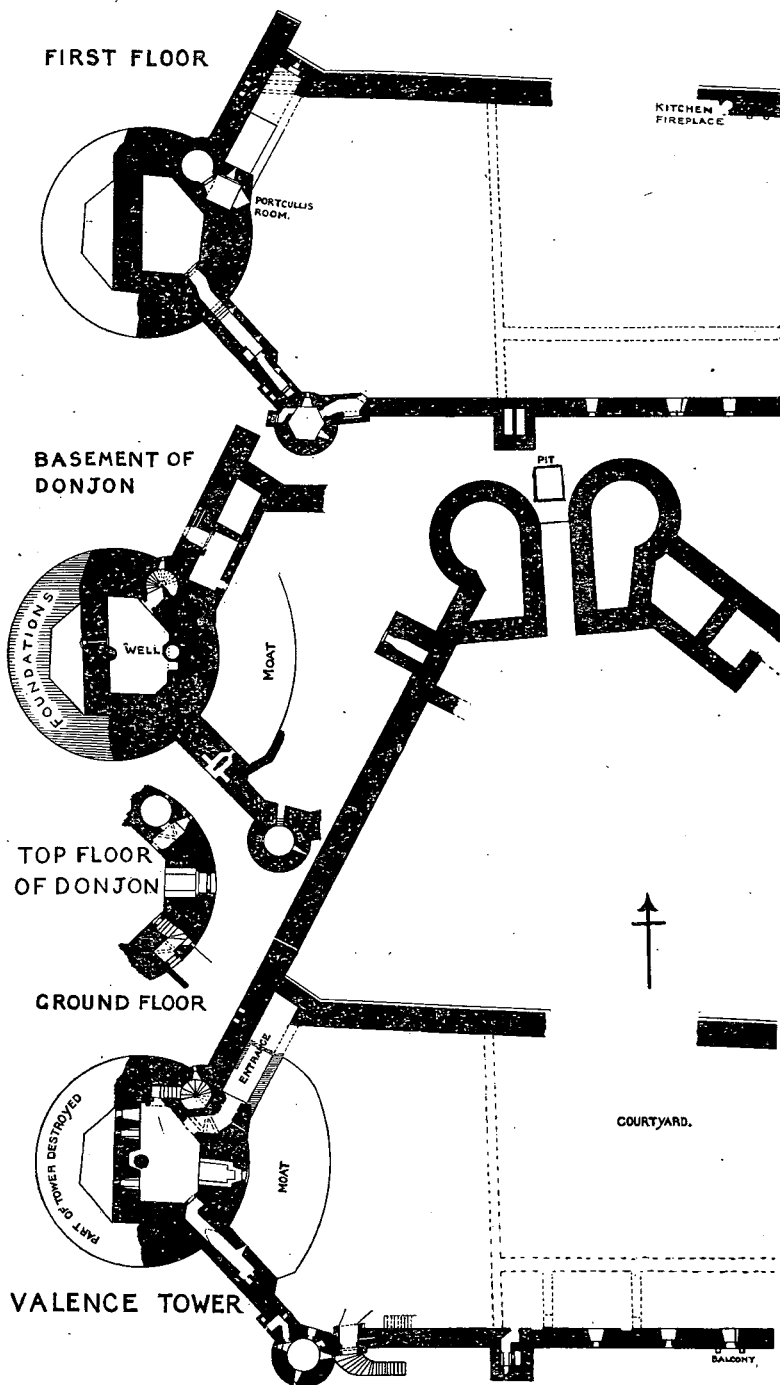


FIG. 4. BOTHWELL CASTLE: HALF-PLANS SHOWING DONJON.

purpose as the double piscina which became usual in the thirteenth century—one basin to rinse out the chalice and the other for the priest to wash his hands.

The site of the donjon, and the position of its entrance, have alike been carefully considered. The tower occupies the loftiest part of the castle stance, in the corner remotest from the entrance. Herein it is typical of its age—in strong contrast to the later type of castle in which the lord's residence is brought into a frontal position and combined with the gatehouse. Again, the entrance to our Conisborough tower is turned away from the approach. In fact, it is at the back of the tower, in a narrow, triangular *cul-de-sac*, where assailants endeavouring to force admission would be caught and pounded from the wall-heads of the tower and the adjoining curtain. Whether it was reached by an external stone stair and a bridge dropped on the stairhead from the tower, as Clark surmised, or simply by a wooden ladder, the entrance seems oddly primitive for so elaborately conceived a donjon. But it is obvious that the cylindrical plan was ill adapted for the appending of one of those intricate vestibular towers which are found in the later Norman square keeps.

From Conisborough we turn to consider the great donjon at Bothwell.¹¹ (Plate X and fig. 4.) Its architectural detail points to a date in the latter half of the thirteenth century, and it was doubtless built by Walter de Moravia, who held the barony of Bothwell from 1242 until 1278. The donjon appears to have been designed as part of a large castle. Of this the foundations were laid down all round the *enceinte*; but the only portions actually completed of the original scheme apparently were the donjon itself and the wing walls on either side, closing in the ends of the moat by which the donjon was sundered from the castle courtyard (fig. 4), together with a small round tower attached to the southern wing wall, and covering a postern. Thus at the

¹¹ See *Proc. Soc. Ant. Scot.*, vol. LIX, pp. 165-93; *Trans. Glasg. Archæol. Soc.*, n.s., vol. XI, pp. 96-116.

outset there was provided a strong, adequate and dignified residence for the lord and his family.

Only half the donjon now remains. The outer portion was thrown into the Clyde in the great destruction by the Scots in 1337. What remains is the grandest piece of secular architecture that the Middle Ages have bequeathed to us in Scotland. Nobly conceived, masterly in design, and superbly executed in the finest masonry, it rivals the best contemporary work in England or France. The tower was 65 feet in diameter, as compared with the 52 feet of Conisborough—both measurements being taken above the spreading base. It survives practically to the wall-head, a height of 90 feet, being about the same as Conisborough. The circular front of the tower is broken by a great beak or angular construction, which turns the entrance away from the courtyard—much in the same way as was done at Conisborough—and also with its flat face provides a better working surface for the drawbridge to fold back into than would have been easy to obtain on the cylindrical tower. This entrance was reached by a timber gangway over the moat, and was defended by the drawbridge aforesaid, likewise by a portcullis and by a projecting timber brattice, the large stone corbels of which remain at the summit of the tower. Such defensive arrangements represent a great advance upon Conisborough, where there is neither moat, drawbridge, portcullis, nor hoarding.

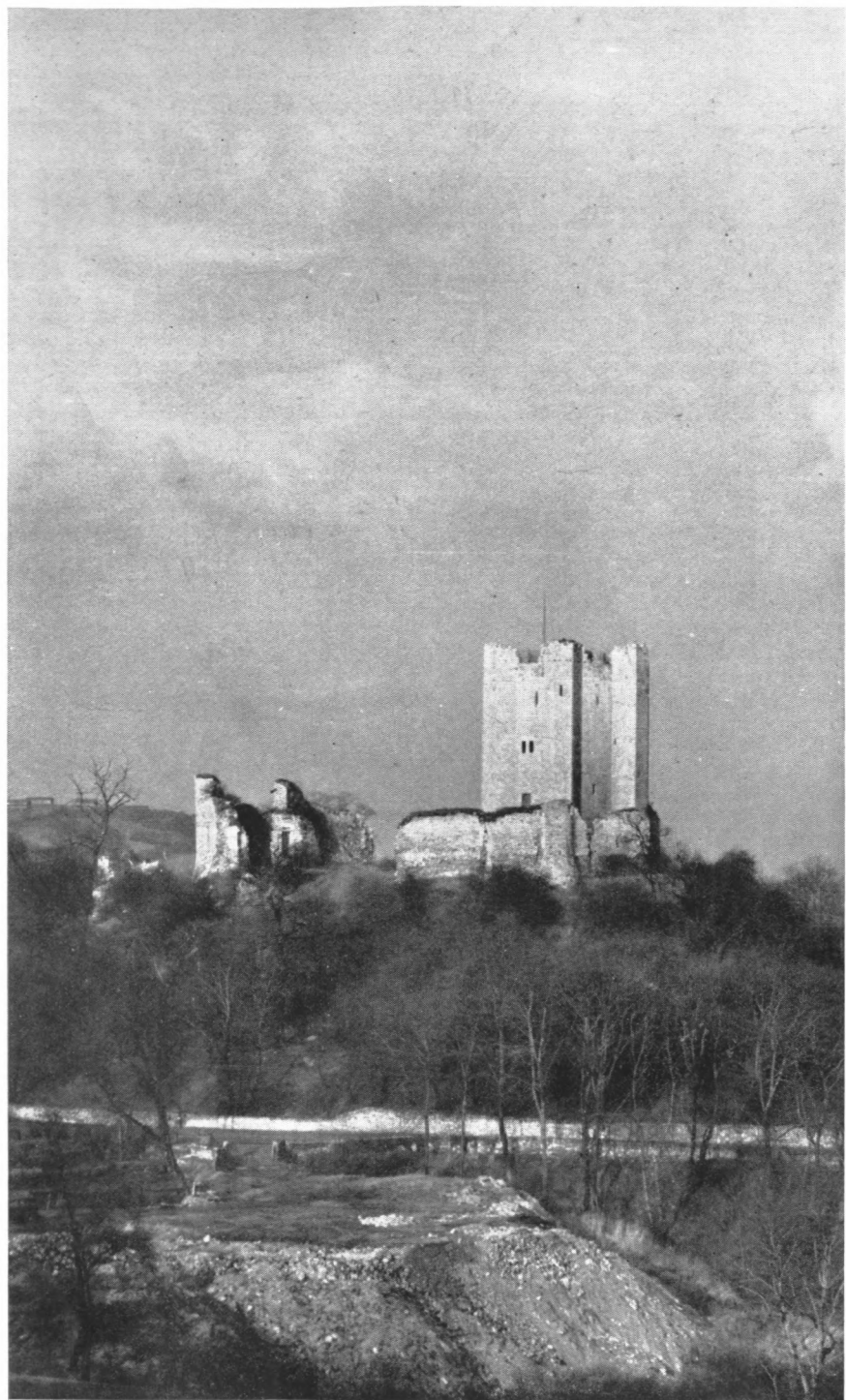
Behind the portcullis a zigzag passage, well devised to check an inrush, leads into the lord's hall. This had a wooden floor resting on a central octagonal pier and two flattish stone ribs crossing the tower. The hall has a fine pointed mural arcade of moulded wall ribs. A channel cut in the ashlar masonry above these wall ribs suggests that there was a wooden or lath and plaster vault, resting on the central pier, chapter-house fashion.¹² Towards the courtyard the

¹² A well-known example of thirteenth-century wooden vaulting is Warming-ton Church, Northamptonshire, figured in Rickman's *Gothic Architecture*, 5th ed., p. 123. The timber-vaulted cloister at Lincoln is of about the same date. Such construction is by no means unusual in the Middle Ages.

hall had a large traceried window, with side benches. Under the hall is a store-room, containing a well. There were two unvaulted storeys above the hall. A spirit stair gives access to the different floors, to the portcullis chamber over the entrance, and finally to the wall walk of the donjon. This stair does not enter from the vestibule, but separately from the hall. Hence anybody wishing to reach the upper floors must pass into the hall. The like principle was adopted, but on every floor, at Conisborough.

So far as its surviving portion permits us to infer, the internal dispositions of this noble donjon seem to have been unusual, and to be contrasted with what we find at Conisborough. There we have a basement and ground floor of storage, and the hall and *camera* in two tiers above, with a fighting deck on the roof. At Bothwell the basement of the donjon forms a store, the lord's hall is on the ground floor, the room above this forms the servants' hall or garrison quarters,¹³ and the *camera* is over all. The room above the lord's hall has neither window nor fireplace in the surviving portion, towards the castle court. Yet it was certainly intended for habitation, as the garderobe passage from it in the south wing wall makes clear. Its windows and fireplace therefore will have been on the riverward side. The disposition of the donjon at Bothwell accordingly was: cellar, lord's hall, common hall and *camera*, with a fighting deck over all. It is to be noted that while access to the wall walk of the north wing wall is by the spiral stair, not directly from the common hall, access to the wall walk of the south wing wall, which is higher, is directly from the *camera*. Thus the lord had means of reaching the small round tower, and so, by way of its external stair in the courtyard, of gaining the postern. He had therefore always at his disposal a private means of egress, and if need be of escape, from his *camera* to the exterior of the castle. On the opposite or north side of the donjon, there is likewise a door giving access to the curtain walk in that direction; but this door closes and is

¹³ At Coucy the corresponding storey is appointed for the same purpose.



CONISBOROUGH CASTLE: GENERAL VIEW.



BOTHWELL CASTLE: THE DONJON FROM THE COURTYARD.

barred against the donjon, so that, as Mr. Sidney Toy has pointed out, "in the event of the entrance to the keep being forced, its defenders could escape on to the wall and bar the door against the assailants".¹⁴

These security arrangements at Bothwell are much superior to those at Conisborough. They present an impressive picture of the military science devoted to such powerful round donjons just about the time when they were falling into disuse. For Bothwell is probably one of the last of these great tower-houses to be built in connection with a large British castle; until they were revived, under the new conditions produced by "bastard feudalism", in the fourteenth and fifteenth centuries.¹⁵ The weakness of such donjons lay in the purely passive conception of defence for which they stood. In the last analysis, they proclaim the gospel of defeatism—the lurking conviction that in the long run the attack is superior to the defence. So in the Edwardian castles the donjon is superseded by the keep gatehouse. The lord or castellan comes forward from the retired position and jealous isolation of the old donjons. Instead, he assumes an "action station" in the forefront of the defence, combining his residence and battle quarters in the gatehouse—always the weakest point in the defensive perimeter of a castle. Of such keep gatehouses, northern England can show no nobler or more instructive example than Dunstanburgh.

¹⁴ *Castles*, p. 133.

¹⁵ On this, see *The Antiquaries' Journal*, vol. XXVI, pp. 145-71.