

XI.—THE GATEHOUSE AND BARBICAN AT ALNWICK CASTLE, WITH AN ACCOUNT OF THE RECENT DISCOVERIES.

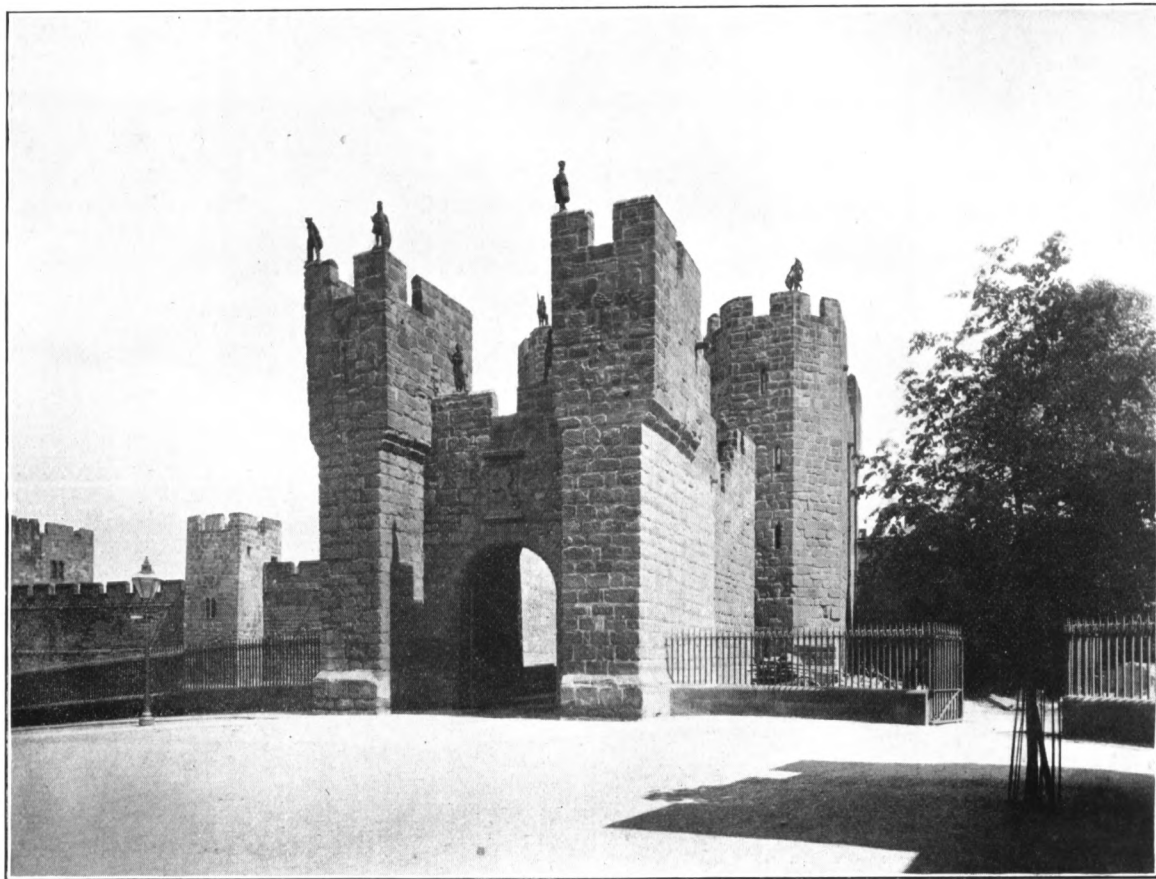
By W. H. KNOWLES, F.S.A.

[Read on the 28th October, 1908.]

The ancient castle of Alnwick is situated on rising ground on the south bank of the river Aln. One of the best views of it is to be obtained from the opposite bank of the river a little to the east of Abbey cottage, from which point the grouping of the buildings is diversified, imposing and effective, though stern in character. The structure appears suited both to its important position on the restless northern border, and to the illustrious and powerful house of Percy with which it is associated. It is five miles from the mouth of the river, and could thereby, in case of need, receive provisions and assistance like other settlements similarly placed. It occupies a strong natural position, protected on the north by the river, on the south and east by the Bow-burn (a stream which used to run through a deep ravine between the castle and the town still evident, though considerably filled in during the eighteenth century), and on the west by an artificial ditch.

There is no documentary evidence, nor has anything been found to suggest that the site was occupied previous to the middle of the twelfth century, unless the clearly defined mount on which the castle is placed was an early artificial moated and palisaded work, thrown up for defence.<sup>1</sup> Such a mount would be quite

<sup>1</sup> There is no evidence to show who was the lord of Alnwick in Saxon times, for the Chronicle of Alnwick Abbey (see Tate, *Alnwick*, pp. 1-32) is not trustworthy. The chief Anglian thane probably resided at Lesbury, it being the principal town in the district. That place however was not selected as the *caput* of the barony constituted by the Norman kings and bestowed, it is believed, on the Tisons, descended from the lords of le Cinglais in Calvados (see new *Hist. Northd.*,



THE BARBICAN AND GATEHOUSE, ALNWICK CASTLE.

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WILLIAM H. HARRIS

consistent with the normal type of castle that prevailed for some time after the Conquest, and was the common precursor of the stone buildings erected later by the Normans. Keeps of irregular shape formed of towers, enclosing an area resembling that of Alnwick, usually occupied artificial mounts, whereas solid or rectangular keeps, such as Newcastle and Bamburgh, were, on account of their solidity, usually erected on natural ground. The *enceinte* walls of the castle do not appear to have combined with, or formed part of, the town defences. The latter, including Bondgate-tower, which yet bars the main street, were of later date and enclosed the town which grew up under the shadow and protection of the castle. The 'Narrow-gate' of the town, and the barbican and chief gate of the castle, were within easy distance but independent of each other.

The buildings, as now seen, have outwardly the appearance of a great feudal stronghold, and largely retain the outline given them by the de Vescis in the twelfth century. The area enclosed by the curtain wall, is, roughly on plan, shaped like the letter 'L' reversed, the clustered towers of polygonal shape forming the keep, being to the north in the re-entering angle. The short limb of the letter is to the west, and in the middle of its length is the gatehouse and barbican described below.

For six centuries the gatehouse and barbican of Alnwick have continued in use, and afford a striking and almost unique example of the double feature yet existing (see plate xvi). A smaller barbican remains before the Walmgate bar at York, but there are very few others in a similarly complete condition. The foundations and extent of the barbican can be ascertained at

vol. v, p. 416). Nor are the circumstances exactly known how the barony passed, by marriage or otherwise, from the Tisons to Ivo de Vesci probably *circa* 1096. That the last mentioned erected or reconstructed a castle at Alnwick is suggested by the wording of a charter granted by Henry II. (1154-1189) to William de Vesci confirming to him the 'castrum de Alnewyco et totum honorem qui fuit Ivonis de Vesci avi sui,' etc. (Tate, *Alnwick*, I, pp. 51-402).

Prudhoe castle and elsewhere, but even the traces of that which stood before the Blackgate of Newcastle, like many others, have perished. The size of the gatehouse is impaired in effect by the barbican attached to it, which tends to dwarf its real size and importance. The gatehouse block is larger than that of Bothal castle, and, including the barbican, is almost identical in dimensions with Tynemouth, both of which served in reality as keeps.

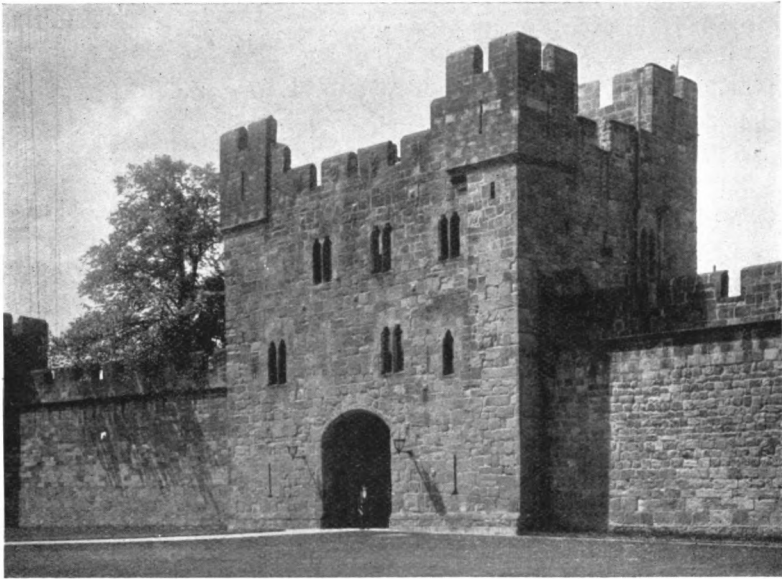
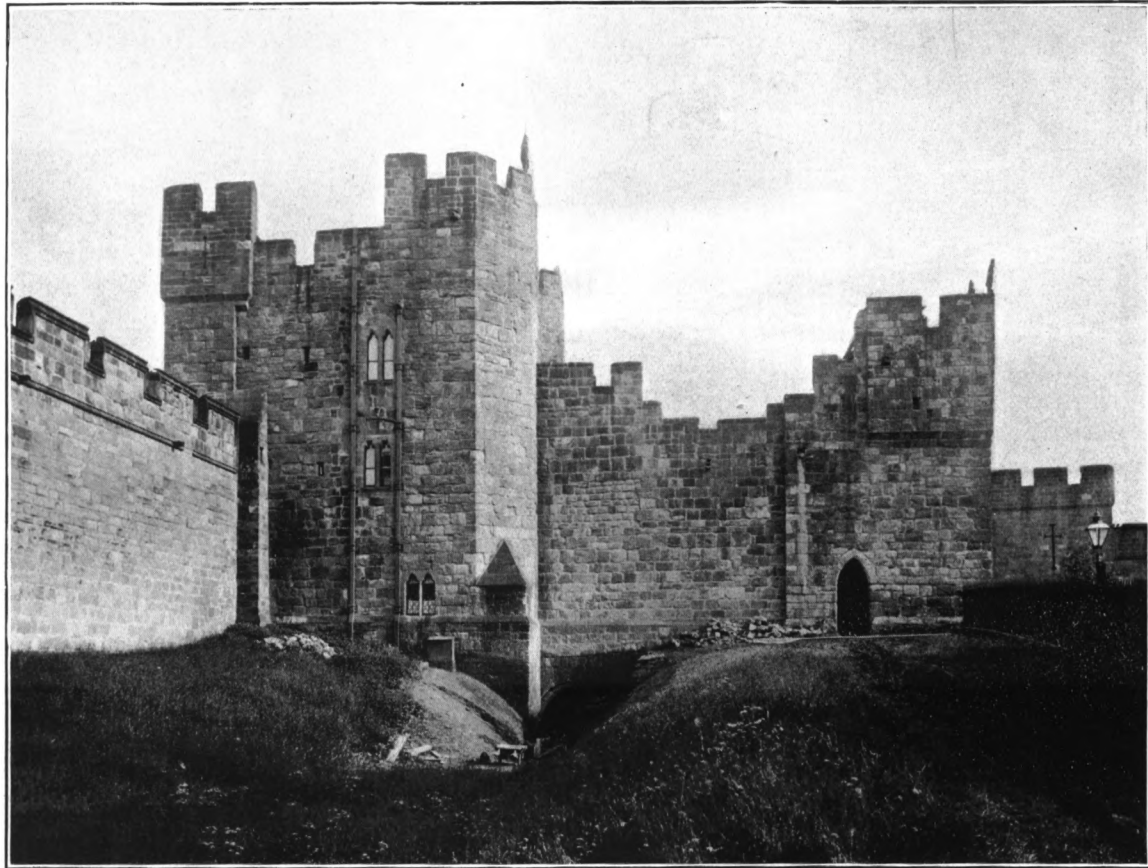


FIG. 1. THE GATEHOUSE FROM WITHIN.

The Alnwick gate and barbican effectively fulfil the purpose for which they were erected, and provide at a point frequently considered weak, and consequently subject to attack, all the usual features of defence, including a moat with a drawbridge, a portcullis, and gates, together with concealed posterns from which the garrison could make sorties and by which emissaries obtained ingress and egress.



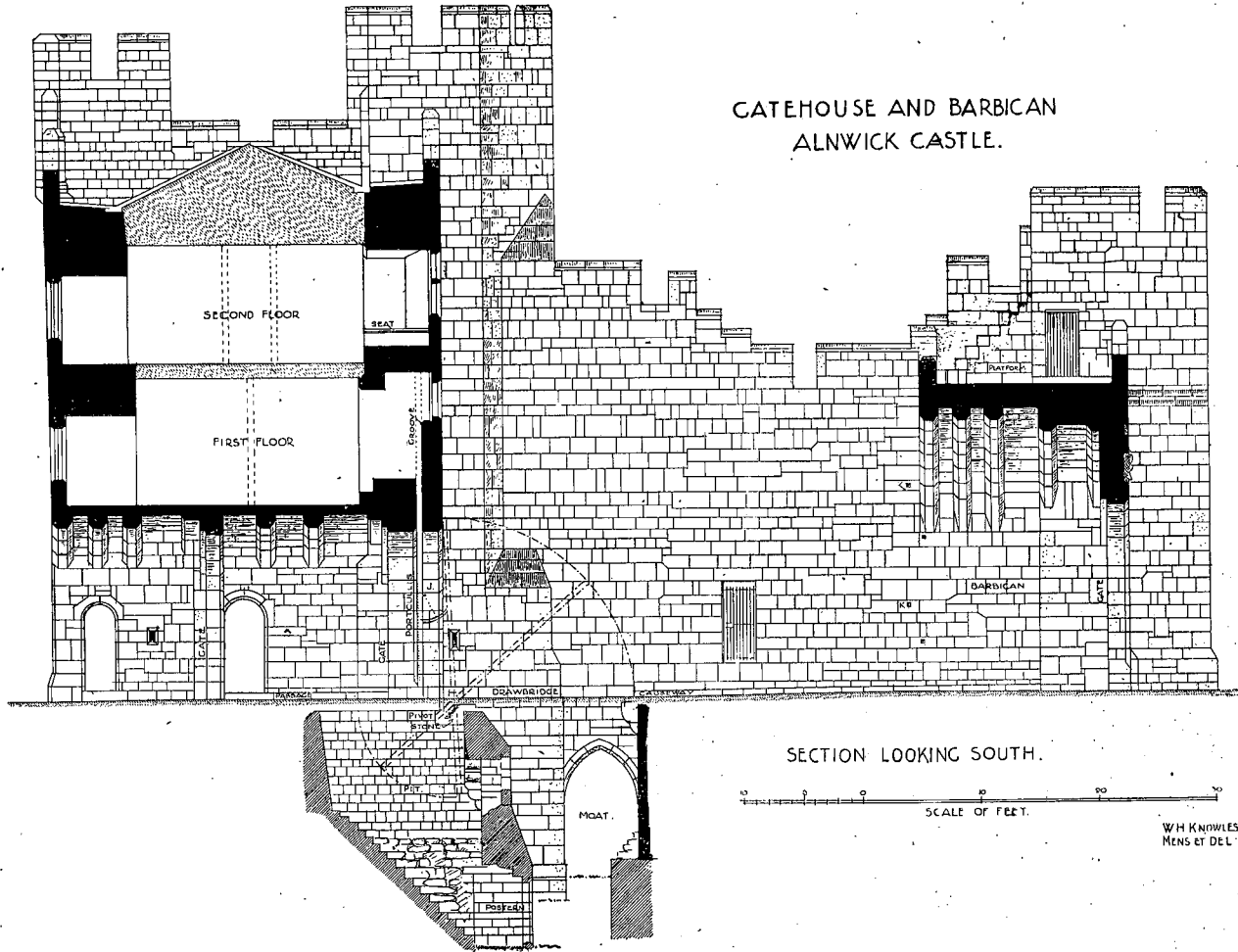
NORTH SIDE OF GATEHOUSE AND BARBICAN, ALNWICK CASTLE.

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GATEHOUSE AND BARBICAN  
ALNWICK CASTLE.



Three storeys in height, the gatehouse occupies the site of an earlier structure, and was inserted in, and projects from the west side of the Norman *enceinte* by which the Vescis encircled the castle. A few walls at the low level of the drawbridge pit are older than the remainder of the structure. They may have belonged to an earlier building, or (as they appear of only slightly earlier date) may be the result of a change of plan. It will be convenient to discuss these later when describing their discovery. On the exterior the design is severely simple, without buttresses or offsets, and is of a distinctly Edwardian character of early fourteenth century date; in several details resembling Bothal and Chipchase castles. There can be little doubt that the gatehouse was erected by Henry de Percy, the first lord of Alnwick, when he acquired the castle and barony by purchase from Anthony Bek, the powerful prince bishop of Durham, who had obtained them on the death of William, the seventh and last of the Vescis.

The barbican projects fifty-six feet beyond the gatehouse, and is entered by a semicircular arched opening ten feet six inches wide, gated and possibly further protected, if the moat passed in front of it, by a drawbridge. It is recessed between solid square towers, measuring on the face seven feet. The entrance is vaulted and crossed by pointed ribs for a distance of eighteen feet, the area above forming a platform, with two store or shelter rooms above the solid masonry which flanks the gate below (see plate xvii). The walls enclosing the rooms are each oversailed two courses to the north and south (see plate xvii). Each room was originally entered by a square rebated door and was lighted on the north and south by a small window with chamfered dressings and by a cross oillet, or loop, on the west. Excepting two corbels, midway in the height of the side wall of the north tower, they possess no other feature. The platform and rooms of the barbican turrets were accessible from the ground level by a staircase in

the thickness of the south wall of the causeway, and from the second floor of the gatehouse by the rampart walk of the side walls (see plates xvii and xviii). Surmounting the rooms are battlements, forty-two feet above the present floor level, which are reached by an open stair sheltered by a stepped parapet (plate xvii, and the second floor, see plate xviii). A postern on the north side with a chamfered pointed arch opened off a vaulted passage just within the gate. The door was secured by a bar for which there is a hole in the east jamb.

Above the level of the outer arch of the barbican there are two openings (now filled in) about eight inches by four inches, directly over the jambs of the gate. These openings, and the fact that the base moulding which passes round the exterior walls is returned and forms a rebate on the gate jambs, suggest (although they do not justify the assertion) that a drawbridge once existed.<sup>2</sup> It is more than probable that the holes may have supported beams for a small gallery or breteshe between the turrets.

On either side of the causeway and just within the east arch of the vaulting (see κ, plate xvii) there are some shallow holes at the springing level and others midway between them and the ground, they are not in the same vertical plane but they may have supported light beams between which a shutter or other obstacle could be dropped.

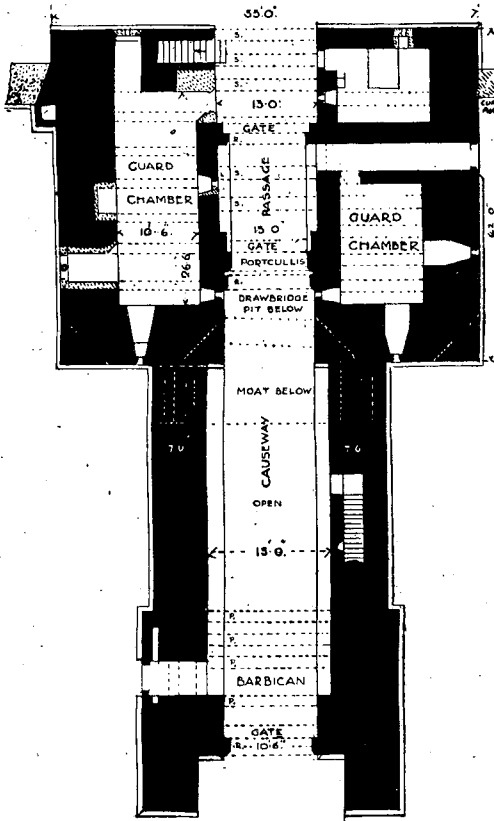
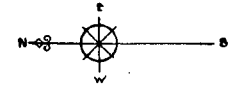
The lateral walls of the causeway leading to the gatehouse are seven feet six inches in thickness, and solid, save for the staircase already mentioned as ascending to the battlements (ground plan, plate xviii). The summit of the walls is battlemented on each face, and is stepped from the middle to the barbican and gatehouse respectively (see plate xvii). The great height of the walls unrelieved by any decoration or architectural feature gives

<sup>2</sup> Hartshorne, *Proc. Arch. Inst. Newc.*, vol. II, p. 174, suggests one before the barbican, but the reference in Bellysys survey, p. 176, to 'the drawbryge of the utter ward' refers to that before the gatehouse. See note from Clarkson's 'Survey,' p. 297 *post*.

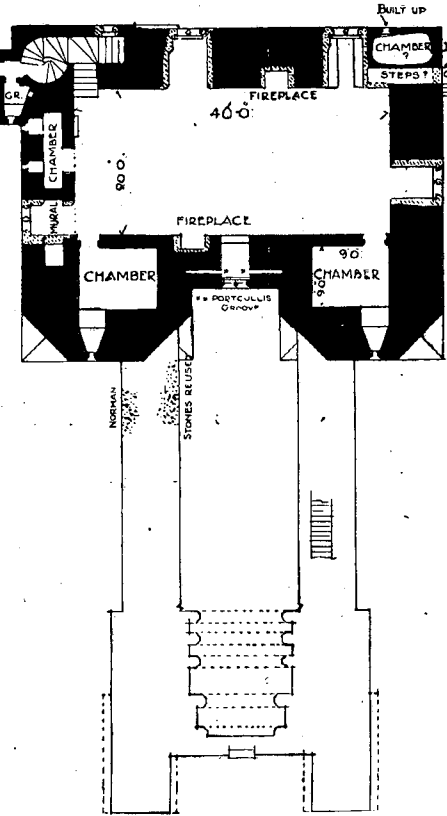
# GATEHOUSE AND BARBICAN: ALNWICK CASTLE.

SITE OF EXCHEQUER

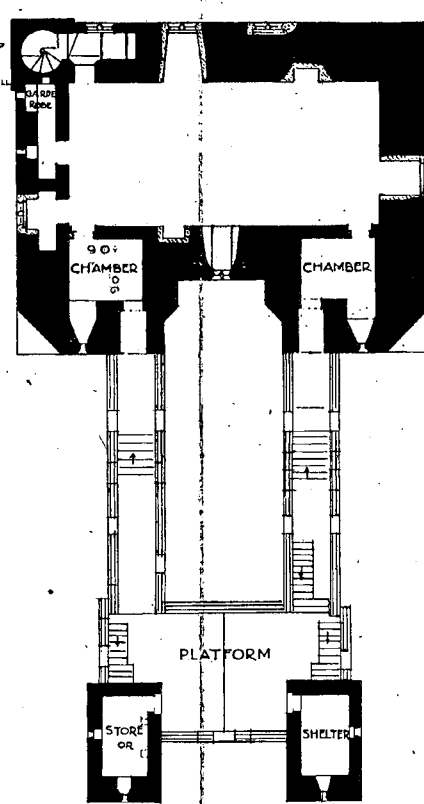
SITE OF STABLES



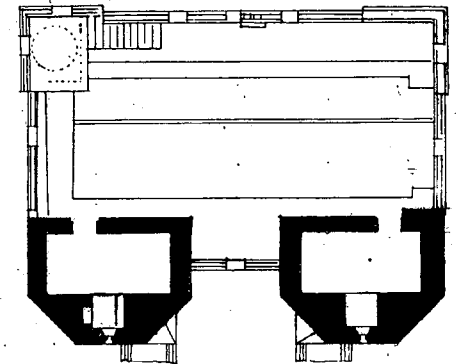
GROUND PLAN



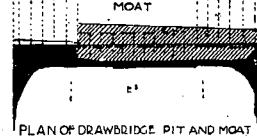
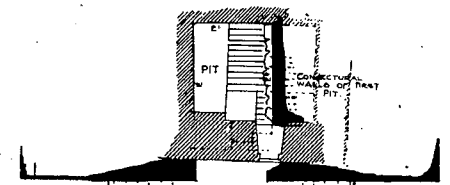
PLAN OF FIRST FLOOR



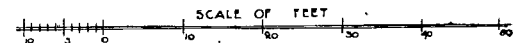
PLAN OF SECOND FLOOR



PLAN OF ROOF



PLAN OF DRAWBRIDGE PIT AND MOAT



SCALE OF FEET

W.H. KNOWLES, F.S.A.  
MENS ET DELT.  
1807



Vertical text or label, possibly a title or reference number, located on the right side of the diagram.

an impressive, but somewhat gloomy, aspect to the entrance (see fig. 2). A portion of the north wall some distance above the ground level is built of re-used Norman stones, suggesting either the reparation of a breach or the building up of a recess.

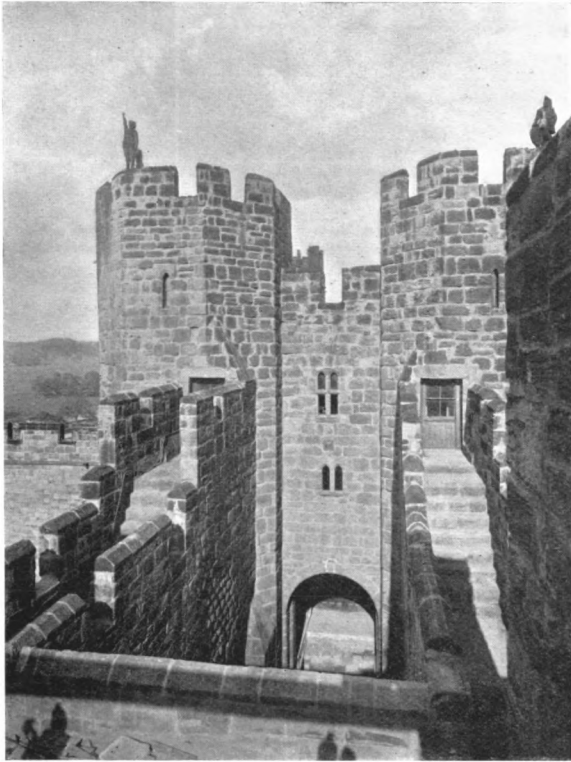


FIG. 2. THE GATEHOUSE FROM THE BARBICAN.

Before the portal of the gatehouse (fig. 3) is the drawbridge previously mentioned (see plates XVII and XX). It spanned the moat which at this point passed below the causeway, the side

walls of the barbican being pierced, for the purpose, by a pointed arched opening with three chamfered ribs (see fig. 6).

The gatehouse (see ground plan, plate xviii) has an external measurement east to west of forty-two feet, from north to south

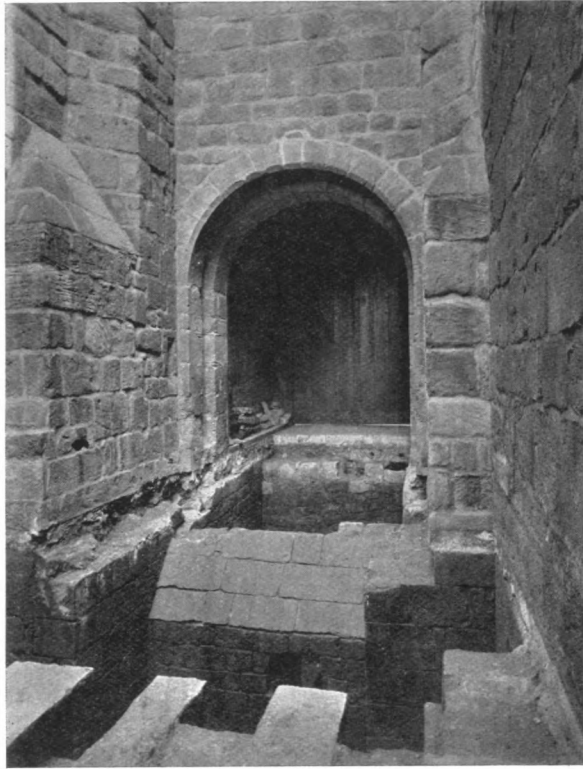


FIG. 3. THE PORTAL OF THE GATEHOUSE.

of fifty-three feet, and is fifty-six feet in height to the top of the parapet. The entrance, between guard chambers, is set in the middle of the gatehouse in a deep recess flanked by lofty semi-

octagonal towers (see fig. 2). The passage, thirteen feet in width, is vaulted with plain chamfered segmental ribs springing from the side walls, and is double gated within round headed openings. In advance of the outer gate are the grooves in which the portcullis moved, and adjacent to it is evidence of the method by which the drawbridge was raised and lowered (section BB, plate xx). On the left of the entrance is a long guard chamber twenty-six feet six inches by ten feet six inches, vaulted and strengthened by six chamfered segmental ribs. The present door is a modern one, the original was a little farther to the east and close to the door of the adjoining staircase. The chamber was lighted by three small windows, one to the west commanding the barbican wall, another in the south wall on the exterior of the outer gate, and the third in the position of the modern double light window on the north side. The cupboard space below the staircase may always have been used as such or is possibly the site of a door-opening communicating with the 'exchequer' which stood near, until removed in 1755. The guard chamber on the right of the entrance, vaulted similarly to that on the left, is lighted by three small windows, as before, commanding respectively the side of the barbican wall, the ditch, and the approach to the outer gate. It is entered from a small passage at one end opening by a postern into the moat, and at the other by a door in the inner gates—a very necessary precaution (see ground plan, plate xviii). The ceiling is of large flat stones supported by a chamfered cornice stone on each side similar to the ceilings of the narrow apartments at Chipchase and Dunstanburgh. To the rear of the south guard room is a vaulted store with a round headed arched door, a small square headed window to the passage and a modern loop to the outer ward of the castle. It will be seen from the ground plan (plate xviii) that the walls of the gatehouse to the north, south and west are of great thickness, that the windows or loops are advantageously placed for observation, and



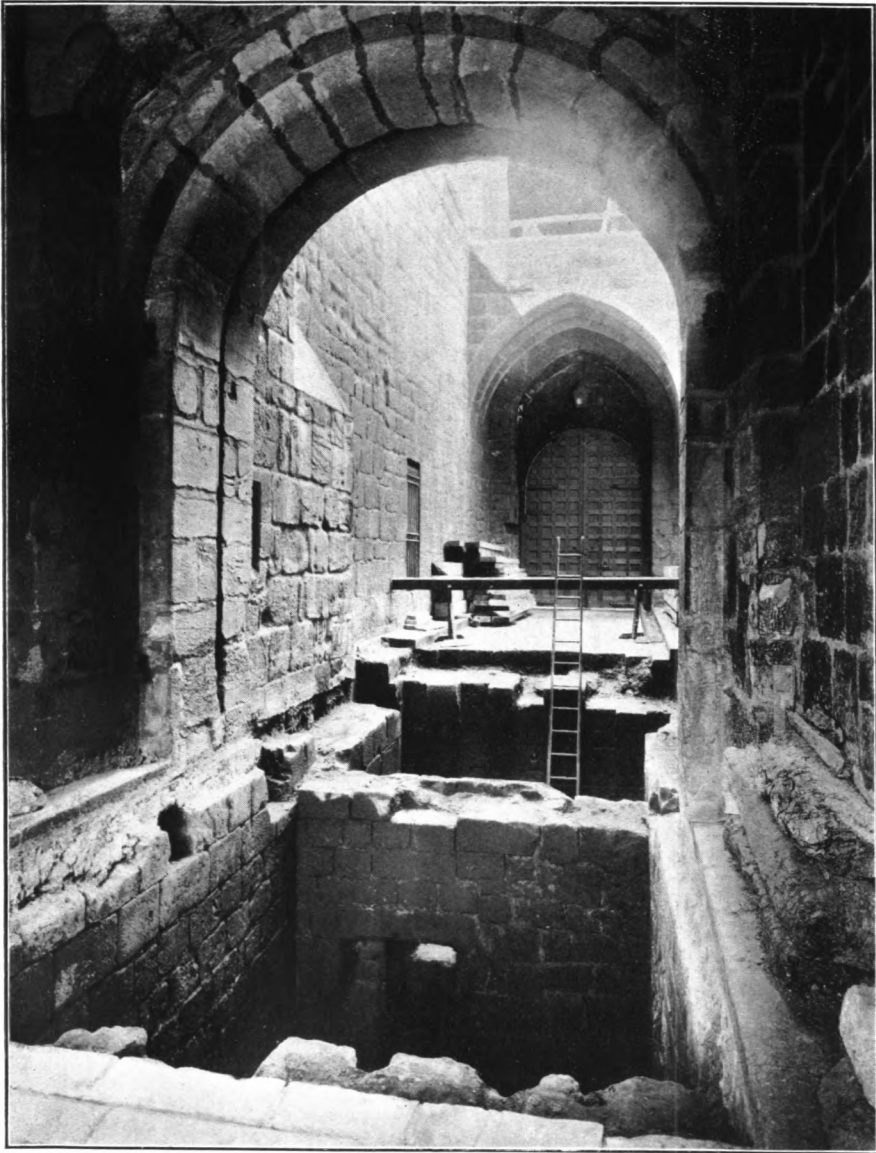
that the double gates, portcullis, and drawbridge, offered an unusually effective defence against assailants.

The first floor, attained by a mural staircase in the east wall, has a ceiling of large stones carried on corbels at one end. The accommodation comprised a large apartment forty feet by twenty feet, with two chambers nine feet by nine feet, arranged in the semi-octagonal projections to the west, and two small mural

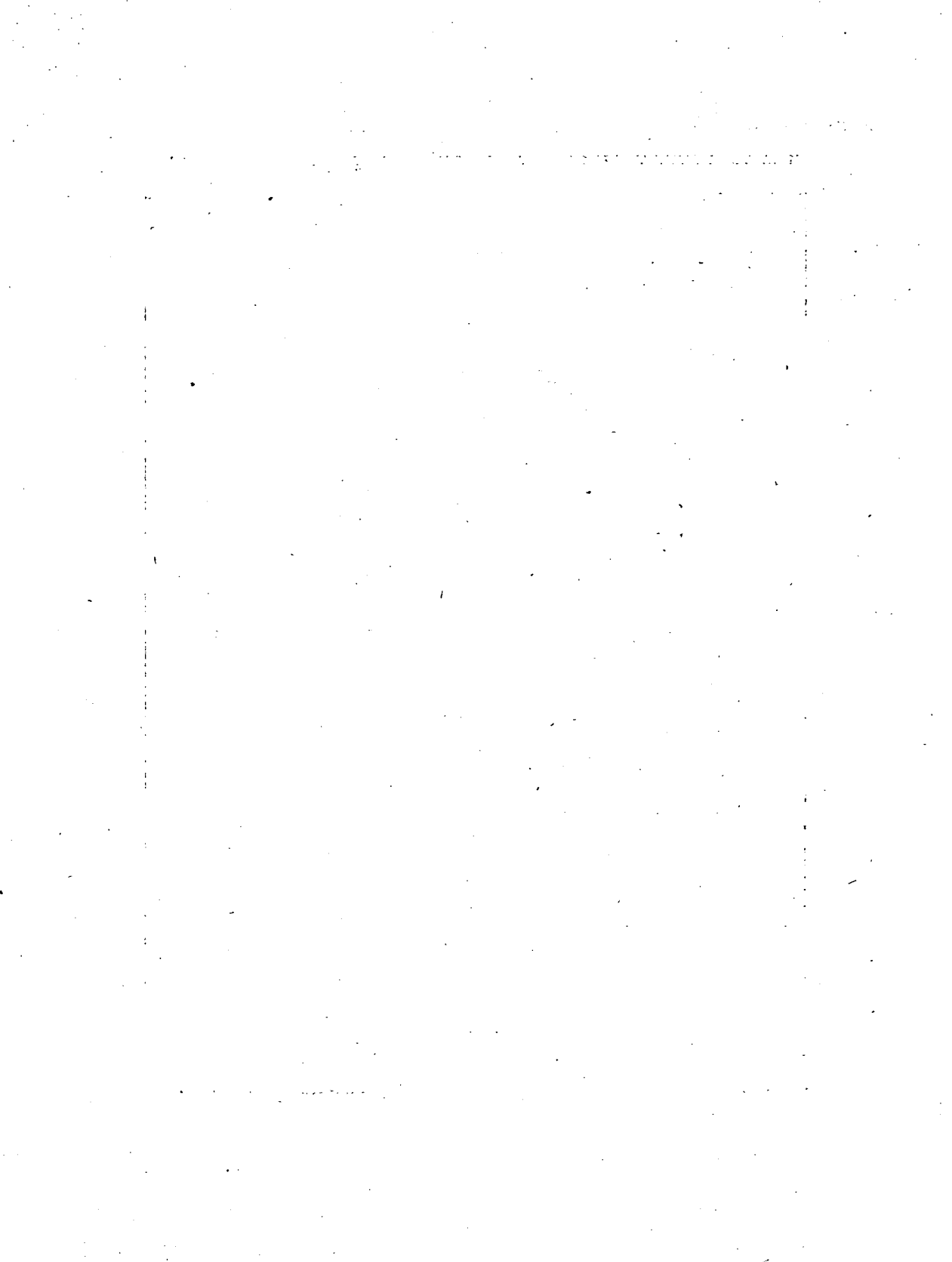


FIG. 4. THE PLATFORM OVER THE BARBICAN.

chambers in the thickness of the north wall (see the plan, plate XVIII). The large apartment is lighted by several windows, one of which, overlooking the barbican, is an original one of two pointed lights, it has a hollow space in either jamb in which the portcullis moved, the other windows which now light the apartment are modern, but may occupy the position of ancient openings. It is



THE DRAWBRIDGE PIT AND THE MOAT BEYOND, ALNWICK CASTLE.



difficult to say whether the modern fireplaces supplanted earlier ones. The chamber communicated with the curtain wall on the north side by crossing the newel staircase in the north-east corner, and on the south side by a mural passage, now closed, and previously lighted by a square headed window, now built up. Near the staircase is a garde-robe with a shaft to the ditch below. The small chambers are lighted by a window with a pointed head in one stone which opens on to the outside of the barbican walls. Of the mural chambers, that to the north has a small unaltered opening, but the window to the other chamber is a last century insertion to give increased light. The circular newel staircase, already mentioned, led up to the second floor which comprised accommodation similar to that below. The large apartment contains an original window of two lights divided by a transom overlooking the barbican, the remaining windows having been altered. The two chambers in the semi-octagonal towers are still lighted by ancient windows opening to the west, and have additional doors giving on to the alure walk of the walls which communicate with the platform, and the small rooms in the turrets over the barbican (see the plans and figs. 2 and 4). The eastern mural chamber in the north wall was used as a garde-robe. The recess near the staircase contains a stone window seat. The circular staircase continues to the roof and to two chambers in the semi-octagonal projections still lighted by ancient windows in the west wall; it terminates in an umbrella vault of eight ribs springing from the newel.

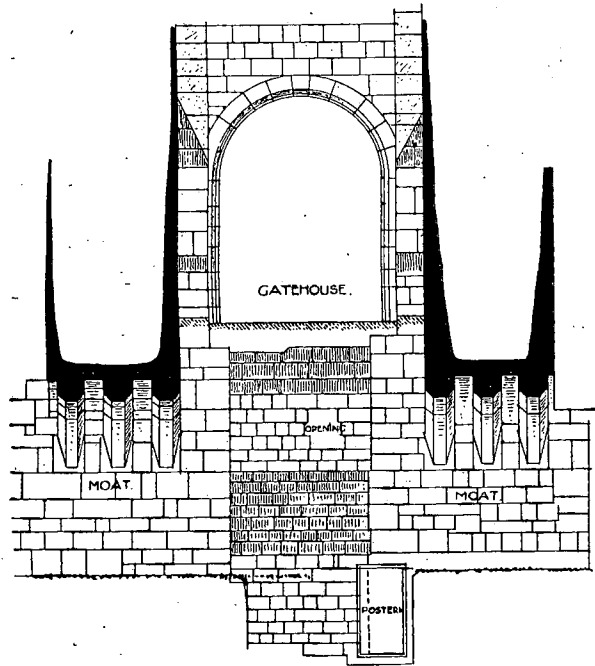
The battlements surmounting the walls have square embrasures and merlons with simple chamfered coping stones, near the top of which are pivot holes for shutters intended to push outwards. There are no machicolations, nor are there indications of any means of attaching a movable gallery or breteshe to the outside of the battlements (erected when a siege was expected), and some times projected on struts springing from corbels and

covered with a sloping roof. The simplicity of the construction of the parapets suggests that there may have been provision for such a gallery, but as this part of the gatehouse has undergone many minor repairs, the needful evidence may have perished. The stone figures which stand on the merlons are of a variety of sizes and costumes, none life size, and were so placed by the first duke of Northumberland, 1750-86. They supplanted earlier figures which had become decayed. Similar statues still adorn the castles of Bothal and Chepstow.

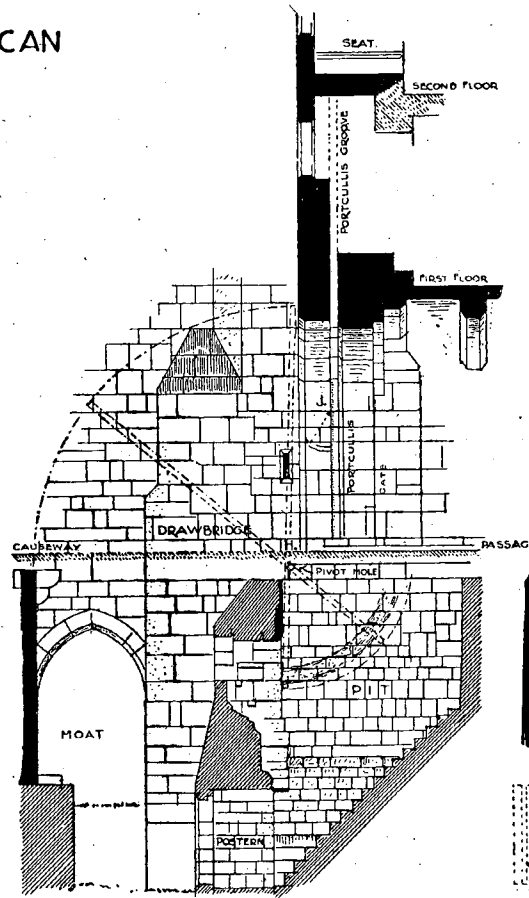
Over the portal of the barbican is a sunk panel, with a hollow moulding worked on the ashlar which encloses it. It is not contemporary with the structure, but was inserted by the fourth earl of Northumberland, 1461-1489, and bears a sculptured Percy lion. The cornice stones above and below are further reparations. On the upper one is the motto 'Esperance ma comferte' between two crescents and a locket, and on the underside three badges between supporters: (1) a locket between a crowned lion and a leopard or panther (?); (2) a bird displayed within a cable moulding, between a lion uncrowned and a unicorn collared; and (3) a bascule between a leopard or panther (?) and a lion crowned. On the lower cornice is the motto 'Esperance H.P. en dieu' between two lockets. The original cornice stones are preserved in the Constable's tower; on the upper one are three badges, a crescent, a locket, and a branch or sprig, and between them the motto, 'ESPERAUNCE MA COUMFORT,' and on the underside three more badges with supporters: 1, a locket between a lion and unicorn crowned; 2, a bird displayed between a lion and unicorn horned; and 3, a bascule between supporters as before but much decayed. (The bascule for Herbert was only used by the fourth earl.) On the lower cornice occurs 'Esperaunce H.M. ma comferte,' the H.M. being for Henry and Maud, the fourth earl and his wife.<sup>3</sup>

<sup>3</sup> See Longstaffe, *Arch. Ael.*, vol. IV, pp. 192 *et seq.*

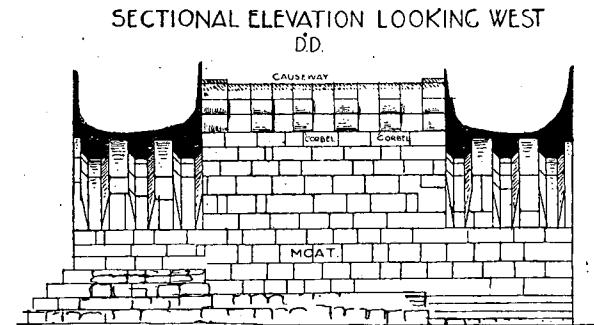
# GATEHOUSE AND BARBICAN ALNWICK CASTLE.



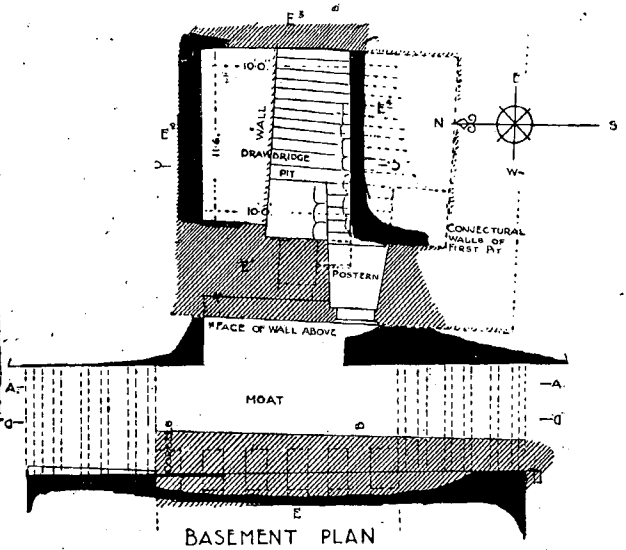
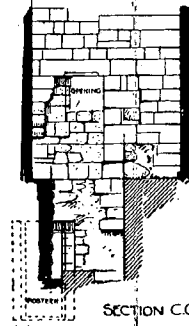
SECTIONAL ELEVATION LOOKING EAST  
AA.



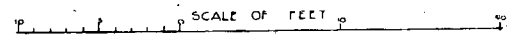
SECTIONAL ELEVATION LOOKING NORTH  
BB.



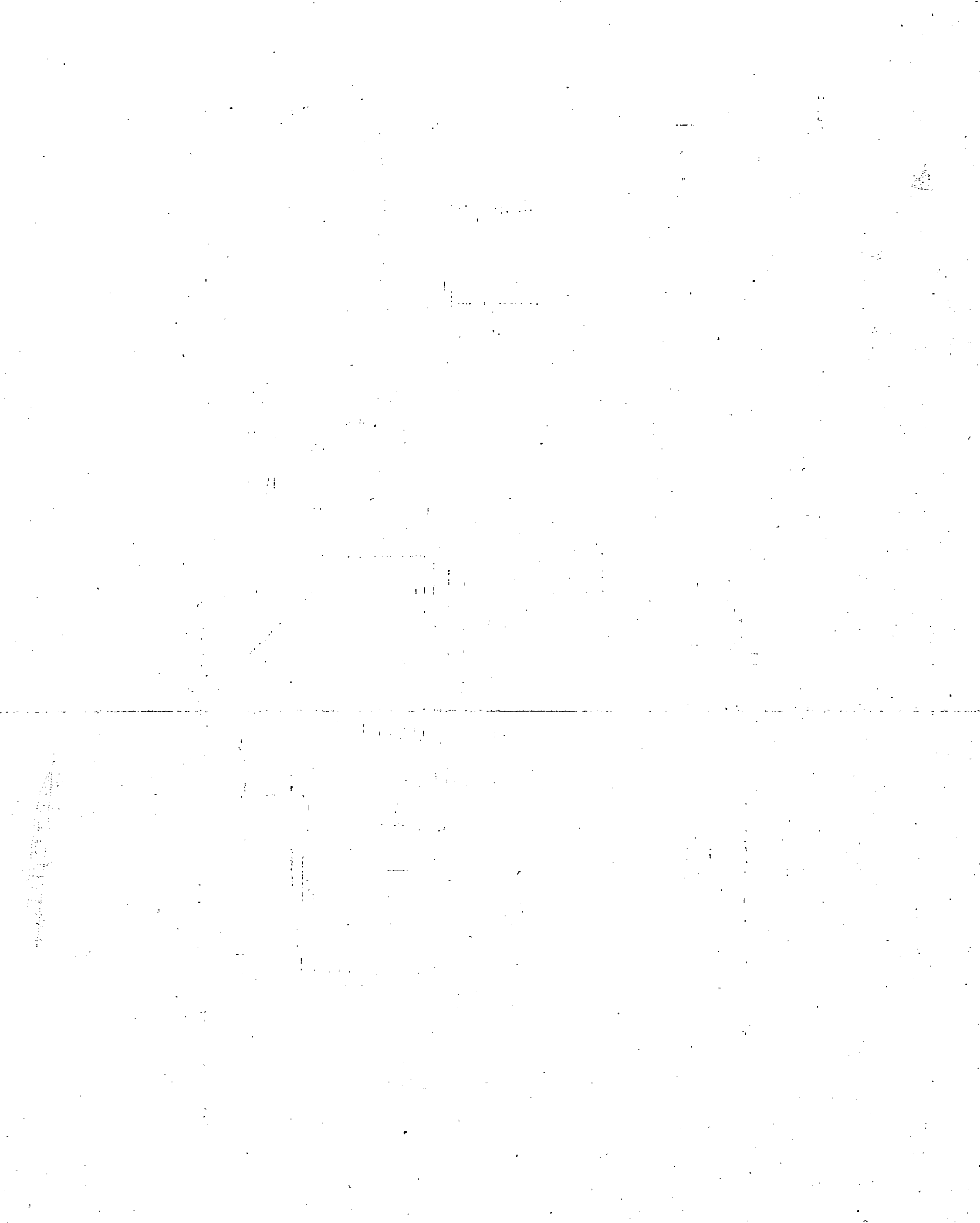
SECTIONAL ELEVATION LOOKING WEST  
DD.



BASEMENT PLAN



W H KNOWLES & SA.  
MENS ET DELT  
1907



## THE EXCAVATIONS.

In 1902, when some repairs were being made to the carriage way, it was observed that the apparently solid foundation of the road through the gatehouse was actually a pit or space intentionally filled in. By the order of the duke of Northumberland this was carefully investigated, with the result that the gatehouse, unique in its complete preservation, was discovered to possess a drawbridge pit within the gate, proving that the bridge was worked from below the level of the causeway, and not as commonly from above, by chains, levers, and counterweights. This important discovery led to further explorations which revealed the site of the moat before the gatehouse (see plates XVI and XVII) mentioned by Clarkson in his survey of 1567 as 'nowe filled uppe and paved.'<sup>4</sup>

A plan and section of the work is shewn on plate xx, and by figs: 5 to 8. The masonry about the pit, indicated by hatched lines on the drawings, is of smaller stones, indifferently dressed and of inferior quality to the superior ashlar of the masonry above. As already stated, this work may not have preceded the superstructure by a lengthened period, and may indeed have been but a change of plan—a frequent occurrence in castle building. It will be observed on reference to the plan that although the hatched portions (including the foundations beyond the bridge) are at right angles to each other, they are not parallel with the masonry of the superstructure.

The pit measures, from east to west eleven feet, from north to south ten feet, and from the threshold of the postern door to

<sup>4</sup> 'In the utter warde where ys the entry from the towne is a faire gate house covered with leade with ij paire of wood gates and on other syde ys a porter lodge with ij house height aboute which ys nowe rewynoose and in decaye by reasone the flores of the upper house ys decayed as well as dorm mounts and joasts as on board and very necessarie to be repayred without which gaits ther is a very faire turne pike dooble battelled aboute with a pare of wood gats in the uttermoste parts thereof betwene which turne pike and the greate gats yt seamith ther hathe bene a drawe-bridge but yt ys nowe filled uppe and paved. . . .' Clarkson's 'Survey' of 1567; Duke of Northumberland's MSS.



the level of the roadway twenty-one feet. The walls, E, E<sup>1</sup>, E<sup>2</sup>, E<sup>3</sup> and E<sup>4</sup>—being the three sides of the pit and the abutment wall on which the bridge fell—are unquestionably of one design and of the earliest period of the work under consideration. In the pit thus enclosed the floor is formed by a series of steps falling to the postern (see plan, plate xx). There are indications above the existing level of the north wall (E<sup>2</sup>), that it was bonded into both the east and west walls, figs. 7 and 8. If the north wall be allowed a thickness of five feet (the same as the west wall) it is apparent that its north side is in alignment with the end of the old foundations intended to receive the bridge at the north west angle of the wall E. Granted also that the postern was in the middle of the chamber it is evident that the south wall may still be buried where suggested at E<sup>4</sup> and that, if produced westward, it also would coincide with the south west angle of the wall E. The south wall of the contracted chamber is built upon the steps which pass under it. Such, no doubt, was the first design; whether it continued long in use or was immediately abandoned it is not possible to say.

When altered, clearly three modifications were effected; firstly, the level of the pit or chamber was raised (section BB, plate xx); secondly, its situation was moved farther to the north; and thirdly, its direction was slightly deflected to the south. The wall which divides the pit from the moat is twice splayed on the outside face, and is built under and is not bonded into the walls of the semi-octagonal towers on either side (see fig. 5). It belonged, so far as its exterior face, to the earlier work.

When the change of plan occurred the outer wall on the outside was encased with masonry, the south wall was built, taken into and blocked the postern below (fig. 5), also the present north wall and the bridge abutment erected. The chamber was floored over at about thirteen feet below the level of the passage and the splayed outer wall was increased in thickness on the inside by being oversailed (fig. 7) and as shewn

in the section BB, plate XX. The north, east, and west walls of the pit are of smaller stones possibly re-used; they are bonded at the internal angles.



FIG. 5. THE MOAT BEFORE THE GATEHOUSE.

Some interesting details in connexion with the working of the drawbridge are prominent within the chamber, shewing that the bridge had a counterpoise which fell into the pit, and was pivotted on the inner face of the outer wall at the level of the passage or roadway (see H on plate XVII and section BB on plate XX). This is made clear by (1) the socketted pivot stones

at H to receive the trunnions on which the bridge was set and balanced; (2) the wide groove worn in the form of an arc on the face of the north wall, caused by the side of the counterpoise-

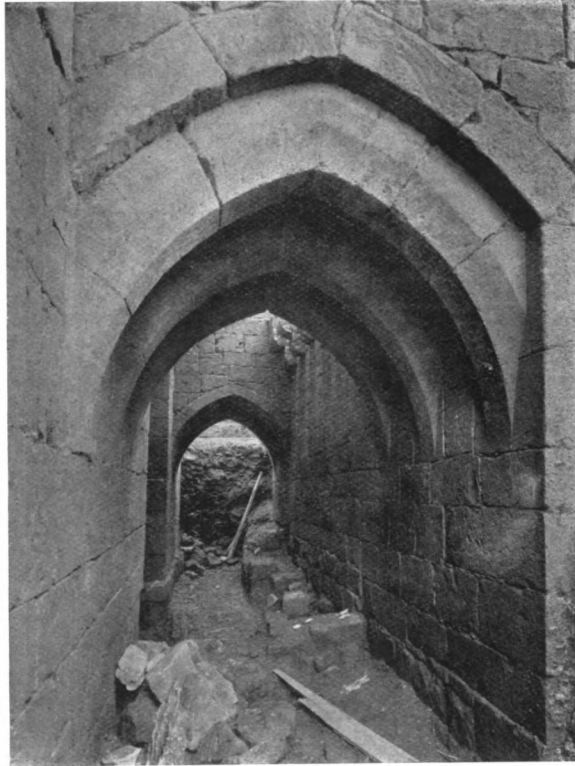


FIG. 6. THE MOAT BEFORE THE GATEHOUSE SHOWING THE ARCHES CARRYING THE WALLS AT THE SIDE OF THE CAUSEWAY.

rubbing against the stonework (BB, plate xx); (3) the aperture in the outer wall without dressings to the exterior, and on the interior forming a recess with a square jamb on one side, and on the other corbelled out by three oversailing courses in the

thickness of the wall, which support two others set crosswise to carry the stone lintel (BB, plate xx and fig. 7). The recess is large enough to accommodate a man and may have been con-

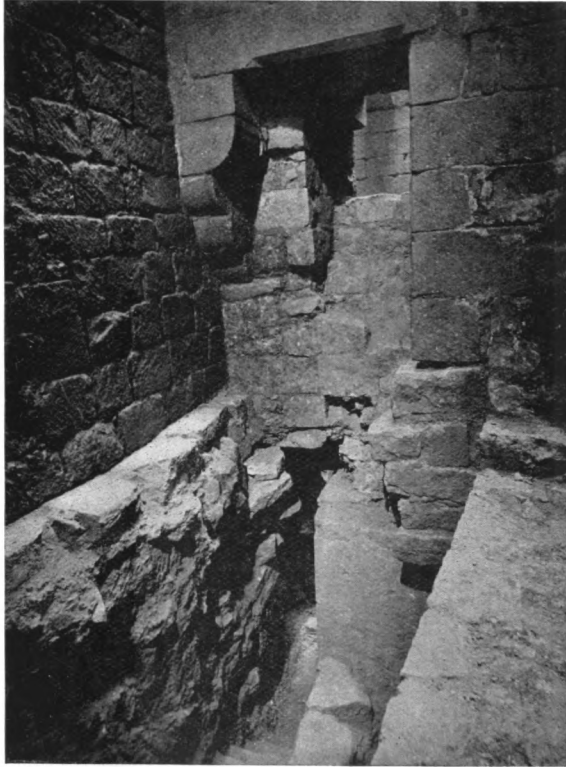


FIG. 7. IN THE DRAWBRIDGE PIT LOOKING OUTWARDS.

structed to facilitate intercourse with those on the causeway, or to serve as a postern reached by a scaling ladder. There is no visible provision in the recess for any timber work, or winch or other machine to work the bridge, such as could have been manipulated from the position by a chain or other attachment to the heel of the counterpoise. In this connexion it should be

recalled that at the springing level of the round-headed arch forming the portal of the gatehouse, both jambs of the stonework were plugged, at J on the section, for some attachment

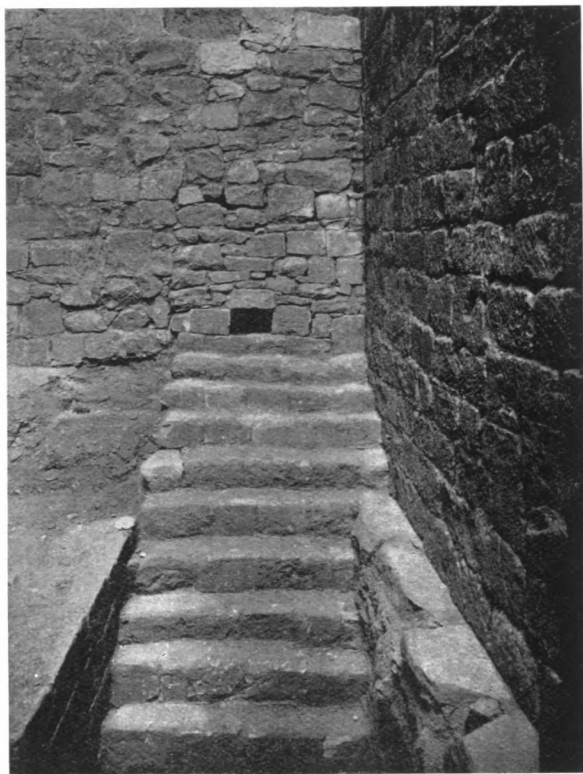


FIG. 8. IN THE DRAWBRIDGE PIT LOOKING INWARDS.

which had described an arc and worn grooves at two feet six inches radius from the points.

It is not easy to determine with any precision how the drawbridge was raised. In many cases chains were attached to the apron piece of the bridge and passed over a pulley fixed in the chamber in which the portcullis was worked—to the

top of the portcullis which thus acted as a counterweight, and as it descended raised the bridge. There is now no evidence to shew that any connexion could be effected between the two, there being no apparent opening in the masonry between the hollow space, in which the portcullis moved, and the exterior. Although in the plugged holes already mentioned it would be possible to secure pulleys about which a chain could pass from the bridge to the top of the portcullis, there is no provision in the groove for a chain, which otherwise would have grated on the face of the portcullis and interfered with its working. The evidence therefore seems to favour the conclusion that the bridge and the portcullis were worked independently, the former from below, and the latter from above.

The plugged holes may have been used for a drop catch to secure the portcullis or the bridge when either was raised.

In the Edwardian period, during which the Alnwick gatehouse was erected, military engineers had already realized that Norman structures, with massive keeps and straight curtains, dependent on passive strength alone, were inadequate to meet the attacks of assailants. These defects were skilfully remedied at Alnwick, and the defences were materially strengthened by the work executed at the time, viz., (*a*) the gatehouse and the barbican were given considerable projection beyond the curtain; (*b*) the windows of the various chambers of the gatehouse enfiladed the exterior of the barbican walls; (*c*) small towers were projected from the Norman curtain permitting the defenders (without exposing themselves) to discharge missiles at assailants attempting to attack the intervening walls; (*d*) the large area within the barbican enabled troops to assemble when making sorties, and to find shelter in case of retreat; (*e*) if taken, the area could be made untenable by those occupying the battlements which surrounded it; and (lastly) the large chamber on the second floor commanded the causeway below (fig. 2), and the platform and battlements about the barbican (fig. 4 and plates xvii and xviii).