

# DERBYSHIRE ARCHAEOLOGICAL AND NATURAL HISTORY SOCIETY.

---

## DUFFIELD CASTLE EXCAVATIONS 1957.

---

By T. G. MANBY.

---

### INTRODUCTION.

**D**URING 1957 the Prehistory and Roman Section of the Derbyshire Archaeological and Natural History Society carried out excavations at Duffield Castle (Fig. 1). The castle stands on the bank of the Derwent, on the northern edge of the village of Duffield, 4 miles north of Derby (Nat. Grid Ref. SK 343441). The castle site was first excavated in 1886 when the foundations of a massive stone keep were discovered. These excavations were reported upon by J. C. Cox who also reviewed the known history of the castle.<sup>1</sup> At this time the site consisted of a motte with the foundations of the keep; west of these the bailey was defined by two ditches. Since then the site has been engulfed by building development, except for the motte and the keep foundations which became the property of the National Trust. A considerable quantity of Roman pottery was found during the 1886 excavations and more was found south of the motte in 1931<sup>2</sup>; more recently Mrs. F. Jacobson collected much Roman pottery from the garden of 4, Avenue Road, west of the motte.<sup>3</sup> In 1953 Mr. R. G. Hughes carried out a small excavation in the garden of 1, Avenue Road, which impinges on the north-west side of the motte. A quantity of Romano-British Derbyshire ware, including a kiln-waster, was obtained from the disturbed material of the

<sup>1</sup> J. C. Cox, "Duffield Castle; its History, Site and recently found remains; with some account of the seven Earl Ferrers who held it". *D.A.J.*, IX (1887), 118-78.

<sup>2</sup> F. Williamson, "Roman and other remains found at Duffield". *D.A.J.*, LII (1933), 107-12.

<sup>3</sup> Pottery in the possession of the Derbyshire Museum Service.



motte<sup>4</sup>; also much Derbyshire ware has been found in adjoining gardens which encroach on the north side of the motte.

The purpose of the 1957 excavations was to establish the nature of the Romano-British occupation on the site and to throw more light on the Norman castle, as several features are obscure from the 1886 excavations.

Permission to excavate was kindly given by Duffield Parish Council, the National Trust and the Ministry of Works, to whom we record our thanks. The excavation owes much to the interest of Mrs. J. Rose of Castle House for hospitality and various facilities, including permission to dig in the last remaining piece of the castle ditch.

The writer wishes to thank all those who took part in the work of excavation, especially Messrs. J. M. Fossey, W. E. Holt, J. Lomas, H. R. Window, P. Archer, K. J. Blunt, P. Oldham, R. H. Oakley, W. G. Lee, M. A. B. Mallender, J. A. Gillam, F. W. Cheetham; Mrs. G. M. Watson; Misses R. A. Coulson, J. Sidebottom, N. C. Scholes, O. J. Mitchell, B. M. Grieve.

Mr. F. Fisher took care of all correspondence; fencing was kindly lent by S. Mehew and A. Garratt. T. C. M. Brewster supplied a report on the medieval pottery and D. Bramwell reported on the bones.

## THE EXCAVATION.

*Ditch* (Fig. 2).

A small piece of the south ditch or "fosse", marked on the 1886 plan, remains in the orchard of Castle House. It is now 40 ft. across the top and 7 ft. deep, with a flat bottom 16 ft. across. The area available for excavation was limited by the presence of a footpath, fruit trees and bushes. TRENCH II was put down across the bottom of the ditch. The presence of two land-drains proved a considerable source of annoyance, repeatedly flooding the trench and ultimately causing the sides to collapse before the excavation could be completed.

Only at the south end of the trench was the bottom of the ditch reached; this was irregularly dug into soft black

<sup>4</sup> Finds in Derby Museum. The writer is indebted to R. G. Hughes for information about this excavation.

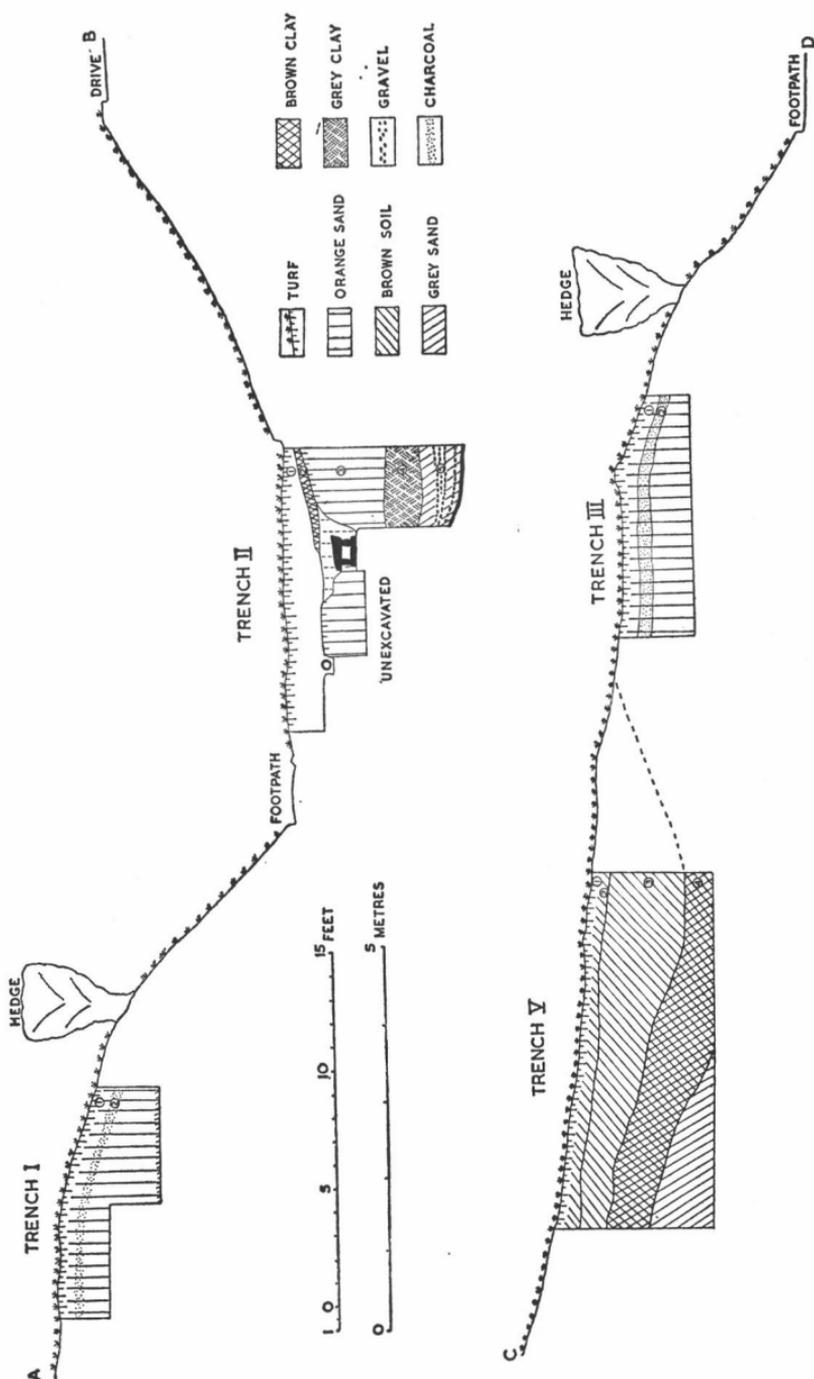


FIG. 2. Sections across the ditch A — B and at the base of the motte C — D.

shale and originally was 15 ft. deep. Over the bottom of the ditch was a layer of greyish sandy silt with much gravel (layer 5); 3 ins. above the bottom was a continuous iron "pan" deposit 1 in. thick. Layer 5 passed into layer 4 which was a compact dark grey clay with root markings in it. Above this the ditch was filled with brown sand showing grey features (layer 3). At the top of this layer was the late 19th century surface from which the two trenches containing land-drains had been dug. A layer of brown clay (layer 2) had been dumped on the south side of the ditch. Over the ditch floor soil had been dumped to turn the ditch into a garden (layer 1).

Layer 3 represents the silting of the ditch from the castle's destruction until the late 19th century. In the top 2 ft. of this layer were eight weathered Romano-British and medieval potsherds and an occasional scatter of charcoal fragments. Layer 2 contained Roman and modern pottery and a piece of a Roman flanged roofing-tile. The source of this clay is unknown.

#### *Base of Motte (Figs. 2, 3).*

Between the motte and the edge of the ditch is a level shelf increasing in width as the edge of the motte curves northwards. At the extreme western end of the shelf is a low bank 1 ft. high, 35 ft. across and 60 ft. long. The area available for excavation was limited by trees and bushes.

TRENCHES I and III were put down on the edge of the ditch to look for any trace of a curtain wall. Under the turf (layer 1) was reddish-brown sandy soil (layer 2) which did not show any sign of disturbance. This passed gradually into greyish sandy clay. The top foot of layer 2 was flecked with small particles of charcoal and an occasional piece of burnt sandstone; Romano-British pottery was found just below the modern turf. Worm action might account for the depth of the charcoal scatter.

TRENCH V, at the base of the motte, passed through a series of deposits of a nature entirely different from those found in trenches I and III. This was at first puzzling. Layer 5 was greyish sandy soil flecked with charcoal and contained a single weathered potsherd. Over this was a

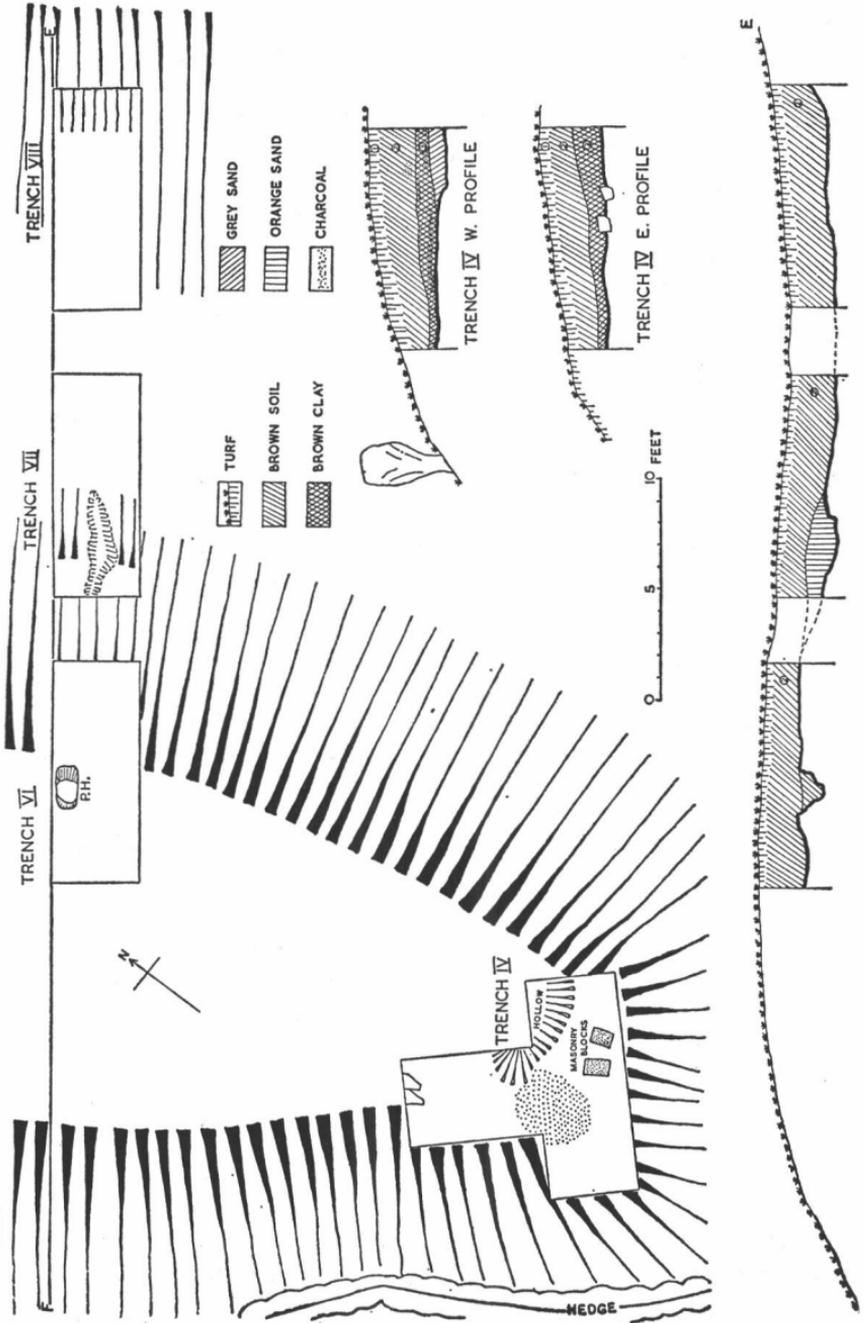


FIG. 3. Excavations at the low bank at the base of the motte. Section E—F.

layer of brown clay (layer 4) with numerous pieces of brown and black shale, yielding no finds. Layer 3 was brown clayey soil with numerous small pebbles. This layer thickened towards the south. A few sherds of Derbyshire ware came from the lower foot of the south end of the deposit, also a piece of daub, eight weathered medieval sherds and a piece of corroded iron. From the middle of the layer came a sherd of Stamford ware. Seven medieval potsherds, including a rim of a jug, came from the upper part of the deposit. The top of layer 3 was marked by a scatter of small stones. On it layer 2 was also of brown clayey soil and contained a few medieval and 19th century potsherds, two pieces of iron-slag and a ploughshare pebble.

The experience gained in trenches VI to VIII suggested that behind a bank of undisturbed soil (trenches I and III) was a shallow ditch, layer 4 being the surface material of the motte (artificial) and layers 2 and 3 layers of hill-wash filling the hollow.

TRENCH IV crossed the eastern extremity of the low bank noted above and was later extended westwards (TRENCH IV ext.). Partially embedded in the old surface under this bank were two blocks of masonry. They were sandstone, one 13 ins. x 9½ ins. x 7 ins., the other 12 ins. x 7 ins. x 7 ins.; both were wedge-shaped in section and weathered on their upper faces. Each had diagonal point-dressing, identical with that found on the stones of the keep. A hollow filled with greyish sand flecked with charcoal (layer 4) was found in the old surface, producing a sherd of medieval and a sherd of Roman pottery with a few small pieces of burnt bone.

Over the old surface was a layer of stiff brown clay (layer 3) containing patches of charcoal and burnt soil with numerous small sherds of 13th century pottery and two pieces of iron-slag. The covering layer (layer 2) was brown sandy soil with numerous flecks of charcoal and small pieces of sandstone, some burnt. In the top 6 ins. of this layer were many small medieval potsherds.

TRENCHES VI to VIII cross the back of the bank to the base of the motte. A layer of brown sandy soil (layer 2) rested on the undisturbed clay and contained medieval

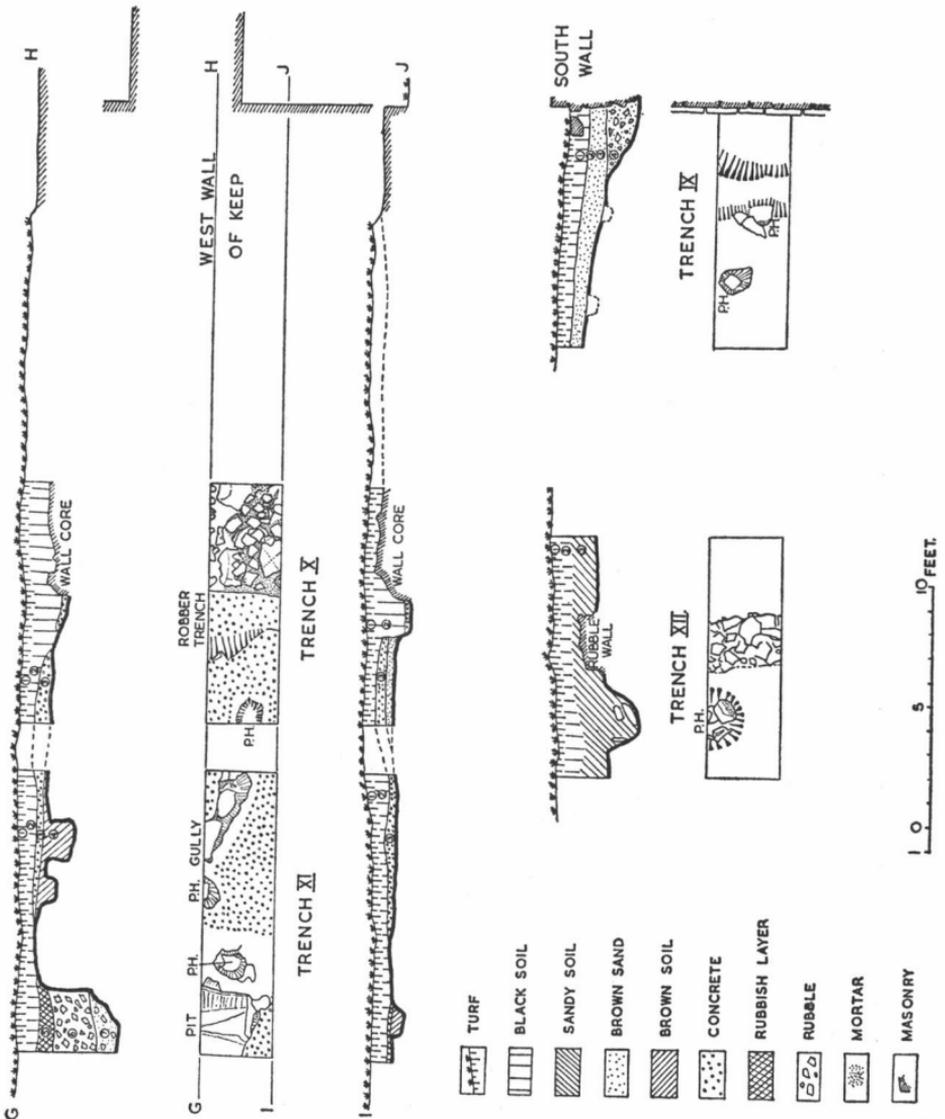


FIG. 4. The keep. Plans and sections of Trench IX inside the keep and Trenches X-XII west of the keep.

N.B. In Trenches X and XI the concrete layer actually extends over the postholes and gully.

and Roman pottery, mostly of very small size. In trenches VII and VIII this layer was very soft, but compact in trench VI and the southern end of trench VII; but no satisfactory division could be detected. A posthole cut into the undisturbed clay in trench VI was filled with brown sandy soil similar to layer 2 but more gritty. In trench VII an irregular V-sectioned gully, filled with orange sand, penetrated the undisturbed clay.

*The Keep* (Fig. 4).

The massive foundations of the keep of Duffield Castle stand on the flat top of a motte of which only the south side remains intact, on this side only 15 ft. high. The keep walls were faced with large blocks of sandstone with diagonal point-dressing. These foundations are described and planned in Cox's report of 1887. Nothing further need be added to this account except to say that the foundations, except in two places, now stand only one course high above an offset course which is level with the turf of the keep interior.

TRENCH IX, to examine the interior foundations of the keep, was put down 15 ft. 6 ins. from the south-east corner of the keep. The foundations below an offset course were of rubble and concrete (Plate Ia) 2 ft. 4 ins. thick and stood in a rock-cut trench filled with sand and stones (layer 4), which extended to only half the height of the foundation. The solid rock north of this foundation trench had a crushed appearance and in it were found two shallow postholes, one with two packing-stones along its northern edge. These postholes were filled with the brown sandy soil that overlay the rock floor and foundation trench (layer 3). Layer 3 contained a few pieces of charcoal, scattered fragments of animal bone and four sherds of medieval pottery, and was overlain by a layer of black soil (layer 2) intermixed with pieces of stone, medieval and modern pottery and recent animal bones. Layer 2 is a modern filling from the 1886 excavations and in it were several large blocks of masonry laid along the face of the wall, which must have been placed there at that time.

The west wall of the keep, according to the 1886 excavators, contained the fore-building and entrance to the keep. TRENCH X was to examine the exterior foundations of the west wall. Only the wall core of rubble and concrete remained (Plate *Ib*). The facing stones, which unfortunately had been removed by stone robbers, had been laid on a layer of mortar resting directly on the undisturbed rock.

*Concrete Apron* (Fig. 4).

The concrete area in front of the keep, found by the 1886 excavators, was exposed in trench X and again in trench XI; it was covered by a layer of black soil mixed with burnt stones and rubble (layer 2), the infilling of the 1886 excavations. On the surface of the concrete were a few animal bones. The concrete (layer 3) was found to be very soft and sandy with much gravel mixed in; a piece of iron cinder was incorporated in this in trench X. The concrete layer, up to 6 ins. thick, rested on the undisturbed rock except in places where a layer of grey soil (layer 4) intervened to fill two postholes (P.H. 1 and 2) and a stepped gully cut into the rock. This soil contained only charcoal flecks. The junction of layers 3 and 4 with the keep wall had been destroyed by the robber trench.

The concrete ended 14 ft. from the edge of the wall core on the solid rock. Here another posthole was found (P.H. 3), 6 ins. deep and filled with black soil. The top was packed with small pieces of stone; amongst these were a piece of tile and a stone disc. At the western end of the trench was a rock-cut rubbish pit 3 ft. 5 ins. deep, cutting through a layer of concrete on the south side (Plate *IIa*). The top of this pit was filled with a layer of black soil 8 ins. thick (layer 5), containing much domestic rubbish such as animal bones, potsherds, pieces of iron and much charcoal. Below this was a layer of rubble mixed with sandy soil and a few pieces of charcoal (layer 6). At the bottom of the pit was a more sandy layer with some rubble, two potsherds and a few animal bones.



PLATE Ia. Trench IX. Foundations of the keep, offset course at the present ground level.



PLATE Ib. Trench X. Rubble core of the keep wall and the concrete area, with robber trench between.



PLATE IIa. Trench XI. Pit cut into the rock. Layer of concrete in the left hand corner.



PLATE IIb. Trench XII. Posthole with packing stones.

*Later Building.*

TRENCH XII, 46 ft. west of the keep, was intended to find a layer of pottery mentioned in the 1887 report. Unfortunately this feature was not rediscovered but a wall was found crossing the trench, composed of rubble embedded in earth. Some pieces of the rubble were burnt and had diagonal point-dressing. West of the wall was a posthole cut into the loose rock, 2 ft. 7 ins. across and 1 ft. 4 ins. deep. Four packing-stones remained; the largest had diagonal point-dressing on one face (Plate II*b*). Above the rock was a thick layer of brown sandy soil with some stones, especially each side of the rubble wall. Six medieval potsherds, a few pieces of animal bone and a rectangular piece of iron were scattered through this layer. Between layer 3 and the present turf was black soil (layer 2), sterile of finds. There was no sign of previous disturbance, and the rubble wall and posthole must belong to some peasant structure erected after the destruction of the keep, as stones from the keep were used in the wall and to pack the postholes.

TRENCH XIII was on the crest of the motte above trench VIII. The motte in this place was not artificial; undisturbed clay passed into decayed rock and then into solid rock.

## THE FINDS.

*Romano-British Pottery.*

Considerable quantities of Romano-British pottery have been found at Duffield Castle in 1886 and in more recent times.<sup>5</sup> The 1957 excavations produced stray sherds of Romano-British pottery from almost every layer of every trench, but the bulk of the finds came from the hillwash at the base of the motte (trenches VI and VII, layer 2).

All this pottery is very fragmentary and most of it is Derbyshire ware, a type which has been discussed at length by Gillam<sup>6</sup> and more recently by Wilson and

<sup>5</sup> Cox, I42, I44.

<sup>6</sup> J. P. Gillam, "Romano-British Derbyshire Ware". *Ant. J.*, XIX (1939), 429-37.

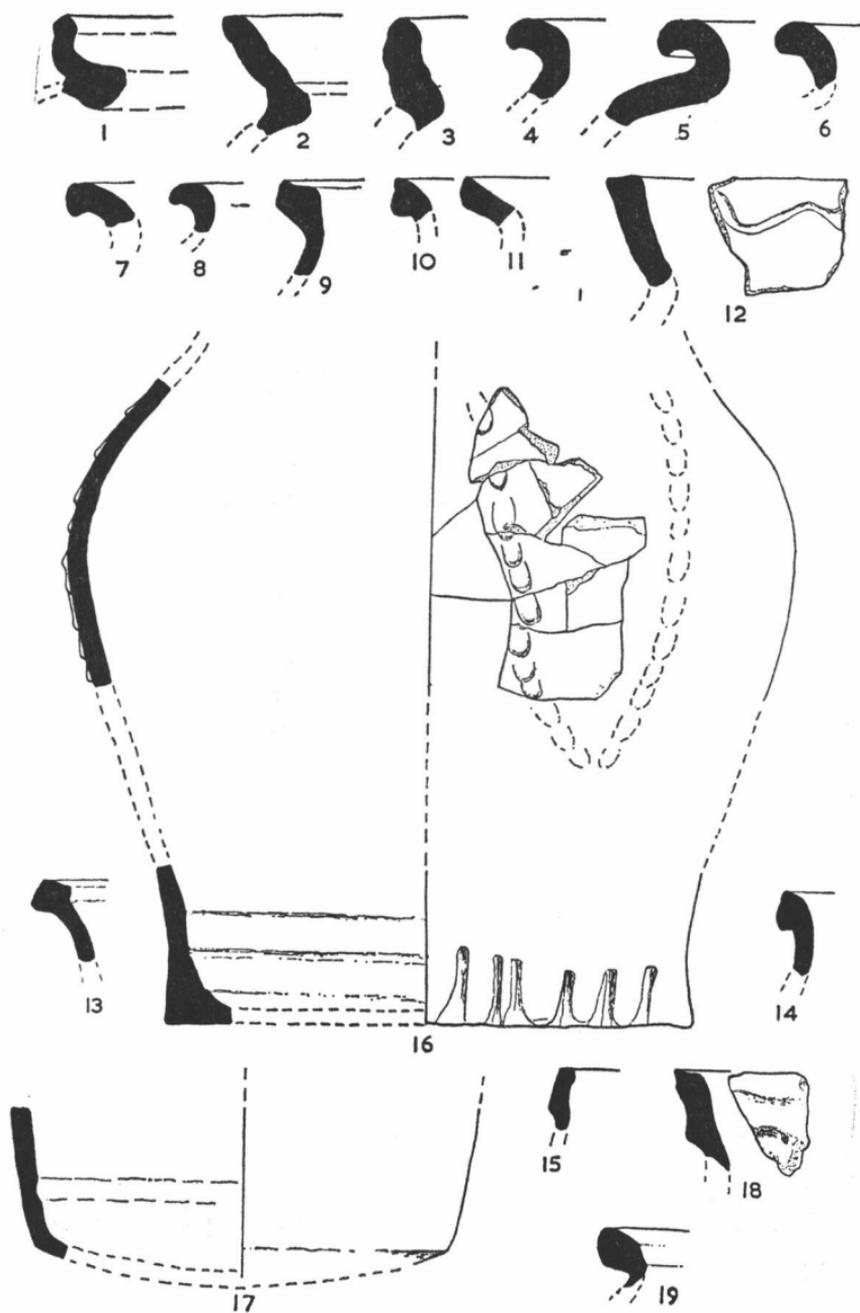


FIG 5. 1-8 Roman pottery. 9-19 Medieval pottery. (1/3).

Fowler when dealing with the Stapenhill finds.<sup>7</sup> The present finds are sherds of varying sizes in the typical gritty fabric, grey predominating over blue, red and orange fabrics. Amongst the rims are only three of the bell-mouthed jar type (Fig. 5, 1-3); the other five are of jars with simple rolled rims (Fig. 5, 4-8). This latter type of jar rim in Derbyshire ware was not recorded in Gillam's original survey but was found amongst the Stapenhill material.

- Fig. 5, no. 1 Bell-mouthed jar with deep concave lid sealing. Dark grey fabric.  
 no. 2 Bell-mouthed jar, orange to dark grey fabric.  
 no. 3 Bell-mouthed jar with everted rim. Light grey fabric.  
 no. 4 Rolled rim, 7 ins. diameter. Fabric orange internally, dark grey exterior.  
 no. 5 Rolled rim, 9 ins. diameter. Orange buff fabric, dark grey core.  
 nos. 6-8 Rolled rims. Dark grey fabric.

The remainder of the Romano-British pottery from the present excavation are small sherds of grey ware including a few with a dark grey burnished surface, one with rouletted decoration and another with part of a burnished lattice pattern.

The little dating evidence that has been found associated with Derbyshire ware points to a 3rd century date.<sup>8</sup>

#### *Medieval Pottery.* Report by T. C. M. Brewster.

Medieval pottery from the Duffield Castle excavations of 1957 is in very fragmentary condition and falls into three classes.

1. *Saxo-Norman pottery.* Two sherds of Stamford ware and one part of a base of a cooking-pot (Fig. 5, no. 17), with a dark grey exterior surface, came from the lower foot of trench V, layer 3. Two small sherds similar to Stamford ware came from trench VII, layer 2 and

<sup>7</sup> D. M. Wilson and M. J. Fowler, "A Report on the Excavation of a Romano-British Native Settlement at Stapenhill, Staffordshire". *D.A.J.*, LXXV (1955), 5-8.

<sup>8</sup> Gillam, 436-7.

trench IX, layer 3 from inside the keep. Amongst the finds of the 1886 excavations were the remains of a bridge-spouted pitcher.<sup>9</sup>

2. *Coarse wares*. The bulk of the pottery from Duffield belongs to cooking-pots in the typical pustula ware found on so many sites in Northern England. The Duffield material varies in colour from red and orange to buff and greyish shades.

3. *Glazed ware*. Glazed fabrics at Duffield are mostly of the same pustula ware type found amongst the coarse pottery, except for fragments of a jug in grey ware with orange surfaces. Most of the glaze is the green speckled type.

The principal groups of pottery came from the bank (trench IV), hillwash deposits at the base of the motte (trenches V to VIII), the interior of the keep (trench IV), the rubbish pit (trench XI) and from around the rubble wall in trench XII.

*The bank* (trench IV). The pottery from layer 2 consists mostly of small sherds of pustula ware mainly of coarse cooking-pots. Only four recognizable rims were obtained (Fig. 5, nos. 9-12); one is notable as a sharply everted rim with an incised wavy line below it, which is a 13th or early 14th century decoration. Layer 3 produced more pustula ware, mostly of cooking-pots, including three rims (Fig. 5, nos. 13-15) and fragments of four bases.

Fragments of pustula ware with speckled greenish glaze include two base fragments with interior glazing from layer 2. Fragments of a large jug (Fig. 5, no. 16) comprising base and body fragments were obtained from both layers. The fabric is a smooth grey ware with buff surfaces covered with a thin clear green glaze. Around the edge of the base are vertical slashings instead of the more usual thumb impressions found on jugs of this period. The body has applied strip decoration typical of the 13th or early 14th century.<sup>10</sup> The jug probably dates from about 1250.

From the hollow underneath the bank (layer 4) came

<sup>9</sup> J. G. Hurst, "Saxo-Norman Pottery in East Anglia". Part III. *Proc. Cambridge Ant. Soc.*, LI (1958), 43.

<sup>10</sup> Staxton ware. *Yorks. Arch. Journal*, XXXIX (1958), 445-6.

a large sherd of gritty ware with brown exterior, which could be of 12th century date.

*Base of the motte.* Trench V, layer 3 produced eight small weathered sherds of pustula ware and the Stamford ware described above. In the upper foot of this deposit was a small jug rim of reddish pustula ware with green glaze on the exterior (Fig. 5, no. 18).

Trenches VI and VII, layer 2 yielded many small weathered fragments of pustula ware including some in a red fabric found in Yorkshire in a 14th century context, also an orange-coloured sherd with two lines of roulette marks half an inch apart. This sort of decoration with green glaze is found in Yorkshire in a 13th century context.

*The keep.* Trench IX, layer 3 inside the keep contained a small sherd similar to Stamford ware, and a fragment of a thick cooking-pot base of pustula ware tooled around the base.

*Rubbish pit.* Trench XI, layer 5 produced pustula ware including sherds of two thick cooking-pot bases similar to the one from the interior of the keep. Two fragments with a speckled green glaze are of late 12th century or early 13th century date.

From the soil covering a concrete apron, evidently the filling from the 1886 excavation, came a rim sherd of dark brown pustula ware of 12th century date (Fig. 5, no. 19).

*Later building.* Layer 3, covering the rubble wall of the later building discovered in trench XII, produced only four fragments of pottery, of pustula ware, including a large sherd of a cooking-pot in hard dark brown fabric with orange exterior and with splashes of greenish glaze on the exterior not unlike Staxton ware. Of two other glazed sherds one had a pale green speckled glaze and the other a brown treacle glaze. The group dates to the 13th or early 14th century.

### *Conclusions.*

Apart from the Stamford ware, which dates from the 11th century, the bulk of the pottery from Duffield is not earlier in date than the 12th century and not later

than the 13th or early 14th century. On the pottery evidence the principal occupation at Duffield must have been concentrated in these two centuries as most of the material, including that from the rubbish pit, would fall between 1150 and 1250. The bank (trench IV) must date from around 1250.

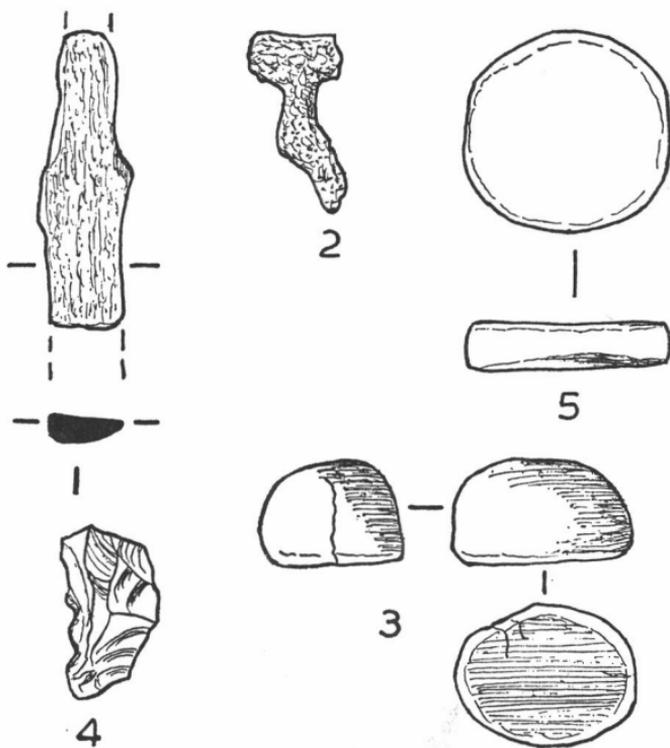


FIG. 6. 1. Iron knife. 2. Nail. 3. Plough-share pebble. 4. Flint flake. 5. Stone disc. (2/3).

### *Small Finds.*

#### Iron.

1. Fragment of a knife, single edged, broad back, from layer 5 of the rubbish pit, trench XI (Fig. 6, no. 1).
2. Nail, square section, bent and corroded, from layer 5 of the rubbish pit, trench XI (Fig. 6, no. 2).

3. Rectangular piece of iron, flat section, slightly convex, 3.8 ins. x 1.9 ins. x 0.4 ins. thick, trench XII layer 3, trench X layer 3.
4. Pieces of iron slag from trench IV layer 2, trench V layer 2.
5. A corroded nail head from trench IV ext. layer 3.
6. A piece of corroded iron plate from trench V layer 3.

#### Stone.

7. Ploughshare pebble, compact dark grey quartzite, rubbed smooth on one surface (Fig. 6, no. 3). The purpose and dating of these pebbles was discussed in *P.P.S.* IV (1938), 338.
8. Flint flake, brown flint, notch on one side, from trench VI layer 2 (Fig. 6, no. 4).
9. Flint flake, dense brown flint, cortex on one side. Uncertain if humanly struck. Trench VI layer 2.
10. Stone disc of compact dark brown sandstone, edges rubbed smooth. From the stone packing of posthole, trench XI (Fig. 6, no. 5).
11. Piece of daub from trench V, layers 2 and 3, trench VIII, layer 2 and rubbish pit, trench XI layer 5.

#### DISCUSSION.

The results of the 1886 and 1957 excavations suggest that the site was first occupied during the 3rd century A.D. as the considerable quantities of Romano-British pottery attest. Any structures of an earlier occupation would be destroyed by the builders of the Norman castle when they stripped the top of the motte down to solid rock and scarped round a natural ridge to make the motte. The Anglian burial found outside the north-west corner of the keep in 1886 must have survived this levelling of the site.<sup>11</sup> The crushed rock floor and the two postholes in trench IX are earlier than the foundation trench of the stone keep. These, together with postholes in trenches X and XI, covered by the concrete apron, might well belong to an earlier timber castle. This would accord with

<sup>11</sup> Cox, 151-2.

the suggestion put forward by Cox on second-hand historical evidence that Henry de Ferrers, who died in 1089, founded a castle at Duffield<sup>12</sup>; the stone keep was erected later for, as Williamson pointed out in 1931, the character of the masonry of the keep suggested a date after 1138.<sup>13</sup>

The first castle at Duffield would, like most Norman castles, have been of earth and timber, of simple motte and bailey plan. As no evidence of a continuous timber palisade was found on the edge of the ditch the castle was probably of the separate motte and bailey type; the enclosed bailey would lie west of the keep between the ditches recorded by Cox. No dating evidence was found in the small piece of ditch excavated but the nature of the lower filling (layer 5) suggests that in its first phase it was a dry ditch.

The stone keep must clearly date to some time in the 12th century. Williamson suggested that it was built by Robert de Ferrers (1139-1162).<sup>14</sup> The present writer discussed the features of the stone keep with Dr. Eric Gee, who pointed out that the diagonal dressing of the keep masonry dated it from some time after the early 12th century and the two capitals with dogtooth ornament found in 1886 could belong to the second half of the 12th century. Dr. Gee also considered that the basement plan of the keep indicated a hall and solar arrangement above, as can be seen in the keeps of Middleham (1170), Porchester (1160) and Headingham (1140).

It is clear that the bailey was not also reconstructed in stone at the same time; the excavators of 1886 looked in vain for a stone curtain-wall. The two masonry blocks found in trench IV, which are identical with those used in building the keep, were found partly embedded in the old surface, their weathered upper faces suggesting that they lay exposed for some time before the overlying bank was put over them, at a date after 1250 on pottery evidence, and the ditch excavated at the base of the motte. This indicates an elaboration of the castle defences at

<sup>12</sup> Cox, 119.

<sup>13</sup> Williamson, III.

<sup>14</sup> Williamson, III.

some period later than the building of the keep. Probably during this elaboration the outer ditch was converted into a moat as the layer of dark clay (layer 4) can best be interpreted as a water-laid deposit. The natural drainage of the site and its physical features are such that a moat could only be maintained on the hillside by damming the lower end, which would be a military weakness.

Plentiful evidence was brought forward by Cox to show that the castle was demolished in 1266 after the rebellion by Robert de Ferrers against Henry III, when Ferrers was defeated and captured at the battle of Chesterfield and his estates seized by the Crown. The archaeological evidence of destruction and the means by which it was carried out were discussed by Cox,<sup>15</sup> and to this the 1957 excavations can add little, only that at some time after the castle's destruction stones were taken from its ruins and used in the poor building which was erected on the west side of the motte and found in trench XII.

The date of erection of the stone keep would be more satisfactorily placed in the lifetime of William de Ferrers (1162-1190) than in that of Robert de Ferrers. Cox, in his history of the de Ferrers family, shows that William joined a rebellion against Henry II and was forced to surrender his castles of Tutbury and Duffield to the King, who demolished them. This event took place in the nineteenth year of Henry's reign (1173) but Cox considered that as the castle still continued in existence until 1266 the demolition order could not have been carried out. A more practical explanation is that the castle demolished at this time was an early timber one, and that when William later regained the King's confidence, around 1177, and enjoyed further favours from Richard I up to his death in 1190, he would be able to rebuild his castle at Duffield. The size of the keep indicates his lavish intentions which for some reason did not result in a stone curtain-wall being erected. His son, William, Earl of Derby, cannot have continued the rebuilding. No further work was undertaken until the elaboration of the outer defences after 1250, which can be associated with the period of Robert de Ferrers' revolt in 1263-6.

<sup>15</sup> Cox, 176.

## SUMMARY.

- 3rd century — Romano-British occupation in the vicinity.
- 6th-7th centuries — Anglo-Saxon burial on the hill.
- About 1080 — earth and timber motte and bailey castle erected by Henry de Ferrers.
- 1173 — destruction of the early castle.
- 1177-90 — building of the stone keep by William de Ferrers.
- After 1250 — elaboration of the outer defences.
- 1266 — final demolition of the castle. Site granted to Prince Edmund, Earl of Lancaster.
- After 1266 — peasant building erected using stone from the castle foundations.

## APPENDIX.

## Report on the Animal and Bird Bones from Duffield Castle.

By D. BRAMWELL.

1. *The Wild Animals from the Rubbish Pit, Layer 5.*

## Red Deer.

There are remains of an old and a young animal which can be referred to this species. Of the adult animal, all the long bones have been split to obtain the marrow. A few measurements are as follows; in the case of the adult animal, tibia has a max. proximal width of 72mm., whilst an astragalus measures 53 x 34mm. A number of fragmentary ribs probably belong to this animal.

## Roe Deer.

There are a few fragments of metacarpal bone which appear to belong to this woodland species.

2. *The Domestic Animals from the Rubbish Pit, Layer 5.*

## Ox.

The only bone which is referable to ox is a single phalanx of the foot. It represents a small animal by present standards. (The only recognizable bone from layer 7 of the rubbish pit is ox, fragment of radius showing scar where ulna attaches.)

## Sheep.

Several bones belong to a small breed of sheep. Happily there is a lower jaw, with worn teeth, from which comparison can

be made with specimens from Early Iron Age, and Romano-British sites. The Duffield mandible has a tooth row measuring 68mm.

**Pig.**

The bones of pig are more numerous than any other animal, but their small size places them in the domestic category. Once again there is a mandible with a full row of cheek teeth, so it is again possible to take a measurement and make comparison with pig remains from earlier sites. The animal from Duffield is young, but near full size, as the last lower molar has broken through but still shows no wear. The tooth row measures 95mm. Other bones of pig include half a pelvis, several bones of the foot, two ulnae representing two different animals, an astragalus and part of a radius. The astragalus measures 37 x 21mm.

**3. The Birds.**

**Domestic Fowl.**

There are a few bones which agree with a small to medium domestic fowl. They include a femur 74mm. in length, a tarso-metatarsus, estimated at 69.5mm., and a metacarpal bone of 41.5mm., besides fragments of tibia, ulna and pelvis.

**Goose.**

This bird is represented by the anterior end of a sternum and a few shaft fragments. It is impossible to state whether or not it is a wild species.

**Coot.**

This bird is represented by a perfect humerus, but a radius and half of an ulna may also belong.

### Remarks on the Collection of Bones from the Castle Rubbish Pit.

First of all it should be noted that the collection is too small to allow for any conclusions regarding food preferences; it does, however, give some idea of the varied nature of the meat enjoyed by the castle occupants. Secondly, the size of the two domestic animals, sheep and pig, shows that no appreciable difference in size has been made to these animals since the Early Iron Age farmers of Glastonbury were active. It would be useful to compare the Duffield animals with those from other similarly-dated sites to see if this lack of progress in breeding really appertains to the whole country.

The remains of water birds suggest that some sport was enjoyed by the river as well as in the woods.