

I.

NOTES ON BERWICKSHIRE FORTS, WITH A DESCRIPTION OF THOSE RECENTLY DISCOVERED. BY J. HEWAT CRAW, F.S.A. SCOT.

Since the Royal Commission issued its Report on the Ancient Monuments in the County of Berwick, several additional forts have been discovered in that area. Although most of these have suffered severely at the hands of the agriculturist, it is desirable that a description of their features and position should be put on record. Some additional notes on early fortifications in the county may be regarded as supplementary to the excellent work done by the Commission.

NUMBER.—Dr Christison mentions fifty-eight Berwickshire forts in his *Early Fortifications in Scotland*, with plans of ten. In the Commission's Inventory ninety-three are reported, of which seventy-eight are figured. The number now on record of which surface evidence still exists is one hundred and five, in addition to twenty-two sites where forts are stated to have formerly been visible. To these should be added thirteen place-names which seem to indicate the previous existence of a fort. This brings the total number of forts to one hundred and forty.

DISTRIBUTION.—The majority of the forts in the county are to be found on eminences overlooking the low country. The two historic passes—Lauderdale and the Pease Burn¹—are flanked by a chain of forts; another chain extends along Bunkle Edge, overlooking the Merse. The coast line, especially where the uplands approach the sea, is thickly dotted, as at Lamberton Moor, Cockburnspath, and St Abb's Head, where the Coldingham Loch group is particularly noticeable. The remoter parts of Lammermoor are sparsely dotted with forts, and the same may be said of the richer portions of the Merse, where, however, many forts may have been destroyed by cultivation. In several instances forts occur in pairs, situated on the top of the opposite banks of a stream.

SITUATION.—Forts may be classified according to the nature of their sites:—

¹ The group of forts and other remains at the Pease Burn has a special personal interest for Scottish archaeologists. About a hundred and fifty years ago the sheep grazing among these forts were tended by a lad called Christison, who afterwards became Humanity Professor at Edinburgh University, and who all his life maintained an interest in these early remains. He was the grandfather of Dr David Christison, the author of *Early Fortifications in Scotland*. It is possible that the interest of the family in such matters may have originated in this striking collection of early remains.

- (1) *Cliff, Escarpment or Crescentic Forts* are such as have their base resting on a slope sufficiently steep to require little or no artificial protection. The defences consist of one or more curved ramparts springing from the edge of the cliff.
- (2) *Promontory Forts* are those having straight or curved defences stretched across the base of a promontory.
- (3) *Contour Forts*, circular, oval, or (more rarely) rectilinear in form, are completely surrounded by ramparts. They may be subdivided:—
 - (a) *Summit Forts*, from which the ground falls in all directions.
 - (b) *Hillside Forts*, placed on the side of a slope, almost invariably where the slope becomes steeper.
 - (c) *Marsh Forts*, depending more or less on marshy ground for their defence.

(1) *Cliff Forts*.—There are nine of these in the county. Earn's Heugh, Coldingham (No. 80 in the Inventory), is stated by Dr Christison to be the most notable example on the Scottish coast. At Chester Hill, Ayton (No. 10), a rampart of slight dimensions running along the edge of the cliff may be of later date. At Ninewells, Chirnside (40), the edge of a steep bank has been preferred to the summit of a knoll overlooking the fort. An entrance is traceable in five of these forts, but only in one, at Milne Graden, Coldstream (104), is it placed close to the edge of the cliff.

(2) *Promontory Forts*.—In the nine Berwickshire examples an entrance remains in four: in two of these it is in the middle of the rampart, and in the other two it is close to the edge of the steep slope. Blackcastle Rings, Greenlaw (171), is the best example of this type.

(3) *Contour Forts*: (a) *Summit Forts*.—This class contains both the largest number—forty-eight—and many of the finest examples of Berwickshire forts. Among the highest summits thus crowned are Tollis Hill, Lauder (1200 feet); Dabshood, Lauder (1256 feet); Longcroft, Lauder (1150 feet); Boon Hill, Legerwood (1070 feet); Cockburn Law, Duns (1066 feet); Black Hill, Earlston (1031 feet); Burncastle, Lauder (1020 feet); and Addinston, Lauder (1000 feet).

(b) *Hillside Forts*.—These number thirty-seven. In many cases the summit has been discarded as a site in order to have the protection of a steeper slope on one side of the fort. Striking instances of this are found at Belchester, Eccles (141); and Habchester, Mordington (270). An outstanding example of the opposite principle is seen at Birken-side Hill, Legerwood (244), where the edge of a steep bank a short distance

to the west has been discarded in favour of the highest ground, where the slopes offer but slight natural protection. Twelve forts in this class occupy sites where the ground falls more steeply on three sides beyond the ramparts, thus approaching promontory type; in nine cases the fall is steeper on two sides; in fourteen cases it is steeper on one side; and in two cases the slope below the fort is similar to that above it. The only rectilinear fort in Berwickshire, at Marygold Hill Plantation, Bunkle (20), is placed on a hillside, in a position of small natural strength.

(c) *Marsh Forts*.—There are only two of these in the county: the recently-discovered fort at West Murrinston Bog, Earlston (fig. 4), and at Leetside, Whitsome (294). Dr Munro (*Ancient Scottish Lake Dwellings*, p. 245), on the authority of the *New Statistical Account*, vol. ii. p. 171, has classified the latter as a lake dwelling, but the remains clearly show the earthworks of a fort. At Fans, Earlston (132), the site is additionally protected by a marsh to the north; and at Raecleugh, Westruther (fig. 10) (recently discovered), the boggy nature of the ground to the south and east has somewhat strengthened an otherwise weak position.

SIZE.—The average length of one hundred and three measurable forts, taken from crest to crest of the inner rampart, is 285 feet. Fifteen forts measure under 150 feet in diameter, forty-three are from 150 to 300 feet, thirty-four from 300 to 450 feet, eight from 450 to 600 feet, and three from 600 to 750 feet. Eight of the smallest class are in the parishes of Cockburnspath and Coldingham. Earth forts average 332 feet; stone forts, 252 feet; cliff forts average 369 feet; promontory forts, 270 feet.

MATERIAL.—Dr Christison states that in the Lowlands stone forts largely predominate; this, however, is not the case in Berwickshire. In eighty-nine forts the construction is sufficiently preserved to show that fifty-five are pure earthworks, and twenty are of stone, with no trace of excavated trenches. In fourteen examples earth and stone are mixed, the former predominating in four, the latter in ten. In Lauderdale and the west of the county there are thirty-three forts, seventeen being of earth and seven of stone. Stone has been largely employed in the Coldingham Loch group. Of the fourteen forts in the smallest class (under 150 feet) four are of earth and four of stone; of eleven in the two largest classes (over 450 feet) ten are of earth and one of stone,—the latter, however, on Duns Law (No. 119) is the largest fort in the county. All the promontory and marsh forts are earthworks, otherwise the proportion of earthworks to stone forts does not differ in the various types. Where a fort is defended by a pure earth-

work and by a stone rampart, the former is placed to the outside, the fort thus having a trench as its first line of defence. It is possible that these earthen ramparts are a later addition to earlier stone forts, marking a period when improved tools facilitated the excavation of a trench. Evidence, however, of man's ability, even in the Bronze Age, to excavate rock, is shown in two round cairns on Dirrington Great Law, Longformacus. These, unlike the cairns of surface-gathered stones in the district, are composed of small, sharp-edged fragments of felstone excavated from a trench surrounding one of the cairns, and from a quarry adjacent to the other.

RAMPARTS.—The average number of ramparts in earth forts is two, in stone forts about one and a half. The fort on Earliston Black Hill (131) is defended on its west side by no fewer than seven ramparts, chiefly of stone. At the north side of Burncastle fort, Lauder (214), there are faint traces of five earthen ramparts. Forty-six forts appear to have had not more than a single rampart. Dr Christison reports only one example in Scotland, and that uncertain, of four complete rings; three complete rings are found in four of the Berwickshire forts. What at first appear to be two ramparts are sometimes found upon examination to be the remains of one, the material of which has been almost entirely removed, leaving only the foundations at its outer edges. Examples of this are at Knock Hill, Gordon (166), and Heugh, Lauder (221). Harefaulds, Lauder (218), is unique in the county as having a regularly built wall 9 to 10 feet thick which still remains $4\frac{1}{2}$ feet high in parts. At Earn's Heugh, Coldingham (80), there are also traces of building, much obscured by dilapidation; signs were also seen at an entrance to Kirktonhill fort, Channelkirk (27), during excavation by Mr Allan (*History of Channelkirk*, p. 648); and at Habchester, Mordington (270), the earthen ramparts are stated in the first *Statistical Account* to have had the appearance of having been faced with stone. No sign of this feature now remains.

A groove running along the top of a rampart is found at Dabshood, Lauder (215), and at Raecleughhead Hill, Langton (202). The feature may have been connected with a superstructure of a perishable nature. In both instances there is a trench on each side of the rampart. At Prestoncleuch, Bunkle (21), the innermost rampart is grooved and from 2 to $5\frac{1}{2}$ feet lower than the middle rampart. This would strongly suggest a superstructure, as the inner rampart almost invariably commands those beyond it; the only exceptions to this rule being at Hillhouse, Channelkirk (28), Thirlstane Hill, Lauder (220), and Longcroft, Lauder (211). At the last-mentioned fort two ramparts converge at the south side till they have the appearance of a single grooved rampart.

In addition to the instances already given of a trench on the inner side of a rampart, this feature, which in itself is suggestive of a stock-enclosure rather than of a defensive fort, is observable at Over Howden, Channelkirk (30), where the stock-enclosure theory is rendered more probable by this being one of two forts in the county placed on ground having no natural defences, and by the close proximity of a fort in a defensive position. At Harelaw, Westruther (288), the position of the trench on the inner side of the rampart appears to be due to the steepness of the slope.

While a platform on the inner slope of a rampart is not an unusual method of protecting an entrance, it is sometimes carried along a considerable portion of the rampart to form part of the defence of the fort itself. This feature is seen at Prestoncleuch, Bunkle (21), and to a greater extent at Addinston, Lauder (213).

Where a rampart passes along the face of a steep slope it is sometimes found in the form of a terrace. It is difficult to determine whether these have been originally ramparts, or terraces defended by a construction of more perishable material. Good examples may be seen at Hillhouse, Channelkirk (28), and Prestoncleuch.

There is only one example in the county, and that uncertain, of earth being removed from a trench to form a rampart at a distance. At Wrinklaw, Longformacus (248), the outer trench is 12 feet deep, with only a slight mound on its inner edge; the north end of the rampart, however, is much higher and has no adjacent trench. As the site has been interfered with, however, by modern occupation, the evidence is not conclusive.

While in earthworks the trench of an inner rampart is almost invariably close in rear of the rampart beyond it, there is frequently in stone forts a level space of some width between the ramparts. Thus at Shannabank Hill, Abbey St Bathans (3), there is a space of 44 feet, and at Coldingham Loch (84) the space is 40 feet. Where stone ramparts and earthen ramparts with trenches are found in the same fort, this space is found between the stone ramparts, as at Hillhouse (spaces 36 and 22 feet); Earn's Heugh, Coldingham (80), space 24 feet; and Blackchester, Lauder (216), space 27 feet. In one instance, at Blackcastle Rings, Greenlaw (171), this feature is found in a pure earthwork, the space being 35 feet between the middle rampart and the trench of the inner rampart.

At Raecleughhead (200) a rampart near the foot of the steep slope to the north of the fort seems to have been intended to provide a defence against the flank of an enemy approaching up a narrow gully. The same feature is seen at Earlston Black Hill (131), where an enemy

moving westwards along the north side of the fort had to pass across a confined area with a steep declivity beyond.

VITRIFICATION.—The only Berwickshire fort for which the claim of vitrification has been put forward is Earlston Black Hill (No. 131). Hibbert, writing over a hundred years ago, reported a small cairn vitrified on one side (*Archæologia Scotica*, vol. iv. pp. 160-182). In 1866 much vitrified stone was stated to exist on the "old British trackway," but no appearance in the fort.¹ On the occasion of the Hawick Archæological Society's visit in 1870 a quantity of fragments of fused porphyry was dug up at a spot half way down the hill on the north side.² No recent authority has been able to find any trace of vitrification.

ENTRANCES.—In many cases the ramparts have suffered to such an extent that the entrances cannot now be traced. In forty-seven forts, however, they are still visible. In half of these there is one entrance, and in the remainder more than one. Dr Christison found two entrances more common than one, and three or four not unusual. He cites an instance of seven original entrances to a fort. Three Berwickshire forts have had three entrances, and one of them, Cockburn Law, Duns (116), may have had four. In at least twelve forts the entrances are two in number.

It is of course often difficult to determine whether an opening through the ramparts is an original entrance or not. In the better preserved instances this is made clear by the neat rounding off of the end of the trench, as at Habchester. In addition to this there is sometimes a low mound running round the end of the trench. This is seen at Tollis Hill, Lauder (223), and at Blackchester, Lauder (216).

METHODS OF DEFENDING THE ENTRANCE.

(1) *Entrance at the Edge of a Steep Bank.*—This confined the ground on which the attacker could manœuvre. A good example is seen at the small fort at Tower Farm (W.), Cockburnspath (62); also at the south entrance at Cockburn Law. At Blackcastle Rings, the entrance itself has vanished, owing doubtless to a landslide; but it has probably been at the north end of the ramparts, where the outer rampart curves slightly outwards towards a track leading up the slope. At Harelaw, Westruther (288), a track runs along the slope below the fort and enters it at the point of the promontory.

(2) *Hut-Circles close to the Entrance.*—A good example is at Coldingham Loch (84), where the circle is placed between the outer and middle ramparts. At Earn's Heugh there is a circle at each side of the entrance

¹ *Ber. Nat. Club*, v. 269.

² *Hawick Arch. Soc. Trans.*, 1869-74, p. 66.

behind the innermost rampart. At two more of the Coldingham Loch group (81 and 87) there are circles at the entrance. At Cockburn Law they may also have existed, but the traces are much damaged. This feature is also found at Staneshiel Hill, Duns (117). At Ewieside Hill, Cockburnspath (49), the cutting off of a small portion of a trench by means of a traverse has a similar effect in protecting the entrance.

(3) *Recessed Entrance*.—A good flanking defence was obtained by curving inwards the ends of the rampart, as at the north entrance at Cockburn Law. A development of this method, suitable especially for stone forts with a single rampart, is to continue the recurved rampart in the form of a dividing wall into, or completely across, the fort, as at Westerside, Coldingham (83), Coldingham Loch (88), Marygold Hill, Bunkle (18), and Staneshiel Hill, Duns (117).

(4) *Hornworks*.—Here the opposite method has been adopted, ramparts having been run forward from the entrance. Slight traces, which may have been works of this character, are seen at Earn's Heugh and Staneshiel Hill, Duns (118). From their position such works are peculiarly liable to obliteration.

(5) *Widening the Trench*.—This method was adopted to accommodate a body of men for the defence of the entrance. Good examples are seen at Prestoncleuch (east entrance) and Cockburn Law (north entrance).

(6) *Platform of Defence*.—On the inner slope of the middle rampart at Prestoncleuch, at the south side of the west entrance, is a platform some 140 feet in length and 9 feet wide. At Addinston a similar platform 10 feet wide is also placed on the middle rampart. Both platforms are designed to deliver an attack on an invader's right or unprotected side.

(7) *Grooved Rampart*.—This feature has already been described. At Prestoncleuch it may have a special bearing on the defence of the entrance, as it is most conspicuous at that point.

(8) *Grooved Roadway*.—At Addinston a crescentic groove, some 7 feet wide at the middle, and rather over 1 foot deep, is drawn with its convexity outwards across each of the two entrances of the fort, immediately in front of the innermost rampart. The feature may not belong to the original occupation of the fort, but the object would seem to have been in some way to close the entrance.

(9) *Oblique or Zig-zag Entrances*.—These were designed to compel the invader to expose his flank to an attack from the ramparts. Good examples are seen in the fine forts at Earn's Heugh, Cockburn Law, and Longcroft. It is noticeable that when provision has been made

for compelling the attacker to expose his flank, whether by means of hut-circles, dividing walls springing from an entrance, widening the trench, platforms, or oblique entrances, it is almost invariably his right side which he is compelled to expose. The same principle is seen in the position of the guard chamber at Edinshall Broch (115).

(10) A similar effect is obtained by a short rampart within the fort opposite the entrance, as at Edinshall. What may be another is found at the east entrance to Prestoncleuch. In the former the convexity is outwards, in the latter inwards.

(11) At Earlston Black Hill (131) there is some evidence of a short additional rampart having been inserted between the outer and inner rampart; but the ramparts have been too much destroyed at this point to permit of a definite assertion.

(12) *External Mound*.—Dr Christison cites Raecleughhead Hill fort, Langton (202), as an exceptional example of a mound outside the entrance as a means of defence. I am inclined to think that this mound is part of a rampart which can still be traced almost completely round the fort, and which with the trench outside it probably constituted the original fort. Later, to strengthen the fort, and possibly to suit it for enclosing stock, a trench was excavated within the first rampart, the earth being thrown outwards partially covering at the east side the older and lower rampart. At the new east entrance the old rampart was allowed to remain, probably as a defence; its trench, however, was filled up, and paths were cut or worn across it till it assumed the form of an isolated mound. A mound also occurs outside the west entrance at Cockburn Law.

HUT-CIRCLES.—These occur in thirty-three forts, of which twenty-two are forts where stone predominates, and eleven where earth predominates. No Berwickshire fort can compare with Eildon Hill fort, where Dr Christison reports some 400 hut-circles, the total number in all the Berwickshire forts being 274. Hillhouse, Channelkirk (28), contains the largest number, thirty-four. Much the most perfect examples occur at Harefaulds, where twenty can be traced. Dr Christison, however, places the number here at eighty. One of these (fig. 1) has a wall 5 feet in height at one point, and a large upright boulder at each side of the doorway. A natural cup-marking on one of these boulders has been erroneously cited as the only true cup-marking in the county.¹ Mr Milne-Home states that excavations revealed a flat projecting seat-like stone in three of the huts. It has also been stated that some of the huts are recessed in the main wall of the fort: the ruinous condition considerably obscures the original outline, but the fact that at no point is there less than 9 feet

¹ *Proc. Soc. Ant. Scot.*, vi. (Appendix), p. 47.

of wall between the hut and the exterior face of the wall, compared with 10 feet where no huts exist, leads me to believe that the circles are placed against the wall rather than in it. There is no instance in the county where a circle can be definitely stated to be constructed in the rampart; the rare instances where such a feature appears to exist may be due to later excavation; the usual position is closely in rear of the inner rampart. Important examples of hut-circles are found at Earn's Heugh, Edinshall, Earlston Black Hill, and Tollis Hill; all the Coldingham Loch



Fig. 1. Hut-Circle, Harefaulds, Lauder, showing natural cup-marking on upright boulder at right side of doorway.

forts contain them, and at Oatlee Hill, Coldingham (79), one is found outside the fort immediately to the north.

In size hut-circles most frequently measure about 16 feet in diameter from crest to crest of the foundation mound. They range, however, from 10 feet upwards. There is no evidence to show how large a span the builders of these circles were capable of roofing, but doubtless the larger circles were uncovered. At Kirktonhill, Channelkirk (27), is a large circular enclosure 69 feet in diameter; at Tollis Hill there is one 54 feet; and at Addinston one measures 46 feet. The regularity of the remains of the last named when compared with the condition of the ramparts and of some hut-circles adjoining it which are almost obliterated, suggests a more recent date, possibly of the period to which the entrance grooves above mentioned belong.

Irregularly shaped enclosures, probably for stock, occur in fifteen forts; Longcroft and Tollis Hill are the best examples.¹

On the summit of Cockburn Law, within a stone fort (116) are what at first appear to be two circular enclosures, measuring about 50 feet and 38 feet in diameter. From the character of these constructions I am inclined to believe them to be the foundations of Bronze Age cairns, similar to those crowning all the chief eminences in the neighbourhood. This theory is supported by there having formerly been at the summit a "stone-lined hollow" called the "Pech's Grave" (*Ber. Nat. Club*, vol. iii. pp. 15 and 138). The stones of the cairns were possibly utilised for building the ramparts of the fort.

THE ANNEX.—Adjoining the fort proper is sometimes found an annex, or addition, most likely of later date. It may have been chiefly used for the accommodation of stock, a theory which is not controverted by the fact that several examples contain hut-circles, as these are found in typical stock enclosures on Lauder Common and elsewhere. The rampart of the annex is not so strong as those of the fort, and it is usually commanded from the ramparts of the fort itself. The best example is at Marygold Hill, Bunkle (18). Others are found at Chester Hill, Ayton (10); Cockburn Law; Spottiswoode, Westruther (287); Staneshiel Hill, Duns (117); Coldingham Loch (86); and Trabrown, Lauder (fig. 5); probably also at Shannabank Hill, Abbey St Bathans (3); and Westerside, Coldingham (83). At Duns Law a rampart runs out to the west: it may either be an annex or the beginning of a black-dike similar to Herrit's Dike at Harefaulds. A similar trace is seen at Dowlaw Road, Cockburnspath (50).

TRACKS LEADING TO FORTS.—At Longcroft a hollow track commences immediately behind Longcroft farm, and runs up the hill, winding slightly, in the direction of the entrance to the fort. It becomes obliterated, however, some 70 yards from the entrance; at its best preserved point it is 16 feet in width and 2 feet deep. At Harefaulds, the well-known black-dike known as Herrit's Dike runs to the wall of the fort close to the south side of an entrance. At Dean Castle,

¹ An enclosure worthy of interest lies in the fort at Killmade (see *Ber. Nat. Club*, vol. xxi. p. 206), which although in the parish of Stenton in East Lothian is almost within stone's-throw of the Berwickshire boundary. In the fort are several hut-circles, and a rectangular enclosure measuring internally 40 feet 9 inches by 14½ feet, with the stony foundations of a wall 1 foot 9 inches broad, lies east and west, with its eastern end abutting on the rampart of the fort, which at this point overlooks a steep declivity. Although the remains of this enclosure are meagre, the fact is noteworthy that a fort bearing the suggestive name of Killmade contains a single oriented structure associated with hut-circles. The earliest churches in Ireland are found in raths and cashels associated with hut-circles, and Dr Anderson believed that similar evidence of a Christian character might yet be found among our Scottish forts (*Scotland in Early Christian Times*, p. 93).

Cockburnspath (60), Blackcastle Rings, and Wallace's Knowe, Lauder (212), tracks run up the steep slopes towards the forts. At Kelphope Burn, Lauder (225), a similar feature may be of later date; and at Wrinklaw, Longformacus (248), two tracks may be connected with one of the more recent occupations of the site. At Prestoncleuch there is a slight trace of a track leading to the east entrance. That at Harelaw, West-ruther (288), has already been mentioned. At Cockburn Law there are also traces of a track running to the north entrance, and at Thirlestane, Lauder, one leads down towards the Snawdon Burn.

WATER SUPPLY.—The infrequency of any attention to a supply of water in the choice of a site has frequently been remarked upon. In only two instances in the county do the ramparts seem to have been purposely drawn to include a water supply. At Wrinklaw there are faint indications of the rampart having been extended to the east across a small burn, and running up the opposite bank, then curving southwards and recrossing the burn some 260 feet lower. At Lennel Hill, Coldstream (105), the same feature occurs, the main rampart leaving the natural line of defence and crossing for a short space to the opposite side of a small stream. At Longcroft a natural spring occurs outside the inner rampart at the north-east side of the fort; and at Belchester, Eccles (141), we also find a spring in the trench. At Edinshall water from a spring on the hillside is stated (*Ber. Nat. Club*, vol. ix. p. 96) to have formerly come to the fort by a cutting now destroyed. Agricultural drainage has doubtless diverted many former springs, but there can be no doubt that a large proportion of the higher forts must have been entirely without any adjacent supply of water.

RECENTLY DISCOVERED FORTS.

The following twelve forts are not recorded in the Inventory.

Ayton Parish.

(1) *Castle Dikes (A)* (fig. 2).—This fort lies in a cultivated field 400 yards south-west of Ayton Law steading. The position, 200 feet above sea-level, is at the edge of a steep slope, and directly above the Hairy Craigs Quarry, which has cut into the area of the fort. It might be classified as intermediate between promontory and crescentic type, being placed on the edge of a steep bank some 20 feet in height which at this point curves round parallel to the course of the Eye Water which flows below. The measurements are 350 feet east and west by 250 feet north and south. The remains of three earthen ramparts 46 feet apart are faintly visible, the outermost being placed on the crest of a slight ridge beyond which

the ground is level; the interior slopes gently down towards the steep bank. At the west end the termination of the innermost rampart can be seen on the uncultivated slope; at the east end this rampart seems to have sprung from a natural outcrop of rock on the steep slope. The east end of the outermost rampart is also traceable on the slope.

(2) *Castle Dikes (B)*.—At a distance of 66 yards to the north-east of the above-mentioned fort, and at a slightly higher level, lies a circular fort measuring 216 feet east and west by 210 feet north and south. A single rampart, much obliterated, has followed the crest of a natural

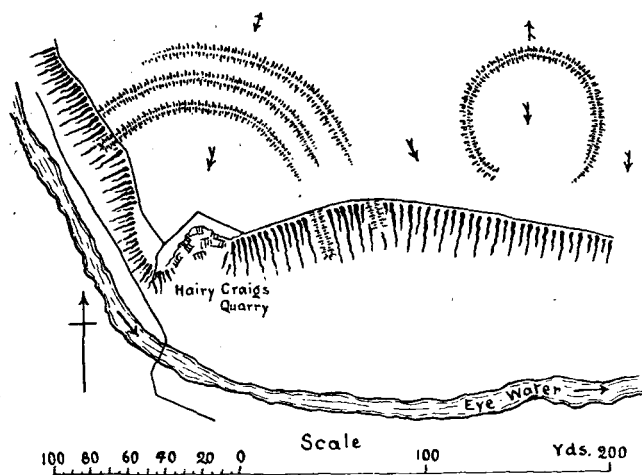


Fig. 2. Castle Dikes Forts, Ayton.

ridge on the west and north sides of the fort. The south side is ill-defined, but has apparently run near the edge of the steep bank. This and the preceding fort are shown on Armstrong's Map of Berwickshire, 1771. Carr also mentions a fort on Ayton Law as being much defaced. (*A History of Coldingham Priory*, 1836, p. 14.)

Channelkirk Parish.

(3) *Nether Howden* (fig. 3).—On a knoll above the Edinburgh and Lauder road, $\frac{1}{4}$ mile south of Carfrae Mill, and 784 feet above sea-level. This fort is mentioned in Mr Allan's *History of Channelkirk* (p. 659) as having two ramparts with a trench between, the south part being in a wood. No surface indications remain, and I failed to trace the fort until the summer of 1919, when the whole course of the trench could be seen half a mile away by a thick growth of thistles. The fort, which lies wholly to the north of the strip of wood, is defended by a steep slope to the north-

west, north, and east; the ground to the south-west is level. It seems to have been an earthwork, and measures 300 feet by 255 feet.

Coldingham Parish.

(4) *Burnt Chesters*.—On the summit of the Gowel Hill, 1000 yards north-north-west of Howpark, and 686 feet above sea-level, are the traces of a fort measuring 126 feet north-east and south-west by 87 feet. The ground falls steeply to the south-west and north-east and more



Fig. 3. Thistles reveal the course of an obliterated trench, Nether Howden Fort, Channelkirk.

gradually to the north-west and south-east. The occurrence of the name on Low's map of Coldingham Common (1772) led me to examine the spot.

Earlston Parish.

(5) *West Morriston Bog* (fig. 4).—This fort is situated 470 feet above sea-level, close to the north side of West Morriston Bog, and is very noticeable from the Berwickshire railway. The south half of the fort is defended by a natural gravelly ridge or kame, artificially improved for defence: this is continued round the north side by a single rampart formed apparently of earth taken from the interior of the fort. This rampart and the interior have suffered from cultivation. The entrance is at the east side, at the end of the kame, which here is 13 feet above the interior of the fort. From the entrance a road has been formed across the bog: this, however, seems at least partially of later date.

The fact of the rampart being formed of soil from the interior would suggest a construction for enclosing stock. The nature of the site, how-

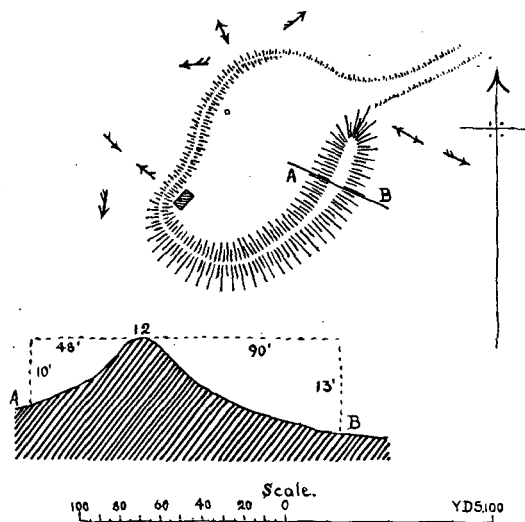


Fig. 4. West Morrision Bog Fort, Earliston.

ever, and especially the position of the entrance, dangerous of approach, seem to be conclusive proofs that this has been a fort.¹

Lauder Parish.

(6) *Trabrown* (fig. 5).—This fort is situated about 980 feet above sea-level on the north-east shoulder of Trabrown Hill, about 800 yards west-south-west of Trabrown steading. Irregularly oval in form, it measures about 335 feet by 255 feet, the north-west portion being obliterated in a wood and by a quarry. The single rampart of stones has been much damaged to supply material for local field walls. In the centre is an oval enclosure, much hollowed out, measuring 72 feet by 55 feet; from this radiate some eight stony foundations, subdividing the fort. Two hut-circles, one of which measures 19 feet in diameter, the other 30 feet by 24 feet, lie near the east side. An entrance remains at the south-east—more may be obliterated. To the east lies an annex with traces

¹ Since the above was sent to press my attention has been drawn by Mr James Ballantyne, Earliston, to an unrecorded fort at Huntshaw, Earliston. The remains, although showing a trench several feet in depth some fifty years ago, are now very faint. The position is on the west end of a low ridge in the north-east corner of the Well Field, some 300 yards north-east of Huntshaw farm steading and about 680 feet above sea-level. Here an oval ring, 270 feet by 180 feet, can be traced. The trench is almost levelled, but the outline is more noticeable when the land is under a corn crop.

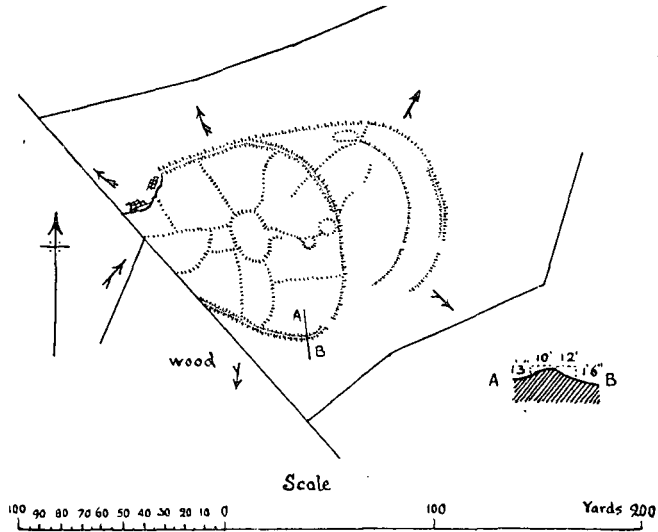


Fig. 5. Trabrown Fort, Lauder.

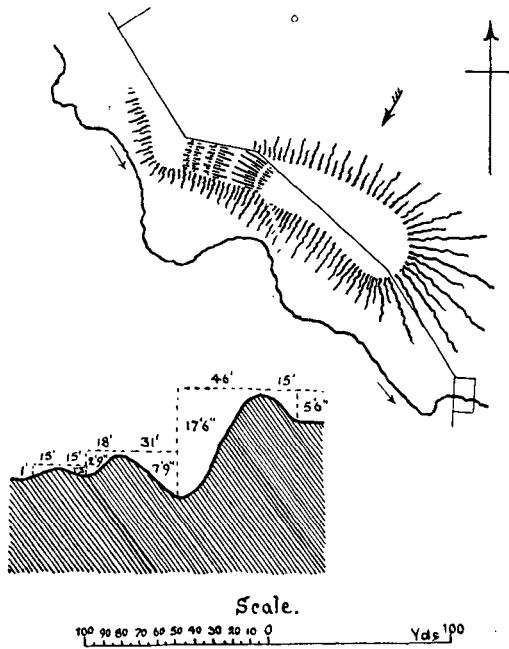


Fig. 6. Thirlestane Fort, Lauder.

of a double rampart of stones. It has a distinctly marked entrance at the east side, and a rectilinear enclosure with rounded angles 39 feet by 15 feet lies east and west between the two ramparts at the north side. The fort was recently discovered by the Rev. Wm. M'Conachie, D.D., Lauder.

(7) *Thirlestane* (fig. 6).—This fort occupies the top of an isolated knoll about 670 feet above sea-level, $\frac{1}{4}$ mile north-east of Thirlestane farm steading. It has apparently been of crescentic type, resting on the steep left bank of the Snawdon Burn which runs some 35 feet below; to the east is a hollow about 25 feet deep. The measurements are 225 feet by 90 feet. The earthen ramparts have been completely obliterated by cultivation except at the north end, where between the top of the steep bank and a wall, a space 45 feet in width, there remain three ramparts, the top of the innermost of which is $17\frac{1}{2}$ feet above the trench outside it. This measurement is $1\frac{1}{2}$ feet more than at Addinston, where the ramparts are the highest recorded in the county. A track leads towards the burn from the rear of the inner rampart. The fort can be seen from the Edinburgh road, 200 yards to the south.

Mertoun Parish.

(8) *Brotherstone* (fig. 7).—A hitherto unnoticed fort occupies a strong position on the eastern summit of Brotherstone West Hill, 871 feet

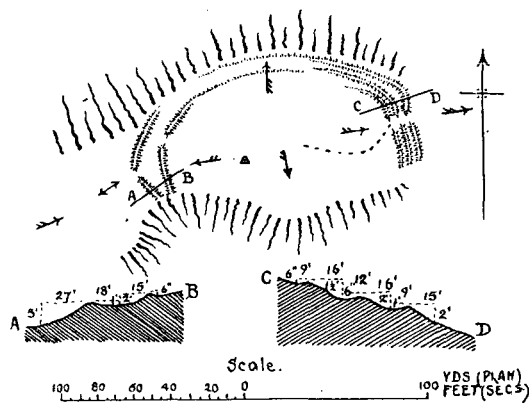


Fig. 7. Brotherstone Fort, Mertoun.

above sea-level. It measures 380 feet by 237 feet, and is defended on the south by a steep and rocky slope with no trace of ramparts along the top. To the west a narrow col separates the fort from another rocky eminence. Two low ramparts of stone here defend the fort and continue along the steep grassy slope to the north, the outer being well down the slope. Beyond it are signs of recent cultivation. At the east end the ramparts are three in number, —slight trenches have apparently existed where the rocky nature of the ground permitted excavation. The entrances are two in number. That at the west end turns to the left and enters obliquely through the ramparts, between which there is at this point a wider space. The entrance at the east end runs straight through the ramparts, the outer

of which is thrown forward at the north side. A track seems to lead into the interior from this entrance. Some of the large boulders outside this entrance may have been placed there as an obstacle; if so, this is the only example of this feature in the county. Although there has been no cultivation within the fort, there is no trace of hut-circles. Much of the material of the ramparts has been removed for the construction of walls in the vicinity.

(9) *Clint Hill*.—A fort occupies the top of the ridge 350 yards due north of Clint Lodge, 540 feet above sea-level. Heckside Plantation here projects to the north for a short distance. The fort is situated 16 yards east of the north-east corner of this projection, and is bisected by a wire fence which runs along the ridge. The slightly raised remains of a single rampart on cultivated land enclose an oval area measuring 282 feet east and west by 222 feet north and south. The ground is level to the west, falls slightly to the north and east, and rather more abruptly to the south.

(10) *Butchercote* (fig. 8).—An oval fort 258 feet by 174 feet occupies the south-west end of a rocky promontory at the south-east side of Whitrig Bog, and 720 yards north by east of Butchercote farm steading; it is 520 feet above sea-level. At the south-west end, on uncultivated land, a rampart can be traced in the form of a terrace running round the point of the promontory. Forty feet beyond this are the remains of another terrace at a lower level. At the north-east end the remains have been almost obliterated by cultivation. Two slight hollows, 45 feet apart, here seem to represent trenches.

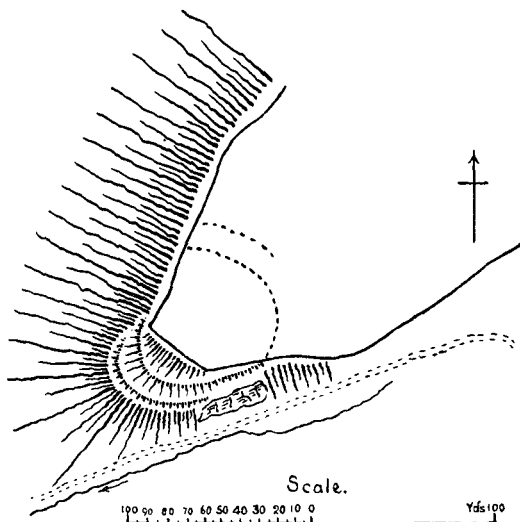


Fig. 8. Butchercote Fort, Mertoun.

Mordington Parish.

(11) *Lamberton* (fig. 9).—A small earthwork 102 feet by 63 feet lies near the south extremity of Lamberton Moor, and $\frac{7}{8}$ mile west-north-west of Lamberton farm steading. It is situated on a promontory about 560 feet above sea-level, with a small burn some 25 feet below it to the west, and a marsh at the foot of a steep bank to the east. The ground

rises slightly to the north-east, and here a single earthen rampart, with a trench beyond, cuts across the neck of the promontory. The rampart is continued round the west side of the fort to the point of the promontory, but there is no trace of it at the east side. The

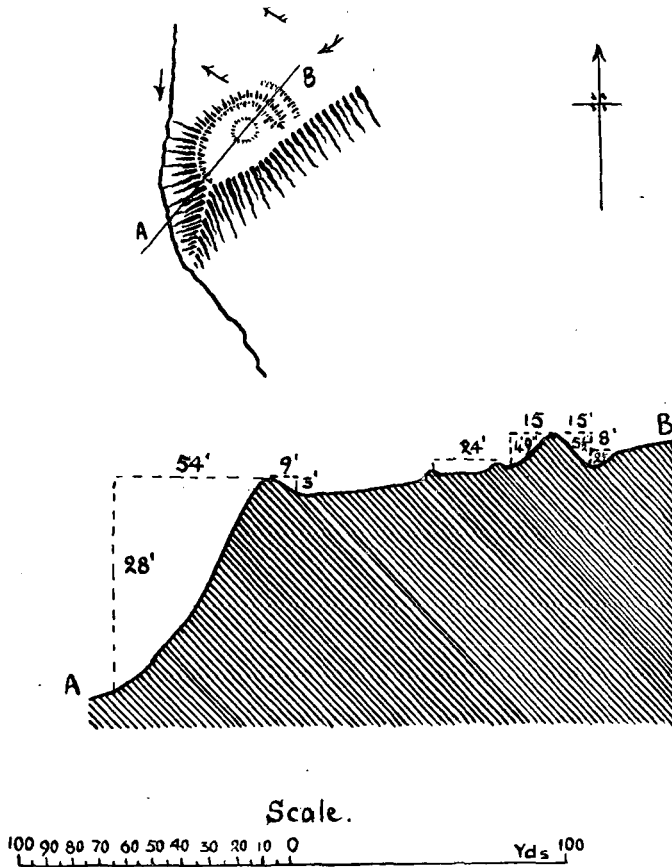


Fig. 9. Lamberton Fort, Mordington.

entrance is at the north-east, close to the edge of the steep bank. In rear of the rampart, near the entrance, is a circle 24 feet by 21 feet in diameter. The fort is well preserved, and has not been disturbed by cultivation. It was discovered by Mr Robert Kinghorn, F.S.A.Scot., Foulden Moorpark.

Westruther Parish.

(12) *Raeleugh* (fig. 10).—This fort lies on a grassy slope which has been under cultivation, about 800 yards west-north-west of Raeleugh farm steading, and about 880 feet above sea-level. The advantage of a

slight knoll to the north has been neglected in order, apparently, to have the protection of somewhat boggy ground to the south and south-east. The position is not naturally a strong one. This is a pure earth-work, with two ramparts, and an intervening trench 1 foot 9 inches deep; it measures 276 feet by 230 feet. The eastern half is obliterated; no entrance is traceable. An unusual feature is that the longer axis

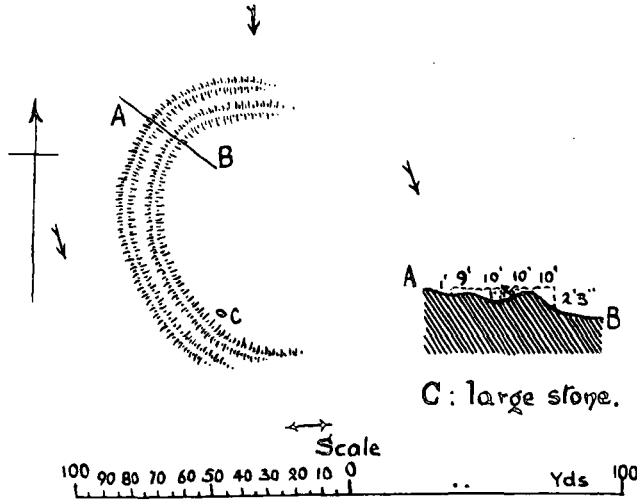


Fig. 10. Raecleugh Fort, Westruther.

of the fort lies parallel to the slope. A large boulder lies within the fort. In the *New Statistical Account*, p. 72, the remains are stated at that time (1841) to be indistinct.

SITES OF FORTS.

It is not merely on grounds of local interest, important as these may be, that it is desirable to preserve a record even of completely obliterated forts. The question of the relationship of forts to one another and to other works such as "black dikes" (whether these are now visible or may in the future be brought to light) demands the preservation of all such records. Being more in danger of being lost, facts concerning such sites are for that reason more worthy of care than facts relating to monuments which can at any time be reinvestigated.

The question of how long cultivation may take completely to obliterate a fort seems to depend very largely on the thoroughness of the original levelling of the ramparts. The fort at Over Howden, Channelkirk (31), though under constant cultivation has altered very little in appear-

ance in the sixty years during which the tenant of the land has known it. The great agricultural improvements of the latter half of the eighteenth century, followed by the increased demand for corn during the Napoleonic wars, account for the destruction of numerous forts and other monuments of antiquity. Thus, of twenty-eight forts shown by Armstrong in 1771, only sixteen remain in fair preservation, and several of these have suffered partial damage from the plough.

Ayton Parish.

(1) *Fairnieside*.—A fort is said formerly to have existed in Blaikie's Field, on the farm of Fairnieside (*Ber. Nat. Club*, vol. viii. p. 164). The name Farndun in the Coldingham Charters, suggestive of a fort, is supposed to be connected with Fairnieside, and may have been derived from the proximity of this fort.

(2) *Cairn-chester*.—Carr (*Hist. Coldingham Priory*, p. 18), writing in 1836, mentions this and the two following forts as having formerly existed near the farm steadings of the same name. The *New Statistical Account* also mentions the three. The position of Cairn-chester farm steading is shown on Sharp, Greenwood, and Fowler's Map of Berwickshire, 1826, on high ground about 1000 yards north of Habchester fort.

(3) *Chester Bank*.—The steading occupies a commanding position 650 yards south-west of Burnmouth railway station. The fort itself is marked on Armstrong's Survey of the Post Road, 1776.

(4) *Chesterdale*.—The farm steading is shown on Thomson's Map of Berwickshire (1821) 550 yards east of Cocklaw. The name is still preserved in a field on that farm. This is probably the fort marked on Armstrong's Survey of the Post Road west of Chester Bank fort; it is there shown as being larger than that fort.

(5) *Hindchester* is marked by Armstrong (1771) as a fort on a hill-top 200 or 300 yards south-west of Chesterbank. The *New Statistical Account* also mentions it in addition to the preceding three: the author, however, may have taken his information from Armstrong's map, and the fort may possibly be identical with Chesterbank.

(6) *Littledean*.—Armstrong's map shows another fort between the Ale and the Littledean Burn about $\frac{1}{3}$ mile east-north-east of the present steading of Littledean. This and the two forts at Castle Dikes on Ayton Law may be the "vestiges of three encampments" mentioned in the first *Statistical Account*, 1792 (Ayton Parish, p. 86).

Chirnside Parish.

(7) *Edington Hill*.—Carr (p. 7) mentions a fort visible on Edington Hill, a few years previous to 1836. In a MS. account of Chirnside

written by James Dunbar, a mason in the village, there is the following obscure reference to antiquities existing about the middle of the eighteenth century: "There were the places where armies had entrenched and encamped across the Hairlaw in holes (sic), also some west near Ninewells farm, and on Edington Hill."

Cockburnspath Parish.

(8) *Akieside*.—Dr Hardy in an article on cairns (*Ber. Nat. Club*, vol. iii. p. 104) mentions the "traditional site of a small fortified circle" on Townhead farm, above Akieside.

(9) *Penmanshiel*.—In the same article (p. 108) is mentioned a small fort on a knoll north of Penmanshiel. It is marked as a site on the 6-inch Ordnance Survey Map, 280 yards north-east of Penmanshiel fort (No. 53).

Coldingham Parish.

(10) *Harelawside*.—"A collection of camps and cairns, now entirely swept away" (1881) is recorded by Dr Hardy (*Ber. Nat. Club*, vol. ix. p. 444) as having existed "at the top of the field east of Grant's House . . . nearly in the line of the upper wall."

(11) *Houndwood*.—On the occasion of the Berwickshire Naturalists' Club's visit to Houndwood in 1879, there was pointed out the site of a fort "half way up the ascending ground, above old Houndwood Inn, on the march between Houndwood and Renton estates" (*Ber. Nat. Club*, vol. ix. p. 17).

(12) *East Reston*.—In the small museum preserved at Coldingham Priory there is a bronze pot which is stated to have been found on the farm of East Reston at a place where the remains of a fort were traceable in 1835.

(13) *Fernycastle*.—This fort is said to have stood on a knoll close to the north edge of Billie Mire, $\frac{1}{4}$ mile north-west of Causewaybank. It is referred to as "a large British Camp" (*Ber. Nat. Club*, vol. xiii. p. 205).

Coldstream Parish.

(14) *Coldstream*.—"On the north bank of the river between the town of Coldstream and Coldstream Bridge, when the present road to the bridge was made, two ditches between embankments were discovered. . . . In one of the ditches deers' horns and wild boars' tusks were found, besides a stone font. . . . The high bank of the river, on which the camp abutted, rendered it quite unassailable on that side" (*Ber. Nat. Club*, vol. iv. p. 457). The writer suggests that the fort may have given its name "Castra-ham" to the town.

Earlston Parish.

(15) *Purveshaugh*.—A fort is shown on Armstrong's map, about $\frac{1}{2}$ mile west of Purveshaugh between the road and the burn, near the junction of the road from West Morriston with the road from Purveshaugh.

(16) *Standingstone*.—The same map shows another fort some 500 yards north-east of the last mentioned. This may be the "large circular camp . . . on an eminence of moderate height" mentioned as being to the west of Standingstone (*Ber. Nat. Club*, vol. x. p. 309). The same description, however, would apply to Grizziefield East Rings (134).

Gordon Parish.

(17) *Gordon*.—A fort is marked on Armstrong's map near the village of Gordon, the position seems to be about 500 yards east-south-east of Gordon railway station, on the ridge along which runs the road to Edenside. A large cairn formerly stood in this vicinity.

(18) *Rumbleton Law*.—The first *Statistical Account* mentions fortifications of stone formerly standing on a hill at Rumbleton Law, but obliterated by cultivation.

Greenlaw Parish.

(19) *Hurdlaw*.—Also marked on Armstrong's map. Apparently at or near the wood which now stands on rising ground some 700 yards east of Hurdlaw.

Lauder Parish.

(20) *Woodencleuch*.—On Woodencleuch, the western part of Lauder West Mains farm, formerly stood a fort which was ploughed down in the beginning of the nineteenth century.

Legerwood Parish.

(21, 22) *Boon Moor*.—Two forts with earthen ramparts are mentioned as having been visible on Boon Moor some years before 1883, the Black Dike running past them on the east side (*Ber. Nat. Club*, vol. x. p. 308).

ERRONEOUS OR DOUBTFUL FORTS.

The following eight constructions, which have been regarded as forts, either have no claim to be classified as such or are of a more or less doubtful nature.

Channelkirk Parish.

(1) *Warlaw Camp* (Inventory, No. 33).—This site is shown on Thomson's map (1821). In Armstrong's map (1771), however, it is shown as a cairn. The existing remains confirm the latter theory.

Earlston Parish.

(2) *Redpath Hill* (No. 137).—This is mentioned as a fort (*Ber. Nat. Club*, vol. x. p. 309). The only remains on the hill are certainly of quite another character and of more recent date; that any other remains have been destroyed is extremely unlikely, as the hill is of a rocky nature, untouched by cultivation.

Fogo Parish.

(3) *Chesters Brae*.—Marked as a fort on the 6-inch Ordnance Survey Map and included by Dr Christison (*Proc. S. A. Scot.*, vol. 1894-5, p. 151) as an earthwork, "with apparent remains of three ramparts at one place." The two outermost of these have certainly no connection with this construction, belonging to a track which I believe to be the continuation of Herriot's Dike, and which runs down the slope and can be seen where it crosses a burn beyond the railway. The innermost rampart is a single curved mound of slight elevation extending down the slope in a manner not suggestive of a fort. On the level ground above there is no trace of a fort or other construction having existed.

Greenlaw Parish.

(4) *Broomhill*.—On the Ordnance Survey Map is marked a "station" on the line of what is called Broomhill Black Dike, at the edge of the high bank descending to the right bank of the Blackadder, about 650 yards south of the fort at Blackcastle Rings. No surface indications now remain.

Hume Parish.

(5) *Hume Pallet*.—In the first *Statistical Account*, and again in Miss Maclagan's *Hill Forts and Stone Circles of Scotland*, is mentioned a fort on Hume Pallet. The name no longer exists, but the fort referred to is undoubtedly that on Sweethope Hill, which is not in Berwickshire but in Roxburgh.

Lauder Parish.

(6) *Camps Field*.—Blackadder's Map of Berwickshire (1797) shows a fort to the south of Lauder. It may possibly be intended to represent Chester Hill (217), but is placed on the opposite side of the Stow road from that fort, upon ground which a generation ago was known as "The Camps."

(7) *Dabshood (North)*.—What is undoubtedly a sheepfold with no claim to great antiquity lies about $\frac{1}{4}$ mile north of Dabshood. It has been erroneously classified as a fort (*Ber. Nat. Club*, vol. x. p. 312).

Mertoun Parish.

(8) *Brotherstone South Hill*.—On the east knoll of Brotherstone South Hill, about 550 yards north-east of Brotherstone steading and 250 yards south of the Standing Stones, is a fort-like enclosure measuring 132 feet by 117. It is enclosed by a single rampart of stones 12 feet in width and now of low elevation, with entrance at the south-east. The remains are too slight to be pronounced those of a fort; but the nature of the site, defended by a steep slope to the north, and sloping more gently in the other directions, would suggest such an origin.

FORT PLACE-NAMES.

The following is a list of place-names in the county bearing the names of forts. More no doubt exist, as in the names of fields, etc. Search in such localities might result in the discovery of additional forts.

Chester.—Belchester, Big Chester (Bowshiel), Blackchester (two: Lauder, and Reston, c. 1400 A.D.), Burnt Chesters (Howpark), Cairnchester (Ayton), Cawchesterlaw (Greenlaw, c. 1230 A.D.) Chesters (Fogo), Chesterbank (Burnmouth), Chester Dikes (Cranshaws), Chesterdale (Ayton), Chesterfield (two: Paxton and Cockburnspath), Chester Hill (two: Ayton and Lauder), Chesterknowes (Edrom), Crouchester (Coldingham, c. 1400), Darnchester, Habchester, Harechester (Coldingham, c. 1400), Hangindechester (Coldingham, c. 1400), Headchester (Cockburnspath), Highchester (Cockburnspath), Hindchester (Ayton), Laverockchester (Coldingham, c. 1400), Little Chester (Bowshiel), Rowchester, Whitechester (two: Coldingham and Longformacus), also Sisterpath, or Chesterpath (two: Cockburnspath and Fogo).

Dun.—Doonslaw (Whitsome), Duns, Dunside (Longformacus), Dun Law (Channelkirk), Dunsteels (Kimmerghame), Dunnylands (Hume), Dunse Law (Lauder, thirteenth century), Ercildune (now Earlston), Farndun (Coldingham, c. 1400), Gordon.

Castle.—Blackcastle (Greenlaw), Castle Dikes (two: Ayton and Cockburnspath), Castle Stele (Linthill, Coldingham, c. 1400), Deancastles (Cockburnspath).

Car.—Carfrae.

Rath.—Rawburn (formerly Rathburn).

SURFACE INDICATIONS OF FORTS.

In searching for the remains of forts it is essential in the first place to become familiar with the type of site usually selected, and with the characteristic forms of construction. It is less probable that additional

forts will be discovered on high uncultivated ground, where remains are likely to be too well preserved to have escaped previous detection, or on low ground where long cultivation has obliterated all traces, than on higher cultivated slopes or foot-hills where the plough has not completed the levelling process. Summits of moderate elevation and promontories are always worthy of examination, and the ends of crescentic ramparts sometimes escape destruction from their proximity to the edge of a cliff or steep bank.

Ramparts approaching obliteration may often be more easily traced from a distance, and slight inequalities may be thrown into prominence by an evening or morning light,—this is of great importance in attempting any photographic work. A light fall of snow slightly drifted has a much greater effect in this way and may reveal an almost levelled trench miles off. The braird of a corn crop may also show the course of a rampart, by showing a greener line along its crest. The presence of stones on the line of its former rampart may reveal the site of a stone fort under cultivation; while in an earthwork there may be a change in the colour of the soil, or the deeper soil in the trench may affect vegetation. Ploughing, or to a greater extent draining or other excavation, reveals stones or deeper soil more thoroughly; and even the slight subsidence of a wall where it crosses a filled-up trench is evidence of the looser soil beneath.

In a dry summer the grass or cultivated crops often remain much greener above the deep soil in a trench. This is sometimes very marked immediately before harvest, when a trench may be traced by a line of green corn when the rest of the field is yellow. Conversely the course of a stone rampart is marked by a weak growth of vegetation, and may even be detected by the firmer feel of the ground when the foot is stamped on it. Thistles show a preference for the deep soil of a trench, as shown in the fort at Nether Howden already described. This is probably due to their roots being able to escape destruction by descending beyond the reach of the plough.

The practice of observation of these early remains is very full of interest, adding charm to many an upland walk, and it is sure to be rewarded sooner or later by an addition to our knowledge of these far-distant times.