

The Donjon of Flint

BY D. J. C. KING.

THE conspicuous feature of Flint castle is the great round donjon that stands at the S.E. corner of its inner ward. The cross-ditch which divides the low sandstone promontory on which the castle stands¹ into inner and outer enclosures is here, at its eastern end, enlarged to form a wide circular space, at the centre of which stands an enormous cylindrical tower, which is thus surrounded by its own particular moat. The adjacent corner of the inner ward, as a result, forms a segmental bay or re-entrant; about the middle of this there projects into the ditch a stout buttress or pier, which carried, and once again carries, the end of the bridge leading to the door of the tower. At its eastern end the segmental curtain projects for a short distance beyond the corner of the inner ward, before breaking off in a ragged end. Mr. Toy² reconstructs this feature as continuing until it reaches the counterscarp of the ditch at the N.E. corner of the outer ward, thus completing the circle on this side of the tower, and protecting the latter from approach. The present state of the fabric does not permit any profitable comment on this reconstruction, except that it is a perfectly reasonable one.

On the other side of the bridge-pier are the foundations of a narrow wall, crossing the moat. Evidently this was not a curtain; nor was it a dam, for it is pierced obliquely at ground level by a narrow opening; in all probability it was merely a screen, built to protect the bridge to the tower against the missiles of an enemy in possession of the outer ward. Such a precaution might reasonably be an afterthought, as this plainly was, for it has no bond at either end³.

The great tower of Flint is thus not only an exceptionally well-protected example of a true tactical keep, standing as it does in its own moat, but an amazingly effective protection to the main enclosure of the castle; projecting boldly upon the one vulnerable side, it could rake such part of the cross-ditch as it did not actually block, dominate the outer ward, and overawe the approach to the gate at point-blank range. It is thus the more surprising to find that the plan of the castle has been

¹For the geology of the castle see Dr. E. Neaverson, *Medieval Castles in North Wales* (Liverpool University, 1947) 41. For the castle itself, Mr. Hemp's guide book (H.M.S.O., 1929) remains the best study.

²*Castles: a Short History of Fortifications from 1600 B.C. to A.D. 1600* (London, 1939) 155-7.

³This may be the 'great stone wall . . . between the great tower of Flint Castle and the inner bail of the same castle, for the great security of the same castle,' built in 1302-3 at a total cost of £37 3s. 5d. (*Flintshire Ministers' Accounts, 1301-1328* (Publications of the Flintshire Historical Society, No. 3) pp. 34-5). It had an arch in it, presumably a culvert, secured with iron bars. Whether the present wall, which is only 4ft. thick, can be called a 'great stone wall' or whether it can be said to have been 'for the great security of the castle' which suggests a wall completely closing the end of the crossditch, are difficult questions, and I am not satisfied, despite the exactness with which this wall appears to be located, that we are not dealing with something more like the wall suggested by Mr. Toy.

violently criticized by earlier authors as ill-designed and dangerous.⁴ The reasoning underlying this hostile criticism seems to have been that properly designed castles of the Edwardian period did not have keeps, and that therefore Flint, having been built in 1277 with a keep, could not be properly designed. The basis of this reasoning is very doubtful; not only were keeps reasonably common both before⁵ and after⁶ the Edwardian period, but the Edwardian gatehouse had many of the functions of a keep—among them its military functions. Moreover, the contemporary baronial castles of Hawarden and Morlais certainly have round keeps and Edward's own foundation of Builth centred around a great tower—now vanished, together with the rest of the castle's masonry.⁷

There is nothing more to be said on this matter, for these early aspersions on the design of the castle have been most ably refuted by Dr. W. Douglas Simpson in *Archæologia Cambrensis* for 1940.⁸ In this article Dr. Simpson shows that "the castle is, in point of fact, an exceptionally able design by an engineer of great resource", and also demonstrates that it is almost certain that the inspiration of its design was not the castle of Lillebonne, as commonly supposed, but the Tour de Constance at Aigues-Mortes.

The first of these contentions has been supported by more recent research in a most remarkable manner; the engineer of the castle turns out to have been the famous James of St. George, who was also the architect of Rhuddlan, Conway, Harlech and Beaumaris.⁹ As to the second, Dr. Simpson makes his case as strong as it can very well be in a matter where direct proof is impossible; it is only when he draws a close parallel between the very singular internal arrangements of the donjon of Flint and those of the Tour de Constance that it becomes impossible to agree with him.

The entrance to the donjon lies across a bridge at a level a few feet above that of the castle's inner ward, and intermediate between the basement and first floor of the tower, these being the only floors which remain. The doorway has been so

⁴The principal denunciation is to be found in Harvey, *The Castles and Walled Towns of England* (London, 1911) 124-6. See also Royal Commission on the Ancient and Historical Monuments in Wales, Flintshire, 25-8; and for a different, but even more startling opinion, Mrs. Armitage, *Early Norman Castles*, 375n.

⁵There are examples of round keeps attributable to the 13th century at Chartley, said to have been built soon after 1220, Skenfrith, built by Hubert de Burgh between 1219 and 1232; Cilgerran, Cardigan and Llantrisant, built soon after their acquisition by the earls of Pembroke and Gloucester in 1223, 1240 and 1246 respectively; Tretower, built in 'the second rather than the first quarter of the thirteenth century' (Raleigh Radford, Guide Book, H.M.S.O., 1950); Launceston, built by Richard, King of the Romans, its earl from 1227 to 1272—by the look of it towards the end of that period; and Narberth, reconstructed after its destruction in 1257. Dolbadarn is a Welsh castle of this period (Raleigh Radford, Guide Book, H.M.S.O., 1943). Few of the numerous round keeps in Wales have any recorded date of foundation, but it seems a dubious suggestion that they represented a dying fashion in the middle 13th century.

⁶Dudley keep seems to have been built in the first twenty years of the 14th century (Brakspear, *Arch Journ.*, lxxxi, 1-2); Sandal about 1328 (Walker, *Yorks. Arch. Journ.*, xiii (1895) 162-3; Llangibby is a keep of late Edwardian type, probably built 1307-14.

⁷*Pipe Roll* 124, m.24; see Edwards, *Proc. British Academy*, 1944, 22-3.

⁸xcv, Pt. 1, 20-6.

⁹For Master James of St. George, see Taylor, E.H.R., lxxv (1950) 433-57.

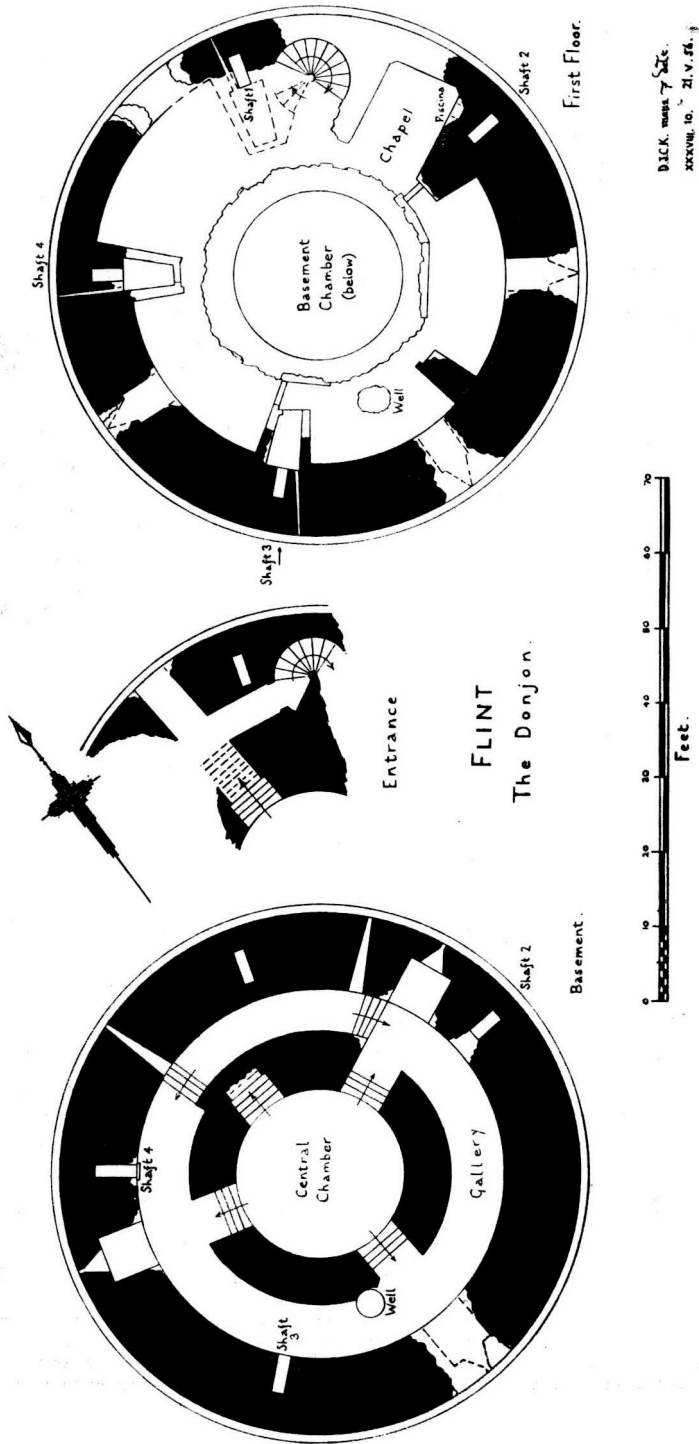
thoroughly robbed as to leave no trace of its arrangements; but it is clear that there is no room in its broken sides for both portcullis grooves and door-jamb, and that there cannot therefore have been a portcullis.¹⁰

The tower is entered by a passage through the thickness of the wall; on the left there is a short approach to the foot of a wide newel stair, rising to the floor above, while the main passage continues down a flight of wooden steps—replacing an original stone flight—to the basement.

This stage of the tower has frequently been described; it consists of a central circular chamber, constricted by the enormous thickness of the walls to a surprisingly small size, and an annular passage carried all round the tower inside the walls at a slightly higher level; where this passes under the entrance passage it is stepped down, and its vault is lowered so as to allow the stair to pass down over it. Access to this gallery in its main portion, which is high and roomy, is given by three large arched openings in the walls of the central chamber (one of them opposite the entrance stair) each having three rather high steps leading up to the floor of the passage. Opposite to each of these archways is a wide recess in the outer wall, a little distance above the floor of the gallery, and in each of these was a long and wide loop, which thus gave light not only to the passage, but to the central chamber as well; in the lowered portion of the passage there are two small slits for lighting purposes only. Finally, the well rises in the floor of the passage on the south side of the tower.

These singular arrangements call for explanation, and first of all it must be pointed out that the two concentric rings of masonry formed in this way have distinct structural advantages. For a few feet from its base the walls of the tower have the awe-inspiring thickness of 23 feet, but on the first floor this has declined to the much lower, if still imposing, figure of about 10 feet 6 inches, which means that the interior span of the tower at this level is some 50 feet. The supporting ring of masonry at basement and first floor levels clearly helped in the flooring of this considerable width. As for the use to which the basement space was put, the annular passage was clearly a fighting gallery of the type familiar in Edwardian fortification. Dr. Simpson denies this, but the two survivors of the large loops are unquestionable arrowslits, with a triangular oilet or fish-tail at the base of each. Admittedly three arrowslits is not a large number, but it was not general policy to weaken the base of a tower with many openings. Besides, these are well placed; one is sited so that it could rake the whole length of the cross-ditch and play very effectively on the approach to the gate of the inner ward; the second enfiladed the flank of the outer bailey; the obvious line of fire for the third—along the east flank of the inner ward—would probably have been masked at this level by the projecting wall at the corner, and the loop points out over the flats instead. As regards the central chamber, this

¹⁰On the E. side of the passage, the stone facing comes to within approximately 16 inches of the face of the tower; on the W. it reaches the bar-hole, which is 8 inches wide, and comes to some 12 inches from the face—no more than an adequate distance for the heavy structure of the door, and the jamb outside it. There was, however, a drawbridge (*Flintshire Ministers' Accounts*, 1301-28, page 33: 'one engine for raising the same bridge').



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might have been some use as a store-room, though it would be very vulnerable to pilfering; potable stores in particular would not keep long in a room to which bowmen continually resorted, as they clearly would to this one.

Dr. Simpson's explanation of the dispositions of the basement involves a parallel with the Tour de Constance, a parallel so ingenious that it is with regret that one joins issue with its author:

“Let us, therefore, conceive that an attacking party has forced the entrance to our donjon at Flint. Rushing along the narrow passage, in darkness and the confusion of assault, they stumble down a flight of steps into the comparatively small, well-like vaulted chamber in the centre of the tower. But meantime the defenders of the entry have not been trapped. They escape round the gallery and from any or all of its three doors they can sally forth upon the non-plussed assailants. Clearly this is the purpose of the gallery. It is a kind of *place d'armes* affording access to three internal sally ports, if I may use the term. That this explanation is the right one is confirmed by a consideration of the Tour de Constance. Here the wall round the main floor is pierced by a mural gallery as at Flint, only it is at a higher level, and commands the inner room by a series of archery loopholes. In the same way, but for hand-to-hand fighting, the gallery at Flint aimed to achieve the like purpose of commanding the interior of the tower after it had been penetrated.”

The parallel, however, is not really so close; at Flint the entrance to the donjon could hardly be attacked without forcing both wards of the castle; whereas at Aigues-Mortes the great tower was all the castle that existed, so that the first line of defence was the only line; moreover the tower had two entrances. Under these circumstances, it is not surprising that the Tour de Constance contained these curious internal defences. Both entrances, besides, were guarded by portcullises, and the opening of the stair to the upper floor—and to the gallery which encircled the tower and commanded the entrance floor through a series of openings in its vault—was so placed as to be concealed when the main door was open, and in any case was covered by a great machicolation from the portcullis room overhead.

In the second place, using modern expressions, the internal defence of the Tour de Constance would be carried out by means of a ‘counter-attack by fire,’ whereas at Flint it would be ‘counter-attack by men’—a much less advantageous method for defence against overwhelming numbers, which the defence of a small post like a castle would almost inevitably be. Nor does it appear that the defenders would have any reasonable hope of being able to alter the terms of war to their own advantage: even setting aside the question of whether the defenders of the entry, having bolted down the stairs *l'épée aux reins*, would be able to mount a counter-attack at all, it is quite clear that they could not obtain reinforcements from the upper part of the tower, from which they would be cut off; they could not prevent the enemy from being reinforced, for the door of the tower would be forced and there was no portcullis to let down; they could not even choose time and place for the combat, for none of the three great archways between the gallery and the central chamber is rebated for a door. Finally, there would be no necessity for the assailants

to descend into the basement at all; if they decided to fight their way upstairs,¹¹ there was nothing to stop them doing so; there was only a weak door, opening outwards, at the foot of the stair.

Before indicating a possible use for the basement, it is necessary to consider the upper floor of the tower. The part around the newel stair has been very heavily damaged, but it is clear that there was a latrine over the passage which leads into the stair; its light and drain (Shaft 1) survive in the broken wall. The floor of the tower has collapsed in the middle, and one looks down into a circular pit—in fact, into the central chamber of the basement. Around the ragged edges of the pit are some remains of walls, and it is plain that there was a central room on this floor as well. There were five other chambers forming a ring round it. Going clockwise from the stair, the first room was the chapel; it is roughly rectangular, with chamfered corners; the greater part of its wall has been destroyed, but the south wall remains, with the springing of a barrel-vault and a badly-robbed piscina. The other chambers were much alike, segmental in plan and separated by radial walls, at the inner ends of which are the remains of a series of doorways, leading from one room to the next, so that it was possible to go all round the tower without passing through the central room. The isolation of this inevitably very dark chamber suggests that it may have been the store-room.

The second room has preserved a single course of its inner wall for almost its whole length; its other walls are largely complete. There is a deep and narrow recess for a light, now robbed. The third and fourth rooms are similar; in the floor of the third is an opening above the well, and it has been suggested that this was the kitchen. There is enough left of the light in the fourth room to suggest that all these openings were arrowslits. The radial wall between the second and third rooms is solid, but there was a small latrine chamber—now completely wrecked—in that between the third and fourth, and another at the end of the fourth room. Each has a large shoot (Shafts 3 and 4) and an unusually meagre lighting-slit. The fifth room is wider than its fellows, owing to a reduction in the thickness of the outer wall on this sheltered side. Only about half of this room remains, floor and wall having collapsed towards its eastern end; but evidently it had a window opening over the door of the tower.

The singular features of this floor do not seem to have been recognised. It has been suggested that the principal apartments of the castle were here, but it would be hard to imagine anything less like a set of royal quarters. In the first place, there is no sign of any fireplace, and it is morally certain that there was none on this floor; the rooms were of inconvenient shape and badly lit, and there is no pretence at domestic convenience, except for the extraordinarily generous provision of three latrines. Apart from this, which seems to suggest a very large population, the main purpose of this floor would appear to be military; certainly there was no kitchen, and there were no residential apartments here.

¹¹This, indeed, was the obvious thing for them to do, and is the regular drill for modern infantry in indoor fighting.

Clearly these last occupied the vanished upper floor or floors of the tower; that such floors existed is evident enough. Brutally slighted as it has been, the tower's present height gives no clue to its original elevation; however, in a castle where the dependent towers had three floors and a basement, one would expect at least as many in the great tower itself. Nevertheless, it is clear that this expectation can mislead us, and that the upper floors—or at least some of them—were never built in the form in which they were designed. Let it be said at once that there is no valid evidence as to the height to which the masonry of the tower was carried up originally, though the level line of its present top certainly suggests that the work stopped there. One thing is quite clear; the tower was left unfinished.¹² The Chamberlain's account for 1301-2 contains the following entries:¹³

“To Master Henry de Ryhull, carpenter, assigned to make one great wood work upon the great tower of Flint Castle, together with one noble and beautiful box. For the carpentry work of those works and other expenses about the same works, and also about the making of windows and wooden steps in the said tower, by a certain agreement in gross made with him on two occasions by the Justice and Master Richard the Engineer. Except the carriage of timber to be made at the expense of the Lord by the same agreement. 28l. 5s.

To Jordan de Bradeford¹⁴ for the carriage of timber expended in the said works from the Wood of Ewelowe to Flint 6l. 11s. 2d. And to Robert de Melbourn, Mason, for stone work fitted into the said tower for receiving and sustaining the said woodwork, etc. 7l. 3s. 4d.

To Benedick de Staundon for 15½ cartloads and three foddors of lead bought from him for roofing the said tower, for each cartload 33s.: 24l. 19s. 1½d. And to William le Plumber for plumbing work done by him about the roofing of the said tower, etc. 6l. 7s. 5d.

For other necessary expenses, etc., etc. 60s. 9d. Sum 76l. 6s. 9¾d.”¹⁵

It is quite clear that a programme of work which cost so substantial a sum, which involved masonry adaptation, the roofing of the whole tower, and the making of windows and wooden steps, could only have been the addition of at least one wooden storey on the top of the tower. No doubt the intention was to supply those residential apartments which are conspicuously lacking in the surviving part of the fabric.

This ‘great wood work’, of course, has gone beyond recall. Probably, after the manner of wooden superstructures, it overhung at the sides, and its leads afforded that position of vantage ‘upon the walls of the Castle, which are large and wide on the inside’ from which the unhappy Richard II watched his enemies closing in upon him on August 22nd, 1399. Speculation as to its arrangements is quite unprofitable, but it is possible to obtain some notion of those masonry upper floors

¹²This state of affairs is not uncommon in the Edwardian castles of North Wales: Harlech and Conway are complete, but Rhuddlan seems never to have been given proper living quarters; Caernarvon never had its hall finished, nor the inner ends of its gateways; Beaumaris never received the upper storeys of its towers, and was left for many years with the outer envelope of its defences half-built.

¹³*Flintshire Ministers' Accounts* 1301-1328, pp. 15-16.

¹⁴The Constable of the Castle.

¹⁵Further expenses for carting the lead and the firewood used in ‘founding’ it, are included in a sum of 12l. 12s. 10½d. paid to the Constable in the year following. (*Flintshire Ministers' Accounts*, pp. 32-3).

which were designed for the tower, but never built, from the evidence which remains in the form of the shafts made for their latrines. At the back of each of the three surviving latrines on the first floor are to be seen the remains of a descending flue, joining that of the latrine itself to form a narrow oblong shaft (No. 1, 3 and 4). Plainly there were to have been three others in the upper part of the tower, making six in all.

But this is not the whole story; the outer wall of the basement gallery, which has been very badly robbed, is broken roughly through at shafts 3 and 4, clearly revealing that the bottom of each shaft is again widened on the inside by some thirteen or fourteen inches, from the level of the gallery downwards, as if there was still another latrine at basement level. The inward edge of the pit is in each case flush with the wall of the gallery, so that it is evident that there must have been some access to the shaft. There is a rebate in the floor, across the front of shaft 4, for a plank, such as might form the front of the seat.¹⁶ Thus there is reason to believe that there were in the basement of the tower two further latrines of a rather dismal and squalid sort, such as might be provided for an emergency population in time of siege.

Shaft 1 has no such feature as this, and the stone-robbers have not broken through to it. What they have done is to expose a *fourth* shaft (No. 2), which did not communicate with the basement or the first floor above, but is nevertheless the same size as its three fellows are below the first floor, at which stage they were each meant to be serving two latrines on different levels. Presumably therefore, when the tower was complete, shaft 2 would have served two latrines, each on a different floor, and both above the first floor; in other words, the tower would have had at least four storeys, as already suggested. Indeed, as this brings the total of the projected latrines to five, two lost floors may not be enough; the plan may well have provided for five storeys, as at Pembroke.

What does emerge is that in this amazing tower there were to have been at least eight latrines, and possibly ten. This is exactly double the number (four certain and one possible) in the great gate of Harlech, which has certainly not a bad provision. Short of some unrevealed and Rabelaisian reason, this can only be accounted for by a large population; indeed, it is clear that the tower, with its vast passive strength and its separate well, was capable of sheltering in case of need the whole garrison of the castle, swollen perhaps by elements from outside.

To sum up: the castle of Flint was not 'a piece of useless ingenuity' but an extremely competent design; its great tower is modelled on the Tour de Constance in its position, but not in its arrangements; it was a true keep in the military sense,

¹⁶The alternative suggestion (for which I am indebted to Dr. Simpson) is that this rebate was for a small sliding door or shutter, like that of a hen-house, of a sort known in Scotland as a *grund-wa' stane*, to allow access to the shaft for cleaning purposes. This is a very ingenious idea but it does not explain either why this unusually unpleasant expedient should be applied to shafts 3 and 4, but not to 1 and 2, or how the cleaning could be carried out, the pit descending as it does far below the level of the gallery. There appears to be a similar arrangement in some of the latrine-shafts in the sister castle of Rhuddlan.

and an exceptionally powerful one; it was designed to have at least four storeys, and while it undoubtedly was meant to contain, and presumably did eventually contain fine residential apartments, none of these are in the surviving portion of the tower; finally, it was specially designed to contain a very large number of people in a siege.

I have to thank Dr. W. Douglas Simpson and Mr. A. J. Taylor for the invaluable help they have given me in the preparation of this paper.

Note: Since writing the above, I have been sent by Mr. A. J. Taylor a copy of his paper *The Building of Flint: a Postscript*, published in the Proceedings of the Flintshire Historic Society for 1957. This contains an improved translation of the building account of 1301-2. It would appear that the work undertaken by Henry de Ryhull was 'one great wood work upon the great tower of Flint Castle, together with a noble and beautiful *circular gallery* (*carola*) of timber' This clearly resolves the problem set by the apparent conjunction in the same paragraph of a major work of architectural carpentry and a small piece of furniture such as a box. The gallery was presumably a projecting structure such as could easily be provided in timber-work.

Mr. Taylor continues: 'Such a work . . . would be consistent with surviving architectural indications that the suite of rooms on the first floor looked into a central 'well' that was open to the sky and not, as has been generally conjectured, covered over by stone vaults at successive levels'. I do not think it is possible to accept this suggestion; it is difficult to imagine what sort of a donjon Mr. Taylor envisages, for such a hollow ring of small chambers could hardly make a proper suite for the accommodation of the castle's master, and the alternative—a donjon which was not a principal habitation—is almost unheard of.

It is, however, not necessary to rely on argument of this sort, for the architectural indications in fact show plainly that the basement was covered in: the numerous doorless openings; the placing—otherwise pointless—of the three great archways leading into the gallery directly opposite the arrowslits; and the location of the two lighting-slits, not half-way along the lower part of the gallery, which must always have been very dark, but opposite its steps, which in the present unroofed state of the tower are very well lighted indeed—all these are clear evidence that the central chamber of the basement was open neither to weather nor to light. Finally, there were no drainage arrangements: 'the floor now consists of shingle and its original level has not yet been determined, as water rises in it to the present surface, and would rise higher had not a modern overflow been cut'. (Hemp, *Guide to Flint Castle*, 1929 edition, p. 11.) It can hardly be suggested that the immensely competent James of St. George would be guilty of so elementary a mistake, and I can only conclude that earlier writers were perfectly right to visualise a covered central chamber on each of the surviving floors.

