

I.

THE FORTS OF SELKIRK, THE GALA WATER, THE SOUTHERN SLOPES OF THE LAMMERMOORS, AND THE NORTH OF ROXBURGH. By D. CHRISTISON, M.D.

The forts that form the subject of the following paper are situated in the county of Selkirk, in the parts of Midlothian, Berwick, and Roxburgh drained by the northern tributaries of the Tweed, and in the adjacent portions of the latter county on the south of that river. The district—well defined geographically—comprises the valleys of the Ettrick and Yarrow, the southern and eastern slopes of the Lammermoors, from the west of the range to the Tweed, the adjacent banks of that river and the low ground to the south of it, but without trespassing on Teviotdale proper; and it will be convenient to consider this extensive district in its geographical rather than in its county subdivisions.

As in former papers, I must here claim the indulgence of other labourers in the same field for the insufficiency of my plans and descriptions, my object being to give a general view of the subject, but to leave to others the task of investigating with minute detail and strict accuracy such of the remains as may seem to be worthy of greater attention.

Unless when otherwise stated, the ground-plans are on the scale of 120 feet to the inch, adopted in my previous papers, but the sections are generally on double that scale. They are all oriented as if the north were at the head of the page. The measurements are in feet. The ground-plans are generally enlarged from those of the Ordnance sheets, on the 25 inch scale, but with corrections of obvious inaccuracies and numerous additions in the details. Trenches are usually dotted, to distinguish them readily from ramparts. Sectional measurements were taken by tape and measuring-rod, the perpendicular heights being estimates of the highest parts of the mounds now remaining.

As the forts rarely have a special designation, for convenience I have given them the name of the nearest farm, burn, &c.

The heights above the sea and the local elevations are taken from the nearest contour-lines of the O.M., and are therefore only approximate, unless when the actual height happens to be given on the O.M.

The measurements, except for the smaller details, are generally taken from the O.M., but have sometimes been checked by myself, or from information furnished by friends.

Forts, the existence of which, now or formerly, seems tolerably well ascertained, are numbered; but very doubtful examples are left unnumbered.

(A.) ETRICK AND YARROW.

The upper and middle stretches of these valleys, which have so strongly excited the poetical imagination, seem to have had no attraction for the fort-builders, insomuch that, if we include the neighbouring parts of Dumfries and Peebles, there is here a space, nearly 20 miles square, quite devoid of forts, and it is only as we approach the junction of the Ettrick and Yarrow that they begin to appear.

1. *Hutler Burn*, $4\frac{1}{2}$ miles S.W. of Selkirk, and 3 above the junction of the Ettrick and Yarrow, is the furthest up the valley of the Ettrick. It is 1 mile east of Ettrick Bridge, on the Hutler Burn, about 700 feet above the sea, and is marked on the O.M. as an oval of about 320 by 250 feet over all, but faintly and imperfectly, as if very ill preserved; and I am informed by Mr Craig Brown, author of *The History of Selkirkshire*, that it is now scarcely recognisable. As far as can be judged from the Ordnance Plan, it has consisted of a single broad rampart and trench.

Castle Hill, Oakwood.—A quarter of a mile E. of the Ettrick, and $1\frac{1}{2}$ above its junction with the Yarrow, a "camp" is marked on the O.M. about a quarter of a mile N. of Oakwood Tower, on Castle Hill, about 600 feet above the sea, as an irregular rectangle of about 300 by 250 feet, but both Mr Craig Brown and Mr James Wilson, of Galashiels, have sought in vain for any trace of it on the easily identified spot, and they do not think there ever was a fort on the site.

2. *Hartwoodmyres*.—Two and a half miles S.W. of Selkirk, about 600 feet above the sea, a rectangular work, one side on the edge, the other on a gentle westward slope of a low ridge. It measures 210 by 180 feet on the O.M. Three sides are merely traceable in a ploughed field, but the E. side has escaped, and lies on the edge of the ridge so as to command the eastward as well as the westward slope. It consists of a double mound, with a trench 4 to 5 feet deep between. The outer mound is prolonged both north and south for several hundred yards each way, its northern arm turning at a right angle and running several hundred yards further, till it nearly strikes a little burn, where it ends in a little square mound-enclosure. The southern arm is gradually lost. Possibly these prolongations originally formed part of a parallelogram enclosing the gentle slopes of a slight marshy hollow to the east of the small rectangle. Of course this work, from its form, has not escaped being called Roman, but it is surely quite possible that, like other works of the kind, it may be an enclosure of earlier or later date, perhaps not even a fortification at all. On the O.M. it is shown as if perfect, and much more substantial than now. As its sides also are represented slightly curved and the angles much rounded, the title of the fort to be called rectilinear is somewhat doubtful. A large circular enclosure on a gentle slope about $\frac{1}{2}$ mile off, consisting of a single mound of slight proportions, of which three-fourths remain, and without a trench, has no resemblance to a fort.

3. *Mote, Howden, Selkirk*—(fig. 1)—a mile and a quarter S.W. of Selkirk, 600 yards E.S.E. of Howden farm-house, about 650 feet above the sea, known in the locality as "the Mote." It is apparently carved out of a natural mound, connected by a slightly depressed neck with equally high level ground to the E., but increasing in height on the flanks westward by the fall in the ground below, till at the N.W. angle it is about 40 feet high. At the W. end the height is diminished by a tongue of land (A) which projects for about 50 yards into the field. A trench, with a rampart in front, covers the west end of the main work, and is cut through this projection. The trench and rampart extend about half way round the S. foot of the mote, but northwards the rampart disappears, and the trench (B) is continuous with a terrace, which goes

partially round the north face, about half way down the scarp. The interior is nearly level, and measures about 220 by 150 feet from crest to crest of a parapet barely traceable on the flanks, but which becomes a substantial mound at the ends. The scarp is steep, and on the S. side is prolonged by a less steep but deep descent to a burn. A broad unfortified eminence, rising 100 feet higher than the mote to the N., is called "The Moat Hill" on the O.M.

There is no other mote but this on the O.M. in the whole region

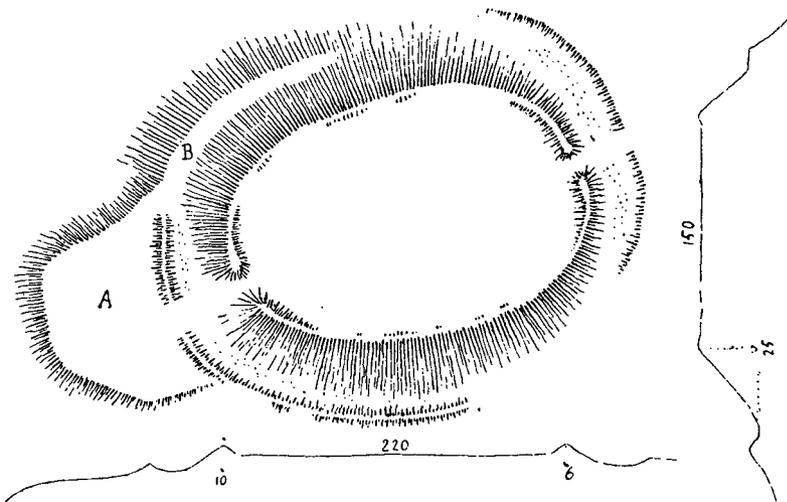


Fig. 1. The Mote, Howden, Selkirk.

overtaken in this paper, and I do not think that more than one of the "forts" has any marked resemblance to a mote.

The mote at Howden is opposite the junction of the Ettrick and Yarrow, and with the three preceding works, two of which are questionable forts, the list of primitive fortifications in the Ettrick valley before its junction with that of the Yarrow appears to be complete. In the latter valley there is but the following one.

4. *Hangingshaw*.—About 3 miles above the junction, 200 yards north

of the Yarrow, and 550 feet above the sea, represented on the O.M. as a faint circle 100 feet in diameter. I have no information about it.

Below the junction of the Yarrow with the Ettrick there are four forts in the Ettrick valley, all on its west side.

5. *Philiphough*.—On a slight eminence, 1000 yards N. by E. of the junction, 200 feet above it, and 600 above the sea. On the O.M. a single oval ring 330 by 220 feet is marked. I could not trace this all round, but on the south there are three concentric, substantial low mounds, occupying a width of 80 feet. They are grassy, but feel stony under foot.

6. *Long Philip Burn No. 1*.—One mile W.N.W. of the junction of the burn with the Ettrick, opposite Selkirk, on a conspicuous green eminence 750 feet above the sea. A deep abrupt little ravine, the Corbie Linn, winds round on the N. and E., but the fort is retired a little from the edge. It is difficult to make anything of the remains. The O.M. indicates a squarish oval of 200 by 170 feet, much quarried.

7. *Long Philip Burn No. 2*.—A quarter of a mile N.W. of the last, further up the burn, on the edge of a steep bank, descending to it on the S.W. side, about 750 feet above the sea. I could make out nothing definite. The O.M. gives two nearly complete oval ramparts, about 190 by 170 feet over all, but the plough has since entirely destroyed them.

8. *Linglee*.—Not on the O.M., but discovered by Mr James Wilson, Galashiels. It is about 600 feet above the sea, and is of the semicircular type, the unfortified base resting on the edge of a very steep, almost inaccessible descent of upwards of 100 feet on the N.E. side of Linglee Burn, half a mile above its mouth in the Ettrick, a little below Selkirk. Only the northern third of the semicircle and a fragment of the southern end, close to the edge of the ravine, remain. The former consists of a scarp 6 feet high, descending on a trench 9 feet wide at the bottom, with a counterscarp 5 feet high, and an outer slope 6 to 8 feet high, to a field. Further round, towards the edge, only the two scarps remain, 12 and 8 feet high respectively, and the trench becomes a terrace.

The next, although not strictly in the Ettrick valley, is so near it, and is so little connected with any other division, that it may be most suitably taken here.

9. *Bell Hill* (fig. 2).—One mile and a half east of Selkirk, 900 feet above the sea, in broken irregular ground, on an isolated eminence, completely and closely commanded, however, by a height which rises steeply on the N.W. The nearly level summit, measuring about 230 by 100 feet, is straight on the sides, and has slightly rounded N.E. and S.W.

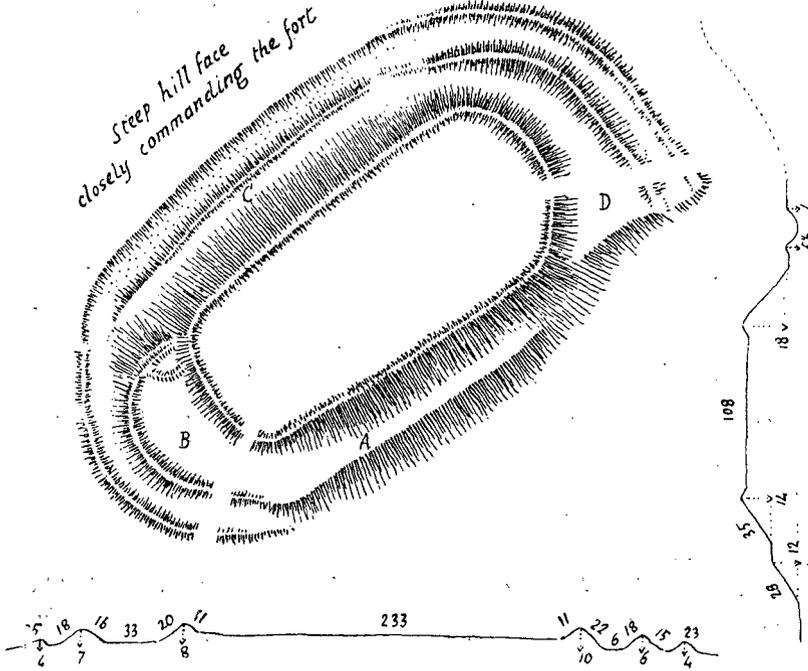


Fig. 2. Bell Hill, Selkirk.

ends. The inner defence consists of a parapet 2 or 3 feet high round the edge of the summit. To the S.E. the scarp from this is from 20 to 30 feet high, and has a narrow terrace (A) about half way down, which does not extend to the N. end of this face, and expands at the other end to a large level space (B) at the S.W. end of the fort. The opposite or N.W. face has a steep scarp, 18 feet high, falling on a narrow

parapeted platform (C) at the base of the scarp, which defends a trench, 5 feet deep and 7 broad at the bottom, beyond which rises the steep face of the hill which commands the fort. The S.W. and N.E. ends are each defended by three ramparts. At the S.W. end the scarp from the interior is about 8 feet high, and falls on the wide expansion (B) of the south-eastern terrace already mentioned ; this is defended by the middle rampart, which also closes it on the north by turning in and joining the inner rampart. At the angle of junction there is a small oval foundation enclosure. The outer rampart at this S.W. end is close in front of the middle one, and joins the outside of the trench on the north. At the N.E. end the two outer ramparts curve round northward to join, the one the outside, the other the inside of the trench of the N.W. face, but run straight south-eastward, so as to leave a widening space (D) between them and the incurving inner rampart, this space being unenclosed to the S.E. There are two entrances near the S.E. and S.W. angles : both may be original, but no characteristic features remain in either of them.

(B.) THE TWEED, FROM WALKERBURN TO GALA WATER.

The valley of the Tweed is studded with many forts in Peeblesshire, but on approaching Selkirkshire they gradually cease, and for a winding course of five miles the valley is entirely destitute of them. In the succeeding course of six miles, to the junction of the Gala, are the following four :—

10. *Caddonlee*.—Three quarters of a mile S.W. of Clovenfords, 638 feet above the sea, on the edge of a plateau, with a steep slope, facing N.W. to a little dry ravine. It has been of the semicircular type, the unfortified base resting on the edge of the ravine, but the plough has destroyed all but two fragments at each end, where the ramparts strike the edge of the slope. At the S.W. end there are three ramparts, with two intervening trenches, the former not exceeding 5 feet in height, and with a good deal of stone visible in sections, the latter narrow and flat-bottomed. The fragments at the opposite end are not so large, the inner one, if it exists at all, having more the character of a wall. The interior length is 558 feet (Mr James Wilson). Outside, to the N.E.,

the ground for about 100 yards along the ridge is much cut up with irregular low mounds and ridges.

Yair.—Nearly a mile W.N.W. of Yair House, on the slope of Craig Hill, overlooking Yair Burn, 900 feet above the sea, 300 above the burn. The site is a weak one, being a shelf on the hillside (section, fig. 3), easily approached on the flanks and commanded in the rear by the slope, which falls directly on it, with a steep descent into it 8 feet high. The wall has run along the top of this descent and downwards on the flanks in tolerably straight lines, but the front is curved, and measures from crest to crest about 150 feet each way. The fort, if it



Fig. 3. Transverse Section of Yair Fort.

be one, has apparently been of stone, and the interior is rough with irregular mounds.

11. *Sunderland Hall.*—A mile and a quarter W. by S. of the junction of the Tweed and Ettrick, on the edge of the final descent to the Tweed of Cribbs Hill, 250 feet above the river, and 625 above the sea. The O.M. makes it an oval of 375 by 275 feet, with only about a fourth part of the single rampart and trench remaining. I could only find uncertain traces, the plough having almost entirely effaced it.

12. *Rink Hill* (fig. 4).—The fort is not quite on the summit (638 feet) of the flat-topped hill, about 250 feet above the Tweed, half a mile W.N.W. of its junction with the Ettrick. To the S. and E. the descent is long and steep, but from other directions the approach is easy. The form is a broad oval, measuring 340 by 300 feet over all, the interior being about 230 by 190. The defences consist of an outer rampart; apparently of earth and stones, 3 to 6 feet wide on its flat top, which on the S.E. is prolonged by a steep natural slope to a height of 20 feet, but this height diminishes as the rampart circles round, till it is only 2 feet above the exterior on the north-west, where the ground rises from

the fort. In rear of this rampart is a trench, varying in depth beneath it from 3 feet on the south-east to 7 on the north-west. Within the trench is the main defence, which appears to have been another mound of earth and stone, with a stone wall on the top, but the mass of stony debris makes it impossible to determine the structure without excavation. In one place I found what appeared to be remains of the outer face of the wall, ten contiguous stones *in situ*, occupying a frontage of 24 feet.

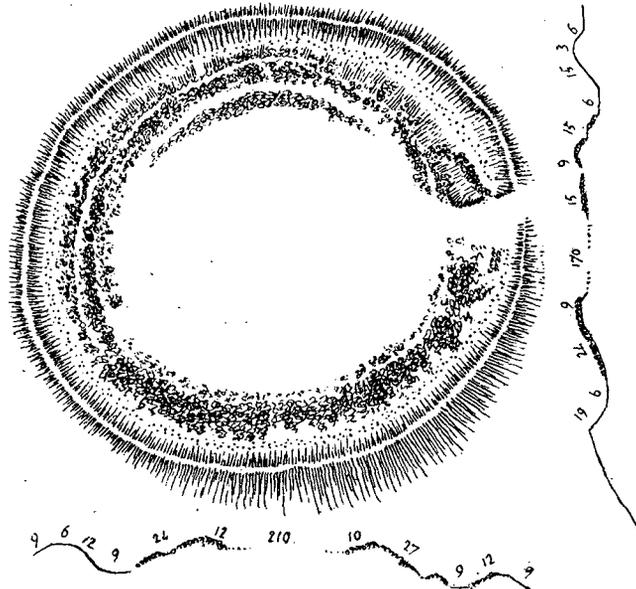


Fig. 4. The Rink Hill.

If this be really the outer face, the wall must have been set 2 or 3 feet back from the edge of the scarp, thus leaving a narrow berm. I could not find the inner face, but I judged the thickness of the wall to have been about 9 feet. The top of the mound on which the wall appears to have stood is several feet above the top of the outer rampart, where the ground outside falls, but is several feet below it where the outside rises. A quantity of debris, 150 feet long in rear of the inner wall on the north

side, may represent an additional wall where the natural strength was least. The single entrance, which is to the east, is much destroyed. It has apparently been 9 feet wide, and is strengthened by a wall running on either side obliquely up the scarp from the bottom of the trench at the middle of the entrance to join the main wall, thus forming a little closed work on each side of the inner part of the entrance. There are also remains of outworks here, but so overgrown with briars that I could not examine them. A low mound in the ploughed land to the west shows the position of the semilunar annex marked on the O.M.

(C.) GALA WATER.

The forts in the valley of the Gala have been pretty numerous, but the greater number have either totally disappeared or are in a sad state of decay, and I am not acquainted with any other district in Scotland where the destruction of forts in our own day has been so complete as here.

13. *Heriot*, the highest up the valley, being 15 miles above the mouth of the Gala, is 350 yards N.E. of Heriot Station, and 1000 feet above the sea. The O.M. gives it as a regular, well-marked oval of 350 by 300 feet, with a double ring, and as if well preserved. It is now almost entirely ploughed away, but small portions remaining at the two ends show a substantial mound, whose crest is 33 feet from the outer margin of the trench in front (Mr James Wilson).

14. *Corsehope*.—On the top of a ridge, 600 yards S.E. of Heriot Water, opposite Borthwick Hall, on the one side, 450 north of Corsehope on the other, 400 feet above the streams, and 1300 above the sea. The approach is easy along the ridge at the ends, but the ground falls steeply on the N.W. and S.E. flanks. The fort has been well described and planned by Mr William Galloway (*Proc. S. A. Scot.*, xiv. 25), and I shall merely supplement his ground-plan with cross sections (fig. 5) taken in 1892 by Mr F. R. Coles and myself. Mr Galloway found the dimensions to be 656 by 474 feet over all, and 410 by 284 from crest to crest of the inner line of the four concentric oval entrenchments. The width covered by the entrenchments varied from 85 feet to 106,

with an exceptional expansion to 130 for the special defence of the east entrance.

The sections (fig. 5) show that the defences are of an unusual kind. Their relief is trifling, but the shape in some places is so well defined that it is difficult to believe they have undergone any great change in the course of time. In the section on the N.W., going from the interior, there is first a trifling parapet not a foot high, with a gentle scarp 4 feet high, falling on a 16 feet wide terrace, with a trifling parapet at its outer edge; then a second scarp, leading to a second terrace 3 feet below the first, 14 feet wide, with a little trench or drain in its rear, and a trifling parapet in front; then a third scarp and terrace, with appurtenances exactly like the second, and 4 feet below it; lastly, a gentle scarp 3 feet high, falling on a fourth terrace, which may be a cart-track.

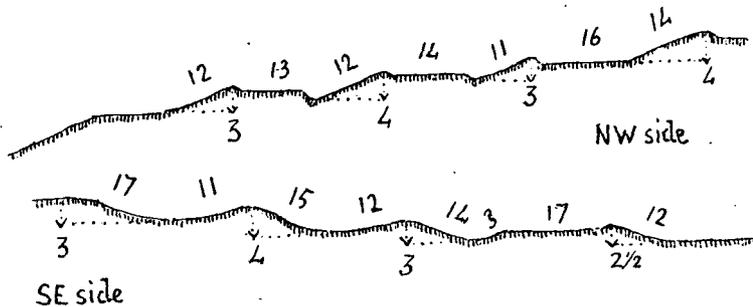


Fig 5. Corsehope—cross section.

The S.E. section shows three concentric ramparts, with intervening trenches, of the ordinary type, but of very low relief, and a fourth or outer line of defence, having a terrace with ditch in rear, and slight parapet and scarp in front, like those in the N.W. section. Northwards, however, the middle trench also becomes a terrace or banquette to where it reaches the entrance. For an apparent earthwork, the fort has a very low relief, and seems to be constructed on the terraced rather than the trenched system, although the slopes are unusually gentle for a terraced fort.

15. *Chapel Hill*.—On the opposite side of Corsehope, 700 yards due

E. of the last, and perhaps a couple of hundred feet lower, on a broad-topped ridge. Miss Russell (*Notes on the Catrail*, 1882) says of this fort that "it was stripped of its characteristic ring of stones by the tenant of the farm ten or fifteen years ago." Few stones remain; but a single "ring," rising a foot above the interior, and a true trench 8 feet below it and 3 below the exterior, are very distinct on the W. side of an intersecting modern wall, which cuts off about one-third of the fort eastward, where the plough has filled up the trench, leaving only the scarp. The trench is crossed by a ramp on the S., and to the W. contains three contiguous shallow "cells" in a row, each about 10 feet long and six wide, with a fourth a little N. of the entrance, which is towards the E. I have only met with two other Scottish forts with cellular spaces in the trench.

16. *Brotherston*.—On a southern ridge of Brotherston Hill (1380), between Brothershiel Burn and Armet Water, three forts are marked on the O.M. The furthest N., 200 yards S. of Brotherston Farm, 1000 yards above the junction of the streams, about 1100 feet above the sea, is represented as a single circular ring 150 feet in diameter. I have no information about it.

17. *Nether Brotherston* (No. 1), 700 yards above the junction, and probably 1100 feet above the sea, is represented as a double circular ring, the inner circle about 250 feet in diameter, complete, the outer one, 370 feet in diameter, remaining only on the N., and elsewhere drawn as a dotted line, as if merely traceable. Mr James Wilson found nothing but small portions of the inner one at three points.

18. *Nether Brotherston* (No. 2), nearly 300 yards N. of the junction, 950 feet above the sea, represented as a regular double oval ring, complete, the outer one about 250 by 230 feet, the inner one 150 by 130. Probably it is entirely gone, as Mr Wilson passed over the ground without seeing anything of it.

19. *Brockhouse*.—Half a mile S.S.E. of the farm of Halltree, about as far N.N.W. of the junction of Brockhouse Burn with the Gala, 200 yards W. of the latter, fully 100 feet above it, and 900 above the sea, on a dome-shaped eminence in a plantation. The O.M. shows it as a

well-marked double oval ring, of about 450 by 300 feet, which agrees fairly with Mr James Wilson's interior measurements of 409 by 256 feet. He found it, however, "terribly ruined by quarrying." There were some remains of a strong inner wall and deep ditch, but no definite traces of the outer wall. The ground was ploughed.

20. *Toddleburn*.—A mile and a half above its junction with the Gala, $\frac{3}{4}$ of a mile N.E. of Hoppringle farm, about 1050 feet above the sea, on Middle Hill, 350 yards above the angle of the junction of Toddle Burn and Middle Burn. The O.M. gives a small well-marked double circle, about 180 feet diameter over all, but Mr James Wilson ascertained from the farmer that it is now only traceable in a ploughed field.

21. *Symington*.—Less than half a mile. W. of Symington House, under $\frac{3}{4}$ W. of the Gala, about 300 feet above it, and 1100 above the sea. Represented on the O.M. by a single oval dotted line, as if the remains were barely discernible, measuring about 220 by 120 feet. I have no information about it.

22. *North Watherston*.—Half a mile N.W. of Watherston farm, from which there is access by a farm road, about as far W. of the Gala, about 450 feet above it, and 1050 above the sea. The site, though elevated, is a tolerably level one, not marked out by natural features. On the O.M. a regular oval of two dotted lines is represented, as if the fort were merely traceable, measuring 400 by 350 feet over all, and 250 by 200 in the inner oval. Neither Mr James Wilson nor I could find the slightest trace of it.

23. *South Watherston* (fig. 6).—Nearly 2 miles W.N.W. of Stow, fully 1000 feet above the sea and 400 above Gala Water, where it flows past Watherston farm-house half a mile to the E. The northerly side of the fort is near the edge of a steep little ravine, but the other sides have no natural strength, the site being on the gentle eastward slope of a hill. On the O.M. the fort is called Roman, and is represented as a regular rectangle with two ramparts, and an entrance in the middle of the S. front. But in reality only the S.W. side (A) and part of the S.E. and N.W. are straight, the S.W. angle being a right angle, the N.W. one obtuse, and nearly the whole of the N. and E. face is

closed by a wide curve (B), near the S. end of which is the entrance. The defences consist of an outer rampart, generally flat-topped, with a flat-bottomed trench in its rear, the scarp of which had no doubt been crowned by an inner wall, of which only the faintest traces remain. The outer rampart appears to be earthen, shored up from the trench in some places by stone. In consequence of the rise of the hill westward, this rampart is only $2\frac{1}{2}$ feet above the exterior in this direction, but where it runs down the slope on the S. front it is 5 feet above the

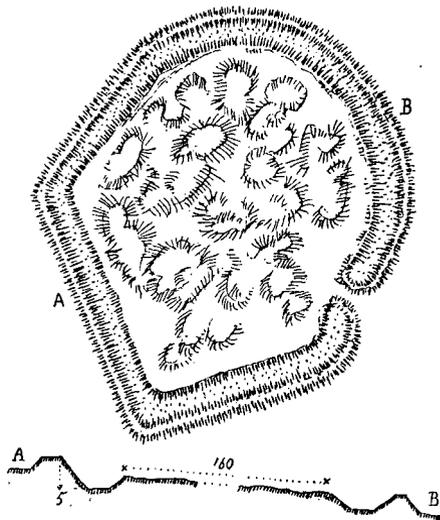


Fig. 6. South Watherston.

exterior. On both these faces it is 5 feet above the trench. The interior, which is full of low irregular mounds, does not rise more than $2\frac{1}{2}$ feet above the trench. It measures only about 160 feet in diameter.

24. *Craigend, Stow*.—Three-quarters of a mile N.N.W. of Stow church, 850 feet above the sea, and 250 above the Gala, which flows a quarter of a mile to the S. The site, on a pleasant plateau on the gentle descent of a hill, is conspicuous from afar, owing to the contrast of its vivid green with the duller colour of the grass field, above which it

is raised from 5 or 6 to 10 or 12 feet all round. The fort is completely demolished, but seemed to me to have been surrounded by two ramparts, widely apart, and the O.M. indicates this by two oval concentric dotted lines, about 400 by 350 feet over all, and upwards of 100 feet apart. Mr James Wilson, who examined the spot carefully, is of opinion that there were three ramparts, and his measurements give 360 by 340 feet over all, with an interior of 200 by 180 feet. The interior is intersected by numerous low mounds, enclosing irregular spaces of considerable size.

25. *Stow*.—Half a mile N.E. of the village, on a nearly level site, 900 feet above the sea, 300 above the Gala. I could not find the slightest trace of it in the field, then under turnips. It is represented on the O.M. by two concentric dotted circles, about 300 and 150 feet in diameter respectively.

26. *Broch or Tower, Bow*.—A mile and three-quarters due S. of Stow, a quarter of a mile N.E. of the Gala, 450 feet above it, and 1020 above the sea, occupying a strong position on a narrow plateau, conspicuous from the railway below. It is marked "castle" on the O.M., but Mr James Wilson, having procured its excavation, proved that it had been a round tower of uncemented masonry, the wall being 13 feet 6 inches thick, and the interior 31 feet 9 inches in diameter. These are ordinary broch dimensions, and the discovery of an undoubted broch near it renders it extremely probable that the Bow tower was a broch, but the remains are too scanty to prove it absolutely [see *Proc.* 1892, p. 68, for a full description by Mr James Curle, jun., F.S.A.].

27. *Broch and Fort, Torwoodlee*.—A mile and a half N.W. of Galashiels, 300 yards S.W. of the Gala, 300 feet above it, and 800 above the sea, on a commanding site, where the pass, through which the branch of the N.B. railway goes towards Peebles, joins the Gala valley. The fort was long known as Torwoodlee Rings, but the broch was only uncovered in 1890, under the superintendence of Mr James Wilson and other members of the Ramblers Club of Galashiels, who were the first to discover that the remains of a circular structure existed within the fort. The whole particulars of the discovery are so well described by Mr James Curle in the paper quoted above that I shall merely note a few details here. The broch is a large one, the interior circular court being 40 feet in

diameter, and the wall from 17 feet 6 inches to 19 feet thick. The broch is at the upper end of the slightly sloping site on which the fort stands, and is partially and closely surrounded by a trench, which at one point opens into the main trench that lies between the two walls of the fort. The position of the broch, therefore, is analogous to a common one of the motes in regard to their base-court.

The fort has been a very strong one, sadly dilapidated now, upwards of 2000 cartloads of stones having been taken from it about fifty years ago. But near the broch, and along the W. and N. sides, remains of two massive stone walls testify to its former strength. The precise shape and dimensions are not ascertainable, but it has been apparently a broad irregular oval, the W. side indeed being straight, measuring 490 by 430 feet over all. Moreover, there are remains to the N., W., and S. of an outer deep trench, with mounds on either side, which if complete must have enclosed a space not far short of 1400 by 1000 feet. It is to be regretted that the walls of the fort have not been excavated, to prove whether they are merely heaped-up stones or are built. Some light might thus have been thrown on the question whether the broch and fort were of the same period. The Catrail is marked on the O.M. ascending from the S. and ending in the fort, but it cannot now be traced on the hill-face, which has been long cultivated, although it still remains at the foot of the hill near the Gala.

Mossilee.—The site of a “camp,” but without any remains, is marked on the O.M. 600 yards N. of Mossilee, $\frac{1}{2}$ a mile W. of the Gala, and close to Galashiels. It appears to be about 600 feet above the sea, and 150 above the river.

A “camp” is marked on the O.M. about $\frac{1}{2}$ a mile above Galashiels, on the right bank of the Gala, as a narrow crescentic enclosure about 200 feet long and 50 broad in the middle, the straight side of which is formed by the Catrail, where it runs near the edge of the steep bank of the river, but it does not appear to me to be a defensive work.

(D.) THE TWEED, FROM GALA WATER TO THE LEADER.

The Tweed flows due E. from the Gala to the Leader in a course of 4 miles. On the N. side there is but little haugh, beyond which the bank

rises abruptly to a pretty uniform height of 500 feet. On the S. side the flat is more extensive, and the rise is more gradual to the broad ridge of Bowden Moor, 600 to 700 feet above the river, but becomes very steep further E., where it culminates in the three-peaked Eildon, the highest point of which is 1100 feet above the stream. The width of the valley from crest to crest of the ridges is about $2\frac{1}{2}$ miles opposite Bowden Moor, but it narrows to $1\frac{1}{2}$ at the Eildons. On the top of the N. bank are remains of three forts; and on the S. side, three lie on the slope from Bowden Moor, one on its western and highest point, and one on the N.E. top of the Eildons.

In considering the forts near Melrose we derive some assistance from an account of the parish, written before 1747, by the Rev. Alexander Milne, although unfortunately he seems to have been gifted with more than the average capacity for vague and loose statements, characteristic of descriptive writers of his time. In particular, he seems to have greatly exaggerated the size of the forts.

28. *Camp Knowe*.—On the brow of the ridge which bounds the north side of the valley of the Tweed above Gattonside, nearly 500 feet above the river, and 785 above the sea. No fort is marked on the O.M., but a low broad mound on the edge of the descent marks distinctly enough the remains of an oval fort about 270 feet in length, probably of stone, as the mound is rough and hard under foot. The rest of the site is ploughed. The Rev. Mr Milne describes this as “a large camp. It has a rampier or wall about it of stone, about half a mile in compass. There is a plain entry from the W. and E.; near to the W. entry, called the closses, there are a great many fine springs.” The site appears to me to be well defined, and I do not think its compass could have exceeded 250 to 300 yards.

29. *Chester Knowe*.—About a mile E. of the last, near the edge of the same ridge, 800 feet above the sea, 500 above the Tweed, the remains of an oval fort of one rampart and trench (?), about 260 by 200 feet over all, is marked on the O.M. The plough and quarrying have entirely effaced it. Mr Milne calls it “a large camp, with a deep ditch, the S. side much levelled by tillage, about $\frac{3}{4}$ of a mile in circumference.”

30. *Easter Hill*.—A mile E.S.E. of the last, on the edge of the same ridge, 300 feet above the Tweed, and half a mile W.N.W. of its junction with the Leader. On three of the sides, which are opposite level ground, a low mound and shallow trench mark the limits of an oval fort, about 300 by 260 feet over all. On the remaining side, where it comes to the edge of the descent to the river, there is a steep scarp 8 feet high, with a terrace or shallow trench at its foot. Mr Milne describes this fort as "a camp of no great compass, the trench pretty deep."

Passing now to the south side of the Tweed, we take the forts in their order from W. to E.

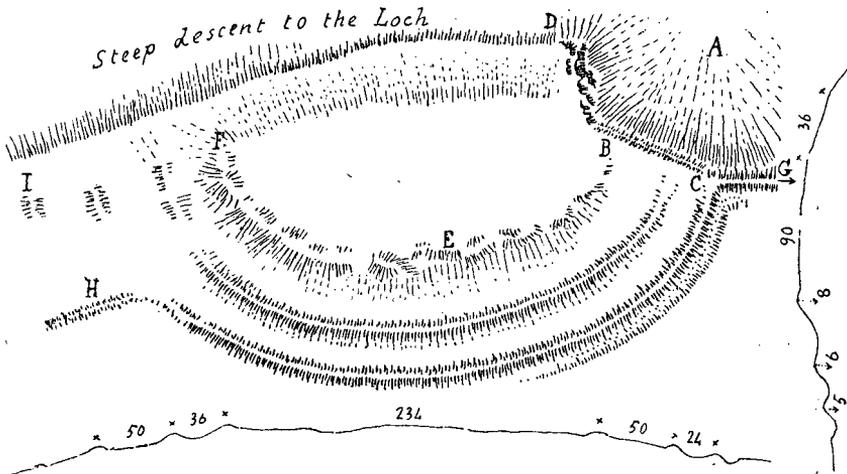


Fig. 7. Cauldshiels.

31. *Cauldshiels* (fig. 7).—At the W. end and highest point (1076) of Bowden Moor, on a knoll 10 to 20 feet above the level ground that lies for a short distance in its immediate front to the S., and stretches along the moor eastward to the Eildon Hills. From the W. end the ground slopes gently at first, and then rapidly, but from the N. front it falls at once steeply to the loch, 270 feet below. Here the defence is confined to the natural strength of the position, except at the E. end, where

a little ascending ravine or hollow (A) cuts into the position, and is defended at the top by a slight rampart (B C) facing N. for 30 yards, flanked by a little line of rocks (B D) facing E., which runs out at right angles to join the N. edge. The two ends and the S. front are covered by two concentric, gently curved ramparts, the inner one half way down the little slope, the outer one at its foot, the latter having a slight trench in front at the E. end. These ramparts appear to be of earth; but a third, probably of stone (B E F), of which only slight traces remain, formed the interior defence at the edge of the flattish top of the knoll. The interior, which is irregular with obscure mounds, measures 234 feet in length from crest to crest of the inner rampart, and 125 feet in width, the over-all dimensions being about 400 by 200 feet. A substantial mound (G), 3 feet high, starts directly from the angle of junction of the slight rampart (B C) with the outer rampart, and can be traced a long distance eastward in the moor, but gradually diminishing in size. Another slighter mound (H) leaves the outer rampart near its W. end, and runs down the southerly descent of the hill towards the "military road" of the O.M., which has been traced by Mr James Wilson for about 5 miles south-eastward to near Blackchester. A fragment of another mound (I) lies on the slope, before it becomes very abrupt at the W. end of the fort.

32. *Haxil Cleuch* (fig. 8).—On the N. edge of Bowden Moor, about $\frac{1}{2}$ a mile E. of Cauldshiels Loch, 800 feet above the sea, protected on the E. by a steep little ravine; its pointed S. end cut off from the level moor by a slight trench (A), cut through a little nose (B) that projects on the moor; the W. side rising a few yards above the dry, shallow head of Haxil Cleuch (C); the broad N. end standing upon and commanding the long gentle slope to Marslee Wood. The form of the fort, produced by the nature of the ground, is crescentic. Except a rampart in rear of the trench at the S. end (D), 5 feet in height above it and 22 feet across, and another along part of the S. end (E), there is little sign of fortification. The dimensions are 200 by 140 feet.

33. *Marslee*.—In the wood of that name, and $\frac{1}{2}$ a mile N.E. of Cauldshiels Loch, on the W. side of a burn, in a position with no natural strength, 600 feet above the sea, there has been an oval fort;

measuring about 250 by 150 feet, of which a broad rampart, with a wide, deep trench, remains on the W. side only.

34. *Kaeside—Castlestead of the O.M.*—Above $\frac{1}{2}$ a mile E. of Abbotsford, 400 yards N. of Kaeside, 450 feet above the sea, in a sloping field, on the edge where the descent becomes steeper. It is scarcely recognisable. The O.M. gives an oval ring of 160 by 90 feet, with the fragment of an outer rampart to the N.; but, according to Mr Milne, this "camp"

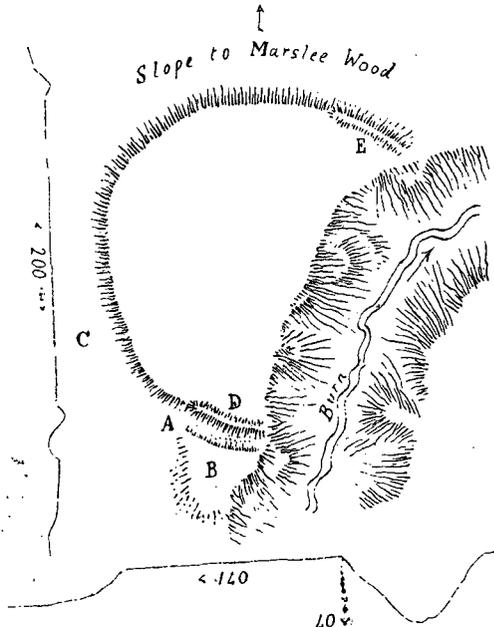


Fig. 8. Haxil Cleuch.

was "surrounded with a deep ditch, in some places with two fosses, more than a mile and a half in compass, called the Kaeside, or rather the Kidside. Some part of the ditch is about 10 feet high. The place where the camp has been, there are two very deep fosses to the N., but to the S. the rampiers are broken down by cultivation." It is difficult to make out here whether the enclosure called the Kaeside is the same

as "the camp" in the second sentence. If his description is at all reliable, Kaeside may have been a rare or unique example in Scotland of a prehistoric town in a low situation.

35. *Eildon*.—This great fort, or fortified town, is of such special size and importance, that I have described it in a separate paper (*Proc. S. A. Scot.*, 1893-94, p. 111). It is on the top of the N.E. summit of the hill, rising to 1300 feet above the sea, and is girdled by a triple line of defence, about a mile in compass, apparently on the terraced principle. Within the lines are several hundred excavations, in all probability for the foundation and shelter of huts.

(E.) LAUDERDALE.

This district is specially worthy of investigation, as it is clearly defined by nature, and contains an unusual number of well-preserved examples. It affords a fair index, therefore, of what may have been the number of forts in other districts where the destruction has been greater, as well as of the nature of these prehistoric works; and an examination of them certainly lends no support to the theory that they were mere cattle-enclosures, as there is sufficient evidence that nearly all of them were surrounded by at least two "rings," of massive proportions. The Leader and its tributaries drain a district about 15 miles in length by 10 in breadth in the upper and middle reaches, but narrowing to a mile or two below, and has contained at least 23 forts, nearly all still recognisable.

HEAD WATERS OF THE LEADER.

36. *Kirkton Hill*.—Three-quarters of a mile W. by S. of Channelkirk, 1000 feet above the sea, on the E. side of and 200 feet above Raughy Burn, to which the ground slopes very steeply. Three concentric ramparts on the S.W. and two on the N.E. represent on the O.M. the ends of an oval fort 570 feet long (523, Mr James Wilson), of which the sides are completely gone. At the N.E. end the outer rampart is 17 feet, the inner 30 feet, across, and the distance between their crests

is 36 feet. The S. side and whole interior are quarried. (Information from Mr James Wilson.)

37. "*Roman Camp*," Channelkirk.—Not a vestige of this remains, if we may trust the O.M., but Roy's plan represents two straight entrenchments, meeting at an acute, slightly rounded angle, the easterly one 1250 feet long, the westerly one 1650 feet long, with an entrance about the middle, covered in front by a small straight traverse. The S. end of the W. entrenchment is prolonged on the plan in a re-entering curve round a little recess in the bank of the neighbouring ravine, and ends in a little redoubt, like that at Inchtuthill, at a point projecting into the ravine. The base of the redoubt towards the interior of the camp is straight, and is defended by three ramparts and trenches, but round the edge of the point there is merely a single semicircular rampart. On the somewhat irregular ground to the S., Roy shows no remains.

38. *Hillhouse*.—Between the Hillhouse and Kelphope Burns, 1100 yards N.N.W. of their junction, 170 yards E. of the former, 200 feet above it, and 1000 above the sea. Pear-shaped on the O.M., 600 feet long, and 480 wide at the broad N. end. Apparently fragmentary and ill preserved, but with three defensive lines at the ends, two on the W. side and one on the E. (No other information.)

39. *Carfraegate*.—A quarter of a mile S.W. of Carfrae, 300 yards E. of Carfraegate and Headshaw Burn, 200 feet above it, and 987 above the sea. Three ramparts well-marked on the O.M. occupy a width of 90 feet at the S.E. end of what must have been an oval fort of considerable size. (No other information.)

40. *Tollis Hill*.—The furthest N. of the Lauderdale forts, $2\frac{1}{2}$ miles S.S.W. of Lammer Law, 300 yards E. of Kelphope Burn, 200 W. of Tollis Hill farm, and about 1200 feet above the sea. A circle, apparently of a single rampart, with trench in front; 360 feet in diameter on the O.M. (No other information.)

41. *Langeroft*—(fig. 9—from a plan by Mr F. Lynn, F.S.A. Scot.)—lies 700 yards N.E. of the junction of Soonhope and Whalplaw Burns, 300 yards E. of the former, 250 W. of the latter, about 400 feet above them, and 1150 above the sea. Long steep descents run down on all sides except the N., where the approach along the ridge is easy. It is

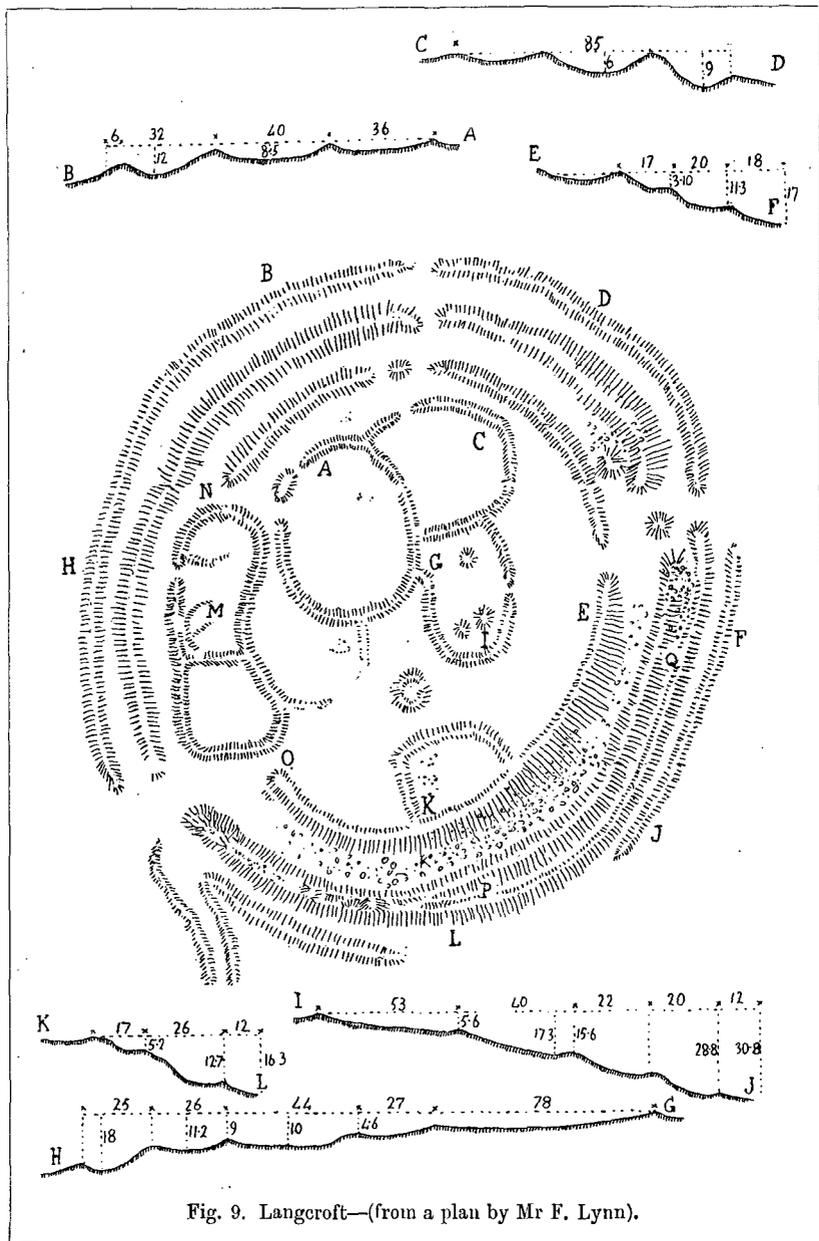


Fig. 9. Langcroft—(from a plan by Mr F. Lynn).

difficult to decipher the remains, partly because the ramparts change in plan and structure as they circle round, partly from dilapidation. This difficulty was sufficiently great, but I was further hindered from making an intelligible plan by a storm of wind and rain during my visit. Fortunately, however, Mr Lynn, after failing from a similar cause, has succeeded in making a careful plan, with cross sections, showing the true levels, all of which I have reproduced in fig. 9.

Beginning on the N., where the ground rises gently *from* the fort, there are three ramparts, but turning westward, the inner one stops (at N), and its line is taken up by the outer mound of an interior enclosure (M), 150 feet long and 50 wide. As the lines circle round to the S., at the S. end of the enclosure (M) there is an entrance (O), and beyond that the inner of the three ramparts begins, not opposite the outer side of the enclosure (M), as before, but opposite its inner side. Circling round the S. of the fort this inner line becomes little more than a stony scarp (below O, K, E). The middle rampart also changes its character here, widening out, and having, half way down its scarp, what I took to be a berm 4 feet wide (P to Q), but what Mr Lynn thinks to be the levelled foundation for a wall. The outer rampart on the S. is trifling, disappears entirely in the middle (at L), and becomes a terrace as it turns northwards.

About the middle of the E. side, there is another entrance, beyond which begin the three ramparts of the N. face that complete the circuit; but the outer one (D), instead of being in line with the outer rampart of the E. face (F), is opposite the "berm" of the middle rampart (Q). As Mr Lynn's sections show, the relief of the mounds is generally slight, owing, no doubt, to extensive dilapidation, but the stony scarps in some places are as much as 10 or even 12 feet high.

Of six large curvilinear enclosures in the interior, five abut on each other, the westmost one of which (M), as already explained, forms part of the defensive lines. It is subdivided by a transverse mound, and within it, as well as elsewhere, there are traces of "hut circles," and several obscure little stony heaps or mounds are scattered about the interior. The sixth enclosure (K) rests on the S. inner wall.

42. *Addinston* (figs. 10, 11, and 12).—Three and a half miles N. by W.

of Lauder, 1000 feet above the sea, and 300 above the Cleekhimin Burn to the E. The site is near the edge of a steep descent to the burn; the approach

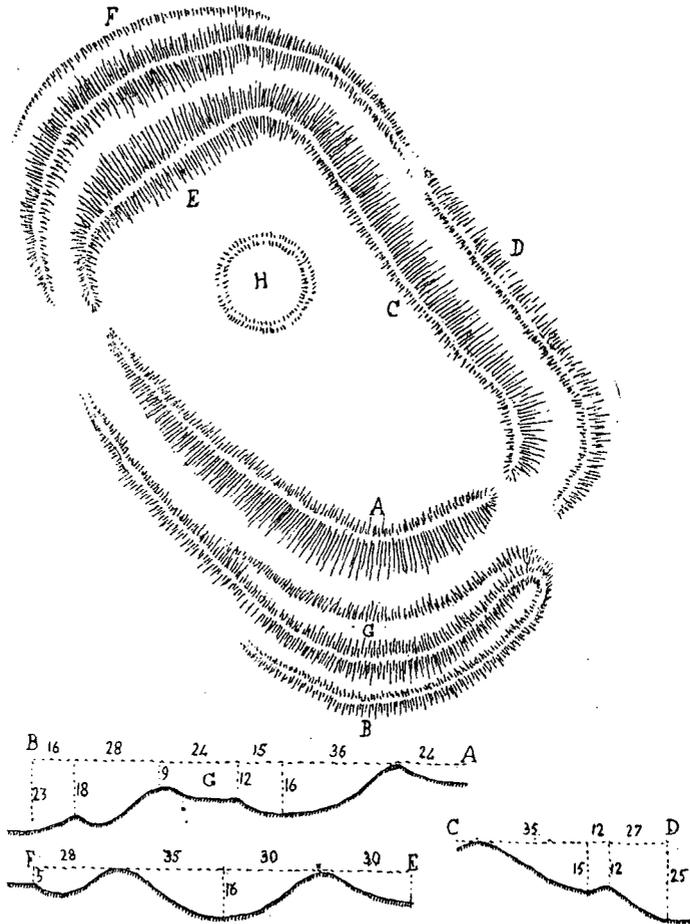


Fig. 10. Addinston.

along the ridge from the N.W. is nearly level, elsewhere the ground falls away gently. The interior is raised from 10 to 20 feet above the

exterior on the flanks and at the S.E. end, but at the N.W. end is some feet lower than the exterior. Thus it would appear that the fortress



Fig. 11. Ramparts, S.W. corner, Addinston.

is carved out of a natural mound. The flanks of the work are nearly straight, so is the inner rampart at the N.W. end, but the outer lines



Fig. 12. Distant view of Addinston.

there and all the lines at the S.E. end, as well as all the angles, are curved. The interior from crest to crest measures about 300 feet in length, by 180 in breadth at the N. and 150 at the S. end. The ramparts are unusually

massive, but the plough has partially destroyed them on the outside. At present two extend all round, and a third (B), with a trench in its rear, beginning at the W. side of the S.E. entrance, gradually disappears in the ploughed field on the S.W. flank. There is also an outer trench at the N.W. end. The ramparts are remarkably strong at the N.W. end (section E, F), where the inner one is 16 feet high to the outside, and at the western side of the S. entrance (section A, B, and fig. 11), where for a distance of 160 feet there is a raised platform (G) in rear of the middle rampart (shown in the view, fig. 11). There may have been an entrance at the N.W. angle, but the works are almost obliterated there. Inside, near the N. end, there is a low circular mound, enclosing a space (H) about 40 feet in diameter.

As a good distant view of a well preserved example of these old forts is rarely got, I give (fig. 12) one of Addinston, taken from a neighbouring height, from a sketch by Mr Lynn. The sections in the plans are also his; and being taken by tape and level, are strictly accurate.

43. *Burncastle*.—Two and a half miles N. by E. of Lauder, $\frac{1}{2}$ of a mile N. of Burncastle farm, 1000 feet above the sea, and 200 above the Earnsclough Burn, which flows 200 yards E. of it. The position is strong, as besides the deep Earnsclough on the E. it has another ravine on the W. and a considerable fall towards the farm on the S. It is only northward that the ground is pretty level for a short distance. The rings have been almost entirely ploughed down, but a fragment of the S. end remains in a plantation, showing two substantial mounds, apparently of earth, the inner one 6 feet high, the outer somewhat less, with a slight trench in front. In rear of the inner mound the ground appears to have been slightly trenched for a width of 30 or 40 feet, perhaps to provide earth for the mounds. In the field the mounds of the N. end are still traceable and are four in number, the two outer ones, as shown in the O.M., not being quite concentric with the two inner ones, and probably indicating an attached outwork. Excluding them, the over-all length on the O.M. is 500 feet. The breadth of the oval cannot be ascertained.

44. *Dabshood, Earnsclough*.—Two miles and a half N.E. of Lauder, 650 yards S.E. of the deserted farm-house of Earnsclough, 1256 feet

above the sea, and 500 above the Earnsclough Burn, which flows a quarter of a mile to the W. of it. The site is a commanding one, on the last conspicuous height of a spur of the Lammermoors, overlooking Lauderdale, and the fort is much the largest in the district. Its great elevation has not saved it from the plough, but enough remains to show its general form and structure. From a careful plan by Mr Francis Lynn, it is an oval, much broader at the S.E. than at the N.W. end, measuring 800 by 600 feet over all, and 650 by 450 within the defensive lines: the O.M. makes it somewhat less. The defences consist of two concentric earthen ramparts, with a trench in front of each, the whole doubtless extending originally all round, although now entirely destroyed by the plough in the middle of the N.E. and S.W. sides. Where best preserved the inner rampart is about 6 feet, the outer one 8 feet above their respec-

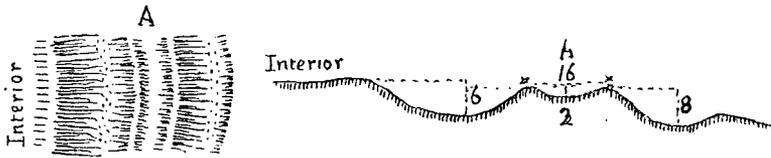


Fig. 13. Dabshood, Earnsclough.

tive trenches. The structure of the outer rampart (fig. 13, on double the usual scale) is peculiar, the crest (A) being grooved to a depth of from a few inches to 2 feet all along the parts preserved on the N.E. and S.E. sides, where attack was easy from the level or gently sloping ground in front. The width of this grooved or double rampart is from 40 to 45 feet over all, and of the grooved top about 16 feet. The inner rampart has a very trifling elevation above the interior, and in some places is altogether wanting (this description is from information by Mr F. Lynn).

MID-LAUDERDALE.

In this division I have placed the forts near Lauder, including four on Blythwater, although that is really one of the head waters of the Leader.

45. *Nether Bowerhouse* is so printed in the O.M., but Bower is written

Bour in old documents, and the pronunciation is *Boorus*; 3 miles N.W. of Lauder, $\frac{1}{4}$ of a mile W. of the farm-house of the above name, 1000 feet above the sea, on the eastern slope of Collie Law (1255), but with little natural strength. The site is planted, and has been quarried. The O.M. makes the fort a somewhat straight-sided oval, about 350 by 240 feet over all, and 270 by 170 within the two mounds, which seem to be of heaped-up earth and stones, although at one place where broken in upon by quarrying, on the line of the inner mound, some well-fitted dry-masonry is exposed, founded on the rock. The inner rampart, where best preserved, is about 6 feet high and 30 across, the outer somewhat less; the two, with the intervening trench, occupying a width of 75 feet. Marshy ground close to the W., with a dry watercourse descending the hill from it, indicate a water-supply before drainage of the country.

46. *Blackchester*.—Two miles N.W. of Lauder, 800 feet above the sea, in a position of no natural strength except to the E., where a short steep slope precedes the gentle descent to the dale. The mounds are planted and the interior is quarried. The shepherd's house of *Blackchester*, with its appurtenances, occupies the S. side, and has caused the destruction of that side, but elsewhere the mounds are well preserved. They are three in number, the outer two being close together and of unusual size, the inner one somewhat retired and of less strength. Where measured by me, the three "rings" occupied a width of 135 feet, the outer one was about 40 feet across and 5 feet high to the outside, the middle one 50 feet across and 12 feet high to the outside.

A shallow trench in rear of the middle mound was probably excavated to get earth to add to the height of the rampart. On the W. and weakest side there is also a slight trench in front of the outer rampart. The mounds seem to be mainly of earth, as very little stone is visible. According to the O.M. the fort is circular, 500 feet in diameter over all, and 300 inside. Two or three small springs, close outside to the E., indicate a good water-supply formerly.

47. *Chester Hill, Lauder*.—Half a mile S.W. of Lauder church, on the S.E. side of Lauder Burn, on an eminence upwards of 100 feet above it, 750 above the sea. On the O.M. it is circular, 320 feet in diameter

over all, 250 inside, with two rings, nearly complete, though partially quarried. I am informed that scarcely a trace of it remains.

48. *Harefaulds* (fig. 14, adapted to my scale from Mr Milne Home's plan, *Proc.*, ix. 466).—Three-quarters of a mile W.N.W. of Blythe farm, 170 yards N.E. of Blythe Water, 200 feet above it, and 1000 above the sea. The ground falls gently from it to the S.E., and steeply to the S.W., but rises gently northwards to a lower summit (1090) of Scour Rig (1191), one of the numerous broad-backed hills or

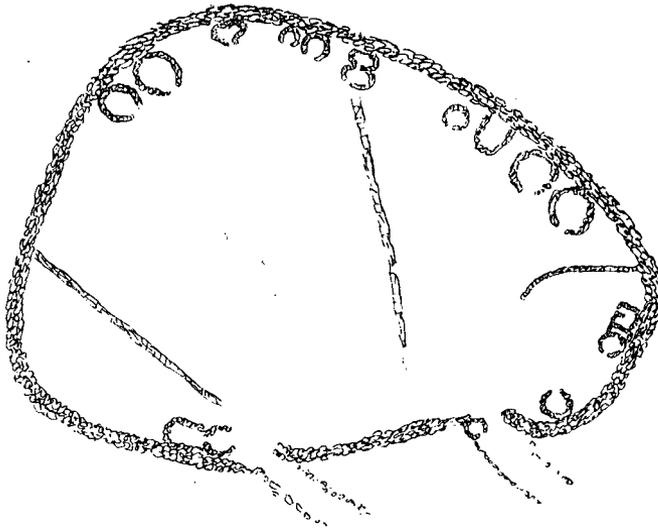


Fig. 14. Harefaulds, Lauder.

ridges which descend southwards from the Lammermoors. This fort, although not recognised as such on the O.M., is one of the most interesting in Southern Scotland, as it contains remains of numerous stone huts. They are more or less circular, although some partition walls are straight, and some of them still stand to a height of 3 or 4 feet. According to Mr Home, they vary from 8 to 15 feet in diameter. His plan shows only about twenty, not a fourth part of those that are traceable, probably because he only gives those of which the remains are substantial.

He thought that some of the cells were recessed in the wall on the N.E. side, and that the wall was thicker there, but it seemed to me that this appearance was merely due to a congeries of cells abutting on the wall. They are almost all connected directly, or by opening into each other, with the rampart wall, particularly on the N. and E., where, including those not marked on the plan, they are two or three deep in some places. The fort has suffered terribly from dilapidation within the memory of man, but facing-stones remaining on the N.E. show that the wall was 11 feet wide there. The main and probably only entrance is from the S. by a kind of natural hollow way formed by parallel rocky mounds, which run 30 or 40 yards outwards. But these natural flanking defences are not now closed by any work running towards the wall. Possibly there was another entrance a little further W. on the same side. Extensive "rigs" testify to cultivation outside by a crofter population, which I am informed by Mr John Romanes, F.S.A. Scot., was formerly settled here.

49. *Blythe*.—350 yards S.W. of Blythe farm and the same distance east of the Blythe Water, about 150 feet above it, and 850 above the sea, on a prominent level spot, with gentle declivities. Represented on the O.M. as a regular oval, with two ramparts, the outer one the wider of the two, and measuring 370 by 280 feet over all, 280 by 200 internally. These ramparts are still traceable as low, rough, hard mounds, and the interior feels hard and stony under foot in many places. Some good-sized stones lie about, and a few fragments of curved foundations, one of which is a semicircle of stones, are visible. Probably this was a stone fort, with buildings inside; but if so, it has been long plundered, and only its hard surface has saved it from total effacement by the plough; which has come close up all round.

50. *Heugh*.—On the east side of Blythe Water, 200 yards above its junction with Brunta Burn, 700 feet above the sea. A semicircular work, the straight unfortified base, 230 feet in length, resting on a steep slope to the stream, 40 to 50 feet below. The level interior, 105 feet in greatest breadth, is raised only a few feet above the field to the east, and there is no parapet to the scarp, but at the ends of the base considerable mounds, with a trench at the south end, cut off the site from the continuation of the bank-edge. In rear of the scarp, on the

northern half of the semicircumference, there is a row of four squarish slight hollows, and a platform or roadway 12 feet in width.

51. *Thirlestane*.—700 yards N.E. of the hamlet of that name, and 1100 west of the junction of Blythe Water and Brunta Burn, on an eminence 820 feet above the sea, and 200 above Boondreigh Water, which flows 700 yards south of it. The access, however, is easy from the north and east. The site is covered by a dense and utterly neglected plantation, impenetrable even to a ray of light in some parts. From what can be seen, and from the Ordnance plan, the fort appears to be circular, 330 feet in diameter over all, 220 internally; and the defences consist of two concentric ramparts, their crests 18 feet apart, the outer and stronger one about 5 feet high on the N. side. A third concentric "ring," 40 feet further in, is perhaps too trifling to be considered a defensive one.

I am informed by Mr H. H. Craw, F.S.A. Scot., that his father demolished more than one fort on a farm in this neighbourhood; but I do not include these, as no precise information can be got about them.

LOWER LAUDERDALE.

As the Leader receives no feeders of any size in the last six miles of its course, the dale contracts more and more in width, till towards the mouth of the river the ground which it drains is only a mile or two in width. In this stretch only one fort remains distinctly recognisable, but there is good evidence that at least five others existed formerly.

Legerwood.—A mile S.W. of the church, on a height upwards of 800 feet above the sea. A circle, 260 feet diameter, faintly marked on the O.M. No remains now.

52. *West Morriston*.—200 yards S.W. of the farm of that name, $1\frac{3}{4}$ miles N.E. of Earlston. Marked on the O.M. by a dotted circle, 400 feet in diameter, as a site only. It is still traceable by a difference in the vegetation in a slightly elevated field 500 feet above the sea.

The Rev. Mr Milne makes brief mention of four "camps" as existing early last century on the west side of the Leader, in the lower part of its course. Although none of them are marked on the O.M., at least three are still traceable.

53. *Bridgehaugh*.—"Near the Leader, opposite Bridgehaugh, there is a considerable camp, greatly defaced by tillage." This is all that Mr Milne has to say of it. Probably the site is not now recognisable, but I have no further information.

54. *Ridgewalls*.—Situated $1\frac{3}{4}$ miles W.N.W. of Earlston, close to the E. of Carolside Mains, or Cairniemount, farm-house garden, about 750 feet above the sea. Mr Milne describes it as "a large camp, a mile N.W. of Clackmae, with three deep trenches; the space between the trenches so large that it is turned to arable ground, about $\frac{1}{2}$ a mile in compass." This description, except in regard to size—a feature of the "camps" always much exaggerated by Mr Milne—was confirmed by a plan on an old estate-map, once seen by Mr Dunn, F.S.A. Scot., Earlston, but which has unfortunately disappeared. Mr Francis Lynn, however, has found distinct enough traces of the nearly flattened mounds, particularly in a plantation at the E. end, although even there the ground, including the mounds, is marked with the old-fashioned high rig, showing that it had long been cultivated, before the trees, now about eighty years old, were planted. Mr Lynn observed that the inner ring is not concentric with the outer ones, but retires 84 feet from them (measured from crest to crest) on the S.E., and approaches within 28 feet of them on the N.W. The dimensions of the inner oval are 188 by 138 feet, its long axis being N.E. to S.W., while that of the outer rings is from N.W. to S.E. The "compass" of the outer mound is about 300 yards, instead of $\frac{1}{2}$ a mile as stated by Milne.

55. *Chesterlee*—(fig. 15, from a plan by Mr Lynn)—about $\frac{1}{3}$ of a mile E. of Carolside Mains, and $1\frac{1}{2}$ N.W. of Earlston, 700 feet above the sea, on the end of a ridge, looking down on the Leader 300 feet below, is said by Mr Milne to be "about $\frac{1}{2}$ a mile in compass, with one single deep ditch." Mr Lynn finds it still distinctly traceable as a rectangular work, but only 300 yards in compass, the length and breadth being 333 and 220 feet. In a plantation at the W. end a part of the mound, 28 feet across and 3 feet high, still survives; a fragment at the S.W. angle, the greater part of the E. end, and the N.E. angle also remain, though more levelled by the plough, the E. end being 35 feet across and 2 feet high. The north side is only traceable by a change of colour in the

crop or stubble. The "deep ditch" of Milne seems to be entirely filled up, but "indications of a second wall," in front of the mound in the plantation, seen by Mr Lynn, may be a remnant of the counterscarp of the ditch.

56. *Brownhill* is mentioned by Mr Milne as "a small camp on an eminence near Earlston, about a mile to the S. of Ridgewalls." Mr Dunn, F.S.A. Scot., Earlston, informs me that this fort is still traceable by a difference of colour in the vegetation of the field when under crop. The position is very strong, between two ravines.

57. *Black Hill, Cowdenknowes, Earlston* (fig. 16, S.W. end of the

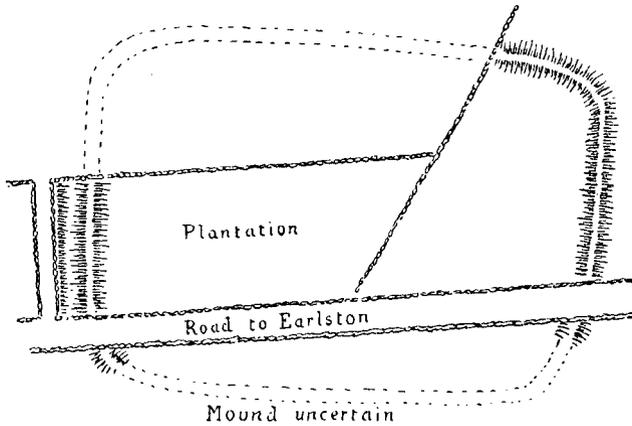


Fig. 15. Chesterlee, Lauder.

fort).—One mile S.E. of Earlston, $1\frac{1}{2}$ N.N.E. of the junction of the Leader and Tweed, $\frac{1}{2}$ a mile E. of the Leader, and 650 feet above it, on the top of a conspicuous and finely shaped hill, rising 1031 feet above the sea. The top is a narrow ridge running from S.W. to N.E., the highest part of the ridge being the straight edge of the N.W. face. From this edge the interior of the fort falls gently to the S.E. for a breadth of about 150 feet, when another edge is formed. From both these edges the fall is steep and stony for about 400 feet, that to the N.W. interrupted, however, by a sloping shelf 40 or 50 yards wide, about

40 feet lower than the top ; the N.E. end of the ridge falls on a broader haunch of the hill, not included in the fort. From the highest point (A) of the ridge and hill, which is at the S.W. end, the ground falls gently for about 100 yards, and the width contracts gradually to a sharp point (B). This point was probably included within the fort, but the traces of its defences are now obscure. From it there is a rough, steep, partly stony descent of 400 feet to N.W., S.W., and S.E.

The defences are greatly dilapidated. The N.E. end still shows three

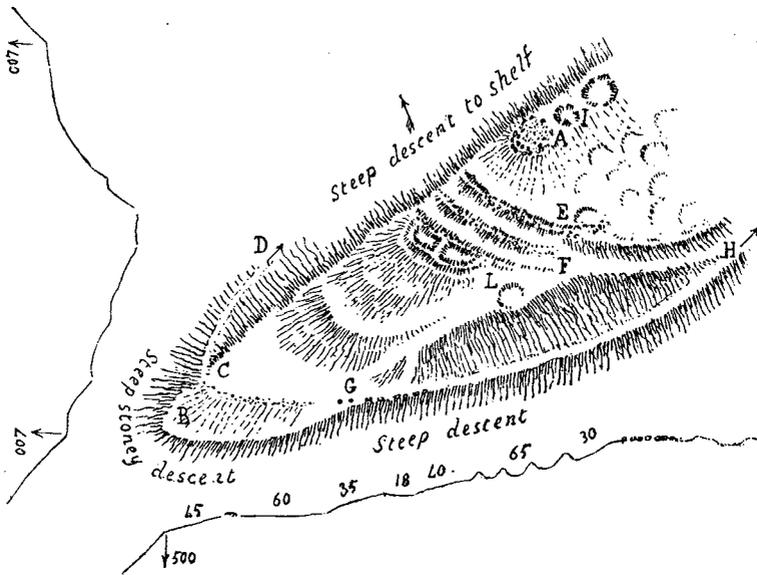


Fig. 16. Blackhill, Cowdenknowes, Earlston.

concentric curved grassy mounds, rising one behind the other, only a few feet high, cutting off the fort from the eastern haunch, which is separated from the mounds by a trench-like, wide depression. The entrance appears to have been towards the S. end of these mounds. Probably the defences from here along the S.E. face consisted of two walls, but only the foundations are traceable by slight mounds and terracing. On

the N.E. face a slight mound remains at the foot of the slope from the ridge on the shelf 40 feet below, already mentioned, and a footpath or terrace (C D), slanting down the slope from the S.W. end, may represent an inner line. It is at the S.W. end that the remains are most distinct, consisting of four short, curved, concentric, stony mounds (E to L) a few yards below the top, and occupying a width of 65 feet. These all begin at the N.W. edge, and curving round southwards, the innermost is apparently continuous with the inner line of the S.E. face (at E). The other three are soon lost on a little flat space on the S.E. slope (F), from which terraces (F H and L G) descend eastward and westward to join the terrace (G H), which marks the outer line of defence on the S.E. face. Lower down than the four mounds, the gentle descent towards the point (B) is interrupted by two irregular terraces, and slight remains of a wall (C G) at the outer edge of the lower of these terraces, probably mark the extreme S.W. point of the defences. It is continuous with the outer line or terrace (G H) on the S.E. face, and with the slanting path or terrace (C D) on the N.W. face.

The interior, which has a pleasant exposure to the S.E., and commands a magnificent view, appears to have been rudely terraced, and is pitted with numerous small, shallow, saucer-shaped excavations, for the most part very slight and indistinct, but two (one on each side of I) are very distinct on the summit of the ridge, near the very top (A), which itself is surrounded by an imperfect double circle of big stones embedded in the soil, possibly the foundations of a wall 6 feet thick, enclosing a space 18 feet in diameter, and now covered with stony debris. Besides the pittings within the works, there are two, deep and well marked, close together, between the two outer mounds (N.W. of L), another where the inner mound passes into the upper S.E. terrace (at E), and another on the flat space to the S. of the mounds (near L). It is to be presumed that these excavations mark the foundations of huts. It is recorded that early in the century three stone ramparts surrounded the interior, and that the farmer threw them down the hill, and ploughed the top to grow turnips. It is also said that these walls were vitrified. I noticed no vitrification, and other observers have assured me that there is none. Hibbert found "only a small cairn,

vitrified on the side where little or no defence appears ;” and this may have been the origin of the belief that the fort was vitrified.

(F.) THE TWEED, FROM THE LEADER TO KELSO.

In the pretty extensive district drained by the smaller tributaries of the Tweed in its course of 11 miles (not counting its windings) from the Leader to the Teviot, and including the Eden, with its course of 18 miles, there are but five forts, two of them on the Tweed itself, one to the N. and two to the S. of it. The greater amount of cultivation, as compared with other districts, seems hardly sufficient to account for the deficiency, as much of this cultivation is but recent, and extensive tracts are both elevated and still little under the plough.

58. *The Knock, Huntlywood*, the only fort in the large part of the district (nearly 10 miles square) N. of the river, although not in Lauderdale, is so near it, and so separated from any other fort-district, at the very head waters of the Eden, that it might have been conveniently included with the Lauderdale forts. The Knock is a gently-rising but conspicuous little height, in a district of many such, nearly 2 miles W. of Gordon Station, $1\frac{1}{2}$ E.N.E. of Legerwood church, 891 feet above the sea, and 300 above the Eden, which flows $\frac{1}{3}$ of a mile to the N. of it. A double wall has surrounded the summit, of a regular oval form, 520 by 300 feet over all, and 420 by 220 interior measurement (O.M. 25 inch); the inner one is at the edge of the tolerably level although rough and irregular interior, the outer one a little way down the slope. The stones have been almost entirely carried off, but the walls can be traced all round, except where quarried away at the W. end, as low broad mounds, breaks in which show rudely built stones, but no facing. The walls have apparently been of less width and are nearer each other, at the more defensible sides, than at the easily approached E. end, where is the entrance. Thus the total width of the defences in the middle of the N. side is about 40 feet, but at the entrance it is 60 feet, the outer wall remains being about 15, the inner about 30 feet wide, and the space between about 18. There are some questionable indications of chambers on

each side of the entrance in the inner wall. There is no vestige of a trench. There are some faint and doubtful saucer-like depressions in the interior. Fine hexagonal basaltic columns crop up in the interior and are exposed in the quarries.

The considerable portion of the district S. of the Tweed (about 10 miles by 3) is drained by insignificant streams, and is much under the plough. It contains only two forts.

59. *Rowchester, Kippilaw*.—Two miles and a quarter S. by W. of Eildon fort, on a gentle eminence 640 feet above the sea; the greater part of the site is in an inaccessible rabbit-warren, enclosed by a wall, topped by three barbed wires. A fragment at the E. end, outside the warren, consists of a massive curved rampart, with a scarp 6 feet high, descending to a trench 15 feet wide at the bottom, the counterscarp being about 3 feet high. The O.M. makes the fort a very regular oval, measuring 450 by 300 feet internally, but with distinct remains only at the two ends. Mr James Wilson makes the interior only 400 by 220 feet, but his over-all measurements nearly agree with those of the O.M. (550 by 370 feet).

60. *Muirhouselaw* (fig. 17).—A rectilinear earthwork, 200 yards S.E. of the farm of that name, 2 miles N.W. of Peniel Heugh, and $\frac{3}{4}$ of a mile N.E. of the supposed "Watling Street." The site is quite low, near the foot of a little height well suited for primitive fortification, which rises 579 feet above the sea, and about 70 above the fort. The work was probably a rectangle, but only the S.E., S.W., and part of N.W. sides remain, the rest apparently having been destroyed by the construction of a pond and sluice. The S.W. face (*a b* in the section) consists of an inner rampart, with a low, narrow-crested parapet, rising fully 6 feet above the trench. The scarp descending from the crest of the parapet slopes steeply for 3 feet, then gently for 6 feet, and again steeply for 9 feet. This peculiar form is unique, as far as I have seen, in Scottish forts. The flat, marshy trench is about 7 feet wide at the bottom. The counterscarp is remarkably steep, rising to an outer rampart as high as the inner one, 6 or 7 feet wide on the flat top, and raised only a foot or two above the exterior. On the S.W. face (*e f*) the formation of the inner rampart is simple, and the outer one is

absent. The ground outside on this face rises gently, and a slight curved entrenchment is marked on the O.M., 350 feet from the main work, 800 feet long, and quite disconnected with it. I did not notice this. The remains of the N.W. face (*d*) are also simple in structure, but on the further side there has been a second smaller rectangular enclosure (*c*), not quite in line with the main work, and without a trench, of which probably about one-half remains. At the N.E. angle of

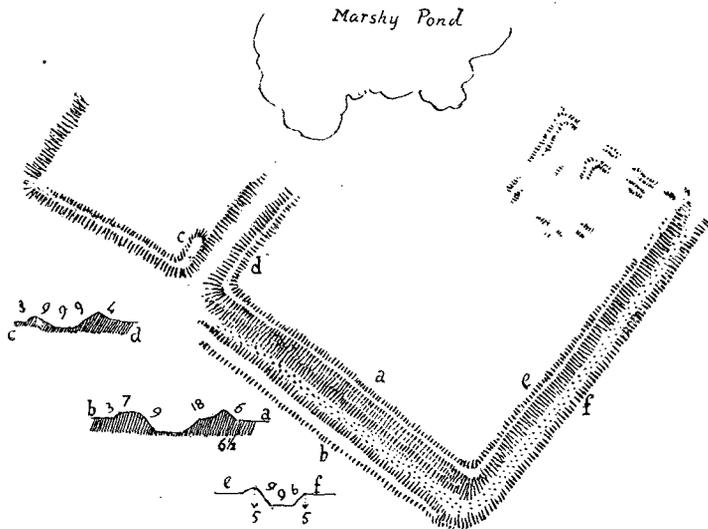


Fig. 17. Muirhouse Law.

the main work are obscure remains of square foundations. The dimensions of the main work, measured along the crest of the inner rampart on the O.M., are 225 by 195 feet.

On the banks of the Tweed itself, in the long stretch of 11 miles to Kelso, there are but two forts, opposite each other at Makerston, one so trifling as hardly to deserve the name.

61. *Ringley Hall* (fig. 18).—Half a mile S.W. of Makerston House, on the edge of a steep descent, about 80 feet high, to the Tweed, on its south side, and about 250 feet above the sea. It is of the semicircular

type, the base resting on the unfortified edge. It is much destroyed, particularly on the eastern half, by the formation of a road and by quarrying; but there are remains of an inner stony rampart all round, from which a scarp 7 or 8 feet high falls on a terrace from 12 to 27 feet wide. A second scarp, of about the same height, leads to a second terrace on the western half, but if it ever existed on the eastern half it

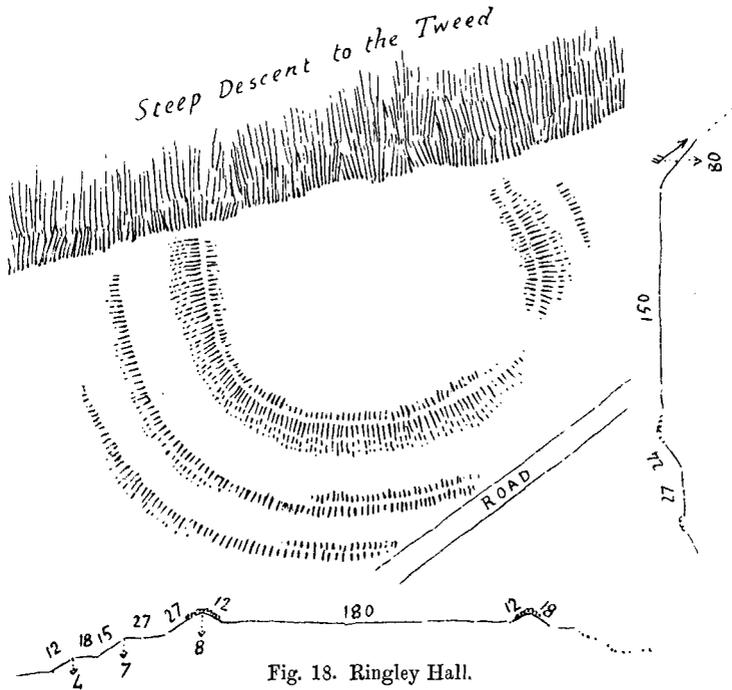


Fig. 18. Ringley Hall.

has disappeared. Towards the south there are remains of a stony parapet at the edge of the terraces. To the west the ground continues to fall slightly, but southwards the outer defence is on the level of the road and fields. The nearly level interior measures about 180 by 150 feet within the ramparts. Possibly this was a terraced mote, defended by stone walls instead of palisades.

62. *Makerston*.—Due north of the last, on the opposite side of the Tweed, on the edge of the precipice, 60 or 70 feet high, which falls to the river. This work is also of the semicircular type, but is of trifling size and strength. The unfortified base of the interior measures only 60 feet, with a radius to the north of 45 feet. To the east, where the approach is nearly level, the defences consist of an outer rampart, not 3 feet high and 15 across, with an inner scarp about 4 feet high, but without a parapet. To the west the interior is raised about 15 feet above the exterior, and the scarp is broken and irregular. Perhaps this side has been injured by a footpath that skirts it half way up.

(G.) THE WHITADER AND BLACKADER.

The Whitader and Blackader drain a great part of the Lammermoor district of Berwickshire, in their eastward course, before uniting in the Merse, or flat part of the county. The number of forts in the hill country itself is only ten, but at its abrupt termination eastwards, on Buncle Edge or the slopes beneath it, there is a remarkable group of 8 fort-sites, at four of which remains still exist. The only other probable fort at the fall of the Lammermoors on the Merse is at the south-east point of the hill mass on Duns Law.

BLACKADER.

63. *Flass*.—Near the source of the stream, close to the north of Flass farm-house, about 950 feet above the sea, an oval fort, 370 by 200 feet, is marked on the O.M. Apparently it had a single, ill-preserved ring at the time of the Survey, but I am informed that now the remains are scarcely recognisable.

64. *Black Castle Rings* (fig. 19).—One mile and a half N.W. of Greenlaw, on the east side of the Blackader. From Greenlaw the ground rises gently northwards to a ridge, from which the first view of the extensive southern moorland slopes of the Lammermoor Hills is got. From this ridge the ground falls gently northwards towards the Fangrist Burn, and also westwards to the edge of the steep and deep ravine of the Blackader. Here, some 50 feet below the level of the ridge,

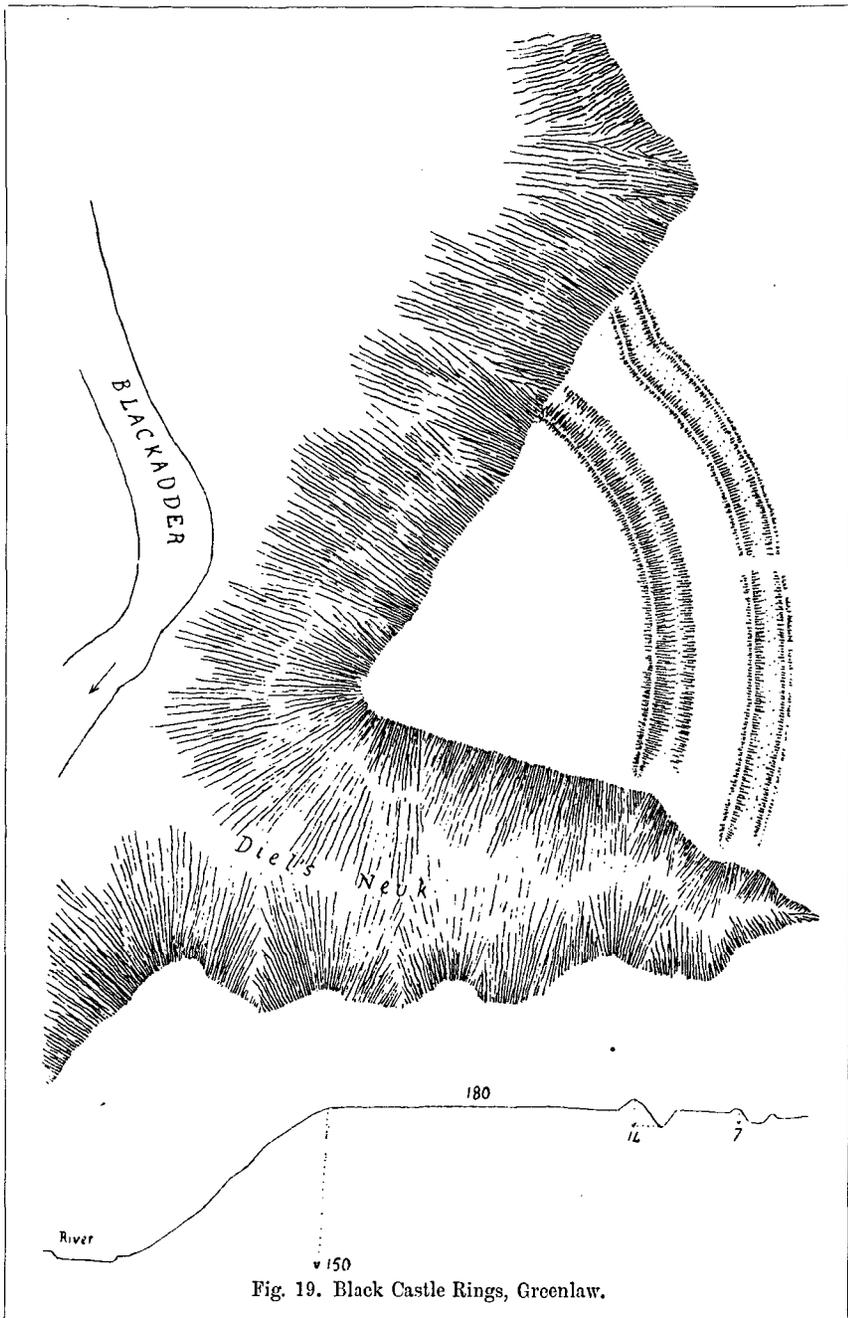


Fig. 19. Black Castle Rings, Greenlaw.

678 above the sea, and 150 above the stream, the fort is situated on a site evidently chosen mainly for its great natural strength on two of the three sides, as it is deficient in the other usual characteristic of commanding an extensive view, owing to the greater height of the ridge to the south. The position is on a triangular spit, the N.W. side of which dominates a little haugh of the river, falling to the haugh by a bare, gravelly and rocky, inaccessible slope. The S.W. side is protected by an equally inaccessible deep and steep little dry ravine (the Deil's Neuk), which, beginning a few yards beyond the fort, rapidly increases in depth in its short course to the river. Two concentric curved lines of defence, separated by a level space 35 feet wide, each consisting of a rampart and trench, the outer one with a very slight mound thrown out beyond the trench, form the base of the triangle, and protect the interior from the easy access from the east. The last ten yards of the outer line only, at its north end, diverge in a straight course outwards to the edge of the slope, for no apparent reason. The scarps of the ramparts are unusually steep. The height of the inner rampart where highest is 14 feet above the trench; that of the outer one about half as much. The trench of the inner one is narrow, that of the outer one about 8 feet broad at the bottom. The entrance has probably been close to the Deil's Neuk ravine, as the ramparts fall somewhat short of reaching its edge. There is no other break in the inner line of defence, and one in the middle of the outer line may be modern. The fort is a pure earth-work. Not a stone is to be seen about the place, and how its green mounds and interior acquired the name of Black Castle is difficult to imagine, unless they had formerly been covered with heather. The bare slopes which defend it are of a fine red colour.

65. *Chesters, Marchmont*.—About $\frac{3}{4}$ of a mile S.W. of Marchmont House, on the S. side of the Blackader, at an inconsiderable height above it, 500 feet above the sea, and close to the east of Chesters farm-house. Entirely destroyed by the present tenant; but I am told by Mr P. Loney, the land-steward, that its figure can still be traced by a difference in the colour of the vegetation when under crop. On the 6 inch O.M. it is nearly circular, and has apparently two defensive lines, far apart, and nearly complete, 350 feet in diameter over all, 150 internally.

66. *Chesters Brae*, a quarter of a mile north of the last, and at about the same elevation as it. The remarks made regarding *Chesters* apply to the present state of this fort also. On the 6 inch O.M. it is represented as an oval of 700 by 450 feet, mainly by a dotted line, but with apparent remains of three ramparts at one place. Both these forts were earthworks (Mr P. Loney).

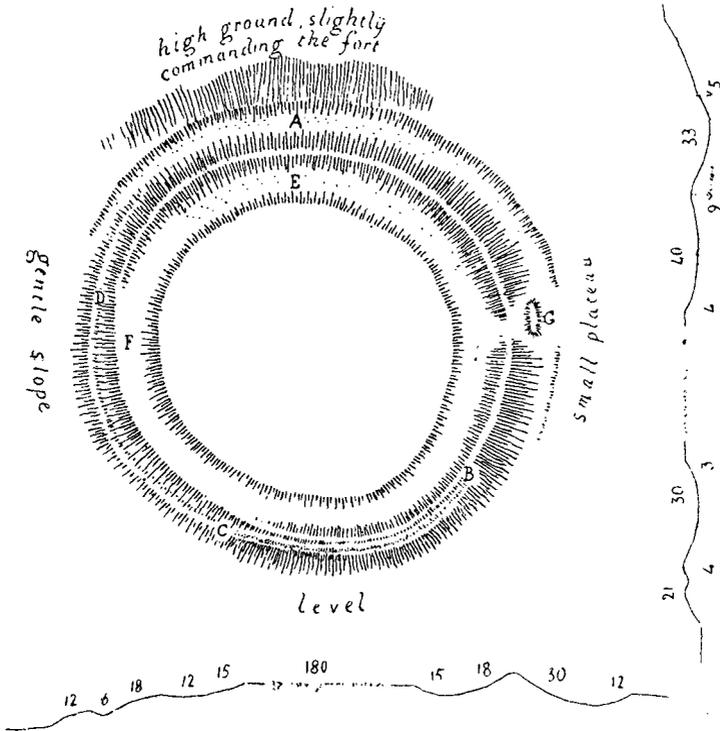


Fig. 20. Raecleuchhead Hill.

67. *Raecleuchhead Hill*—(fig. 20)— $1\frac{1}{4}$ mile W.N.W. of Langton House, 967 feet above the sea, on a shoulder of Hardens Hill. The ground in the immediate front is nearly level, except to the west, where it slopes gently away, and to the north, where it rises for a short distance abruptly, so

as closely to command the fort by a few yards of height. A narrow trench (A), 4 or 5 feet deep, cuts off the fort from this higher ground, and is continued round the level fronts, but not on the sloping western side.

Within this rises an earthen rampart, 9 to 12 feet above the trench on the east, 7 to 9 on the north, but only 4 or 5 feet high on the west and south. On the south this rampart is curiously grooved or hollowed along the top (B C), but towards the west, in place of being on the top, this groove descends and runs along the scarp (C D). It is gradually lost to the east and north. In rear of the rampart is a wide, shallow trench (E), varying from 20 to 40 feet in width and 3 to 4 in depth, becoming a terrace on the west (F). There is no rampart or parapet in rear of this trench. The single entrance, from the east, is round the flanks of a straight, low, short mound (G), fashioned apparently by removing the main mass of the rampart in its rear and the whole of the rampart on its flanks. Thus it is not a projecting work, but stands as it were in the trench,—a unique arrangement, possibly not original. The ground, outside and in, and perhaps part of the ramparts, have been ploughed.

68. *Raeleuchhead* (fig. 21).—Descending 200 feet lower, S. by E. from Raeleuchhill fort, for less than $\frac{1}{4}$ of a mile, by a gentle slope, the visitor finds himself suddenly overlooking another fort across a little, steep, dry ravine (E F), which begins at the W. end of the fort on its N. site, and runs eastward with increasing depth to join, after a course of 300 yards, another narrow, steep, dry, and much deeper ravine—the Guile Howe, which runs on the S.E. side of the fort north-eastward. The site is thus admirably defined and defended on the N. and S.E. of its three faces, but it is open to the W., where the southward slope of Hardens Hill (shown by arrows on the plan), as it runs past, is free of ravines. The western face, therefore, is strongly fortified by two unusually substantial, concentric, curved mounds,—the outer one (E A G) 40 feet wide, though now only 4 feet high; the inner one (H I), where best preserved, 60 to 70 feet across, 8 to 10 feet high to the outside, 12 to 15 to the inside, the greater height inside being due to the original slope of the ground towards the interior. These mounds begin at the edge of the southern ravine, where it is nearly 200 feet deep, and run north-

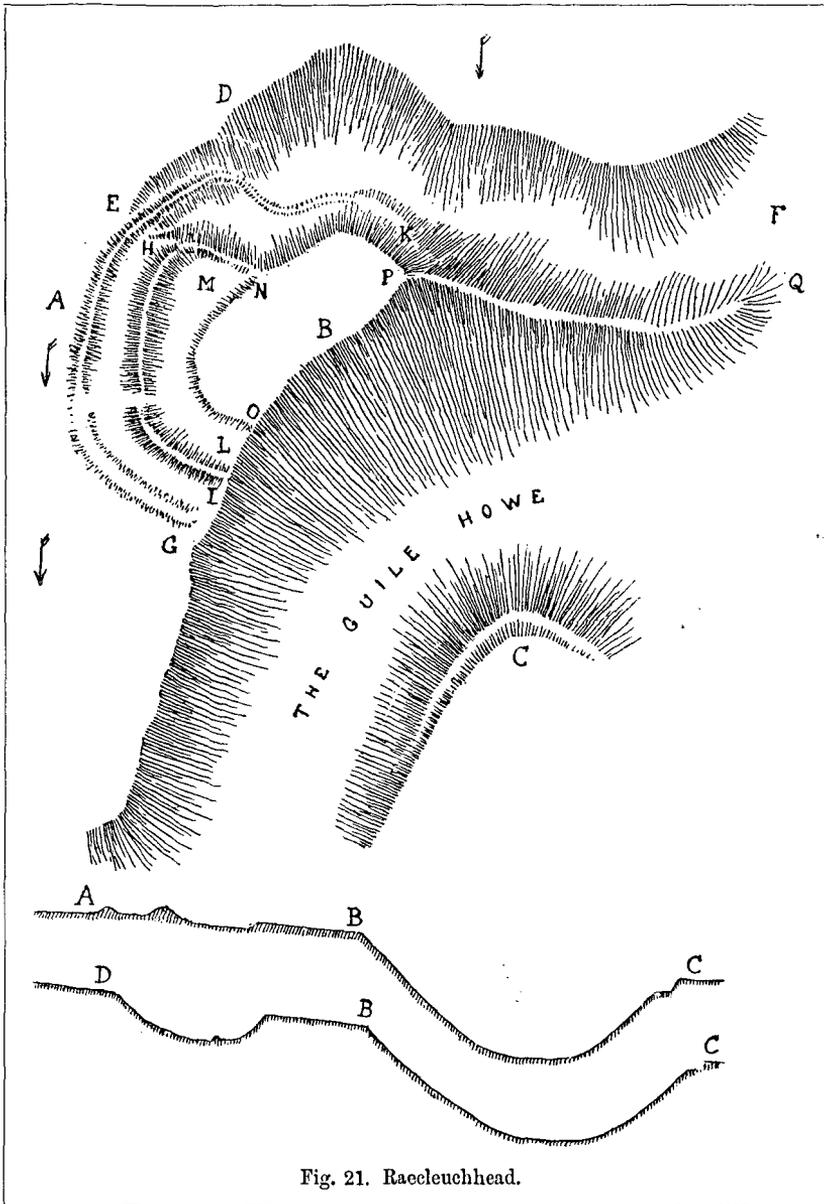


Fig. 21. Raecleuchhead.

wards up the slope to the head of the northern ravine; the inner one continues round the fort on the S. edge of this ravine, so as to protect the flank of a wide, natural, or partly artificial trench (L M), which is in rear of the inner rampart; but the outer mound crosses the head of the ravine to its north side, where it is completely and closely commanded from the northern edge of the ravine a few yards above it, and then plunges down to the bottom of the ravine, finally recrossing to its southern side, becoming a kind of terrace (K), which ends at the eastern angle of the fort, 15 or 20 feet down the slope,—a curious and unique arrangement.

A scarp (N O), 5 to 12 feet in height, but without a parapet, defends the interior from the trench-like hollow in rear of the mounds. The interior in rear of the hollow is irregular on the surface, and is rudely triangular, measuring about 300 feet in length by 200 on the base (O.M. 6 inch). From its apex there is a rapid descent by a sharp-crested ridge (P Q) to the junction of the two ravines.

The S. side of Guile Howe is steep, but is 50 to 80 feet lower than the fort slope on the other side, and near the top has a remarkable terrace about 20 feet wide (below C). It may be the remains of another fort, for which the site is admirably adapted; ploughing of which there are evident signs, and the proximity of Raecleuchhead farm-buildings would account for the destruction of other evidence.

69. *Duns Law*.—It is natural to expect that Duns Law should have been an early seat of occupation, projecting as it does from the skirts of the Lammermoor Hills into the plain of the Merse, as an isolated dome, rising by moderate slopes to the habitable altitude of 713 feet above the sea, and about 250 above the plain, and with a considerable extent of level ground on the top. It is surprising, however, that any evidence of prehistoric occupation should be left, as in the course of ages the mediæval town seems to have circled round the skirts of the Law from the N. side by the W., till its modern representative settled down on the S. It is believed that the summit in mediæval times was not occupied; and this belief, strange as it may appear, is confirmed by the apparent remains of prehistoric fortification, which could hardly have escaped total destruction had a more modern town occupied the site.

The remains consist of two concentric oval mounds, which, although obliterated in some places, can be traced nearly all round. The over-all measurement is about 800 by 600 feet (O.M. 25 inch), and the lines are traced where the ground begins to fall from the nearly level summit, generally gently, but westward somewhat abruptly, the lower line descending the slope a little where it is abrupt, and becoming a terrace. A number of stones lie about, or are embedded in the mounds; and as there are no trenches, the probability is that the fortress was of stone, although whether built or merely heaped up cannot be determined, unless by excavation. A third trifling mound, beginning at the E. end on the S., appears to be part of the defences, but soon sheers off in a straight line westward, and is probably an old fence. In front of it are traces of ploughing, and six or eight swelling "rigs" in front of the lines towards the S.E. are probably due to the same cause.

Towards the S. the lines are obliterated by a levelling of the ground, which, as Mr Ferguson, F.S.A. Scot., Duns, suggests, may have been to form platforms for Leslie's guns. Several irregular mound-enclosures of considerable size, others of a "hut circle" type, are traceable here, and within what seems to have been an entrance, flanked by a straight mound, on the East.

Leslie's so called "camp" is a small redoubt 200 feet square, with diminutive square bastions at the angles, formed of earth from a slight trench in front, the mounds being only 2 or 3 feet high at the most, and 3 or 4 yards wide. It is so much retired on the summit as to command little more than the ground within the prehistoric (?) lines which surround it. Duns Law is supposed to have been on the left flank of Leslie's encampment.

Some distance below the lines, on the W., a remarkably well-formed, sharp-crested mound runs for several hundred yards above the slope that falls towards Duns Loch, known as "the Bruntons park." This is the supposed site of the town burnt in Hertford's invasion, 1545, hence called "the burnt towns"; but the mound could not have been to defend it, as the slope towards the summit of the hill rises at once from the mound very abruptly, and completely commands it. On the other hand, it is difficult to regard it as a prehistoric work, intended to defend

a town on the summit, as the curves of its irregular outline are concave outwards. It is also much more regular in form than is characteristic of prehistoric mounds. It is of substantial dimensions, rising about 5 feet above the ground towards the summit of the Law, and perhaps double that height above the "Bruntons" slope, into which it runs insensibly.

WHITADER.

70. *Wrinklaw Walls* (fig. 22).—Wrinklaw (1192), one of the gently-sloped, almost indistinguishable summits in the heart of the Lammermoors, falls gently south-eastward for 600 yards to the site, which is 900 feet above the sea, on the edge of a steep descent, about 100 feet high, to the Dye Water, a mile and a half above Longformacus. The S. end is thus strong by nature, and the E. and W. sides are likewise protected, the former by a little burn which cuts its way down the slope, the latter by an artificial-looking straight dry cut (A B), which runs down the bank at a little distance from the fort. The only sign of fortification on these sides is a trifling mound (C) at the edge of part of the W. face. But the nearly level neck of the projecting site, which faces N.W., is fortified on its southerly half by a regularly formed trench (D E), about 100 feet long, 10 to 13 deep, and 6 wide at the bottom, defended by a parapet 4 or 5 feet high. It is continuous with the deep cut on the slope (A B), save for a depressed bridge of rock (between A and D) which crosses to the fort. On the northerly half, the defence, in its present perhaps modified condition, consists of a platform 9 feet wide, raised only 4 feet above the exterior, faced by a retaining-wall (F G), and with a gentle interior slope. The entrance is between these two halves of the N.W. face.

In the interior are remains probably of three successive occupations. Near the entrance are the house and garden-walls (not in the plan) of a shepherd, who lived there within recent times. Towards the middle are foundations of about fourteen rectangular structures, arranged mainly in two rows, back to back; and at the south end (in the space H), as I was informed by Mr Craw, F.S.A. Scot., there are shallow, saucer-like hollows, which at my visit were concealed by bracken. They are of the type found in several prehistoric forts in Berwick and

Roxburgh. Between the rectangular structures and the outer line of defence there is a substantial curved mound (I), which stretches about three-fourths across the interior, and appears to have formed part of an

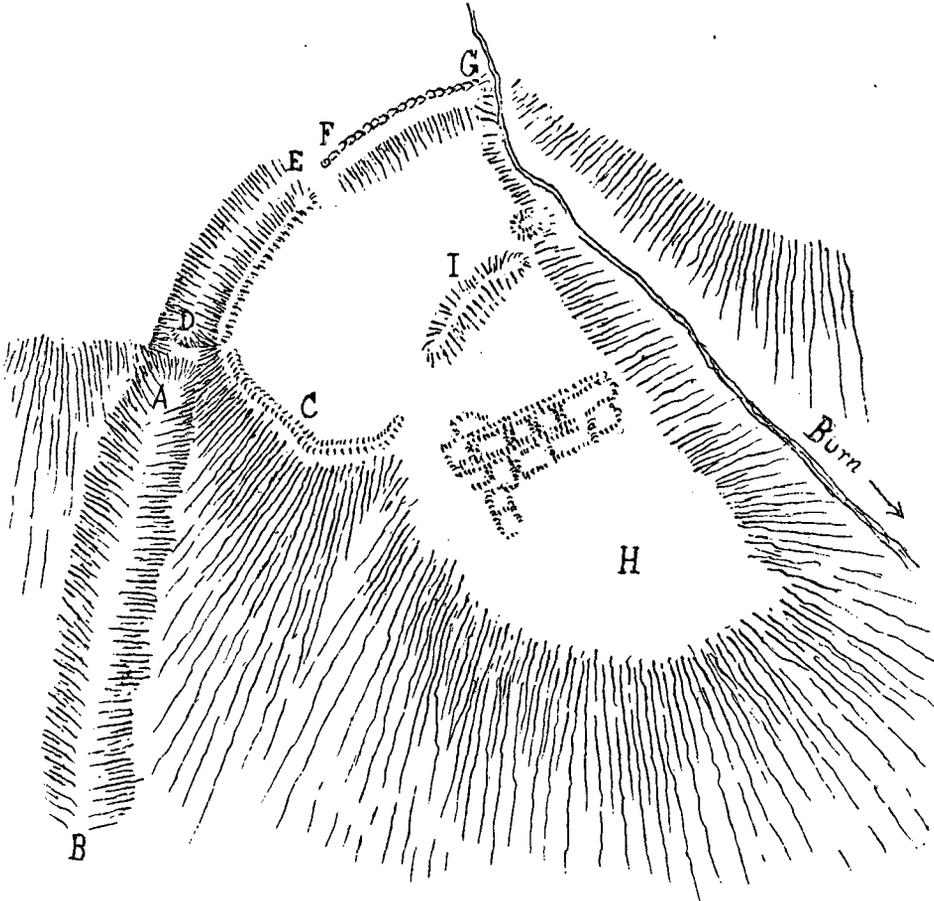


Fig. 22. Wrinklaw Walls.

inner line of defence ; and in front of its east end a circular structure, probably a kiln for drying corn, stands close to the little rill.

71. *Cranshaws*.—On the N. side of Thorter Cleuch, a mile S.W. of Cranshaws church, 800 feet above the sea. The O.M. shows $\frac{3}{4}$ of a circle, 260 feet diameter over all, consisting apparently of one rampart and trench (no other information).

72. *Shannabank Hill*.—Half a mile N.W. of Abbey St Bathans church, 800 feet above the sea, at the edge of a steep descent of 300 feet from a broad-topped hill to Monynut Water, which flows only 100 yards to the W. The O.M. makes it pear-shaped, 300 by 250 feet, consisting of a single massive ring, but with part of an outer one on the E. side, the distance from crest to crest of the concentric ramparts being about 60 feet (no other information).

73. *Cockburn Law* (fig. 23).—Four miles N.N.W. of Duns, 1064 feet above the sea, and 650 feet above the Whitader, which winds round it at a distance of $\frac{1}{2}$ mile to the N. and E. The defensive lines surround the summit, which rises about 40 feet above them. The general form is an oval of 500 by 380 feet over all, and 330 by 280 interior measurement, according to the Ordnance Plan, but Mr Francis Lynn makes the latter 365 by 248. The E. face, strong by nature, is defended by a single rampart at the edge of a short but steep descent, but the lines are doubled at the S.W. end, where access begins to be easier, and trebled on the W. and N.W., where the approach is quite gentle. All these lines are simple, grass-grown, but stony mounds, a few feet high and of moderate width, without trenches. As they sweep round the W. face they are widely apart at the N. end, but approximate gradually southwards, the distance from crest to crest between any two of them varying from nearly 60 feet to little more than a third of that. The entrances are remarkable for their number and structure, and show an unusual anxiety on the part of the builders to secure a flanking defence. The entrance from the S. (A) is where the single eastern line meets the double southern one, and is quite simple; it is flanked internally by a straight rampart joining the outer and inner lines on the W. side. The western entrance (B B) is where the double line from the S. meets the treble line from the N. As it passes from the exterior to the middle line, it is flanked on the N. by the end of the outer line, which ends abruptly here, and on the S. by a little circular mound, the remains,

perhaps, of some defensive work. The passage is straight through the middle line, but then turns sharply to the left and pierces the inner line 20 yards further N., in an oblique manner, flanked on the N. side by a

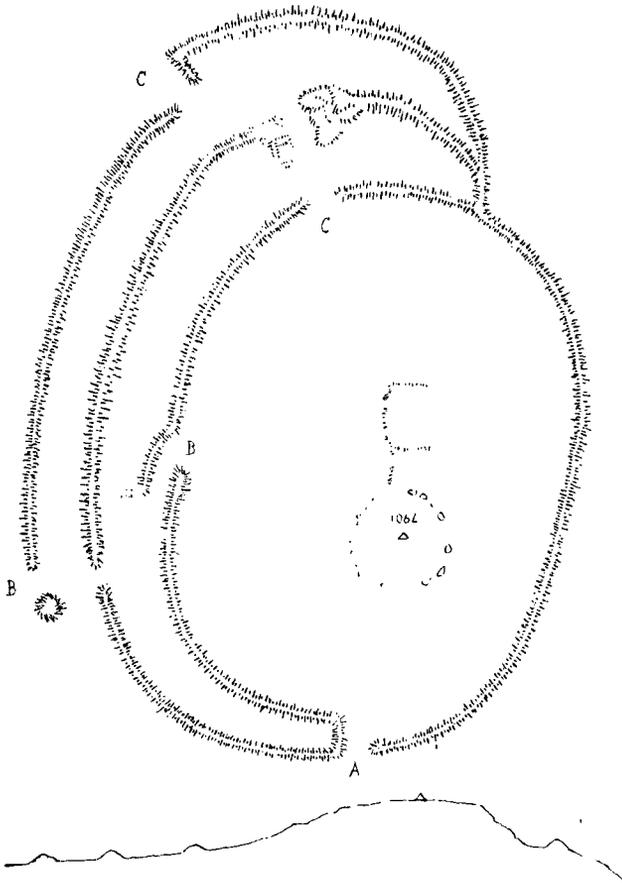


Fig. 23. Cockburn Law.

traverse, at first curved and then straight, which connects the inner with the middle rampart. The northern entrance (C) also penetrates

the three lines obliquely, but the details are different. In entering the work a flanking defence is obtained by the outer rampart being carried further out on the N. than on the S. side, and being furnished on the N. side with a short arm at right angles inwards, which directly flanks the approach to the entrance. In passing through the middle line, the entrance seems to have been flanked by a considerable mass of structures, perhaps guard-rooms, but mere low mounds remain, one of them, however, distinctly forming a small rectangular enclosure.

There are obscure traces of structure in the interior.

From the whole character of the mounds and the entire absence of trenches, this has been, in all probability, a stone fort.

74. *Edin's Hall* (figs. 24 and 25).—Half a mile N.E. of Cockburn Law fort, $\frac{3}{4}$ of a mile W. of the southward bend of the Whitader at Elba (Elbow?), 250 feet above that river, and 660 above the sea. A description and plan of this fortress, with its contained broch, by Dr John Stuart, has already appeared in our *Proceedings* for 1869, but as these have been superseded by a more precise plan and account by Mr John Turnbull, after excavations had been made, it will not be out of place here to reproduce his plan (fig. 24) from the *Proceedings of the Berwickshire Naturalists' Club*, and to give a brief summary of his paper. I have added a plan (fig. 25) of the N.W. end of the fort taken by myself in 1893, as it shows some points not sufficiently adverted to by Mr Turnbull, together with a few observations on matters of detail, which differ somewhat from his. My plan is on the same scale as the others in this paper, and Mr Turnbull's is somewhat reduced, to correspond with mine.

The site is on a kind of shoulder or terrace, which is in fact the termination of the gentle declivity of 400 feet from the top of Cockburn Law, before an abrupt plunge is made to the Whitader, 250 feet below. Here, facing the N. and N.E., the fort comes to the edge of the declivity, and the N.W. end is strengthened by a deep hollow, running down to the river; but the S.E. end is bounded by an irregular moderate slope, and the S.W. face by the gentle acclivity of Cockburn Law, and therefore have no natural advantage. The general form of the work is not unlike that of the human ear, the broad end being to the N.W. The

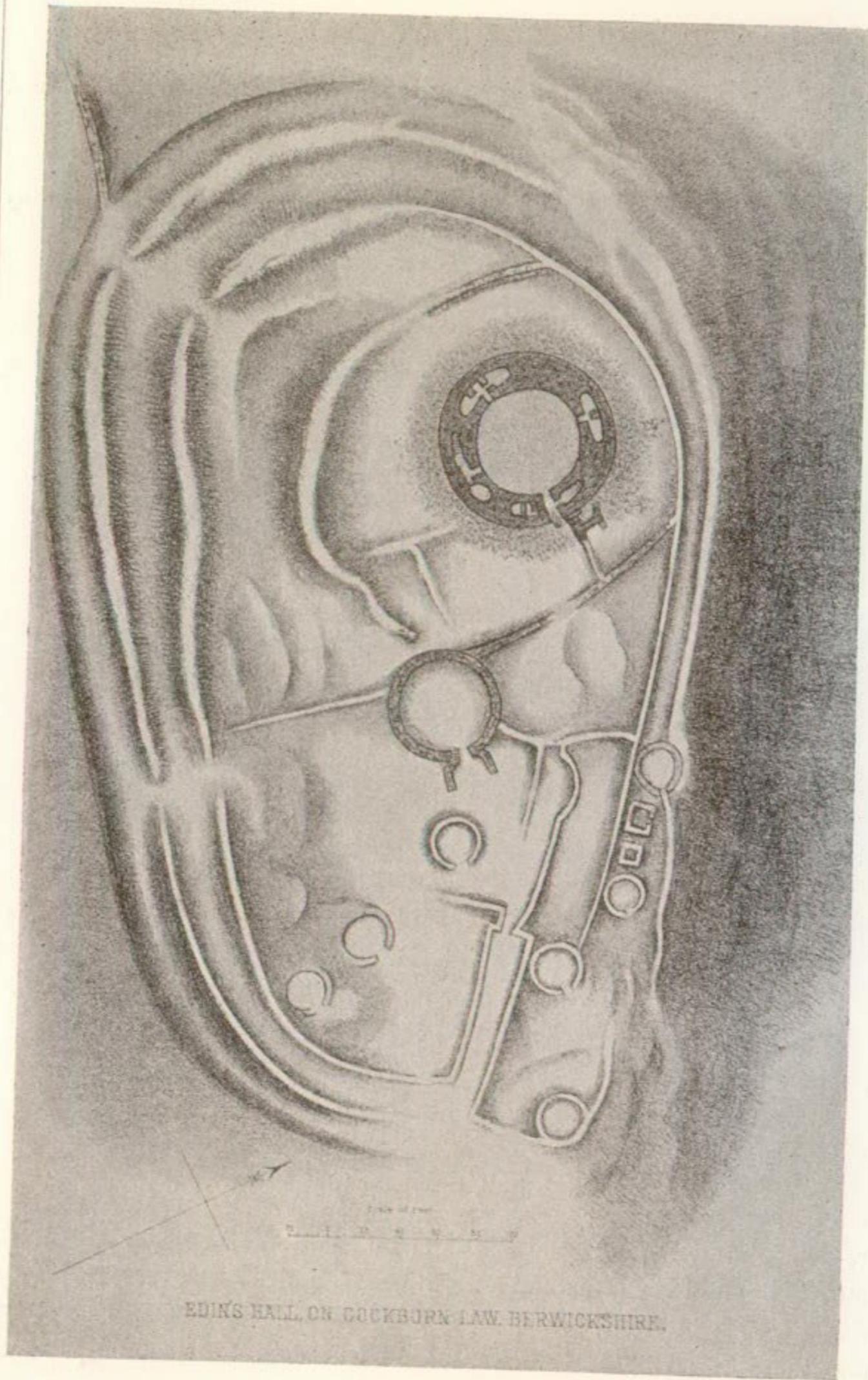


Fig. 24. Edin's Hall, on Cockburn Law, Berwickshire.

total length, on Mr Turnbull's plan, is somewhat under 600 feet, and the greatest breadth, towards the N.W. end, about 370. Near the S.E. end the breadth diminishes to about 250 feet. The lines at the broad and narrow ends of the "ear" are curved, but on the two sides they

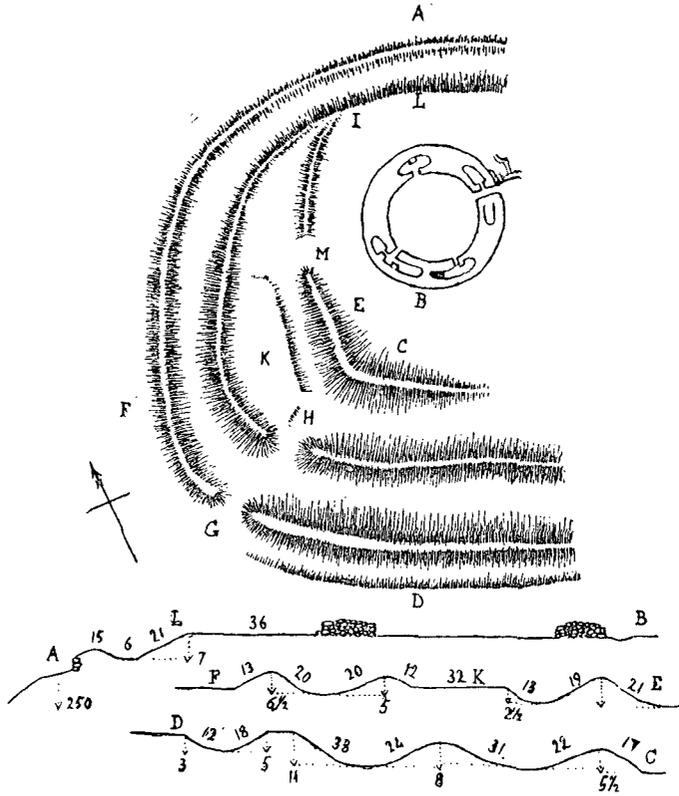


Fig. 25. Edin's Hall, Cockburn Law, Berwickshire.

are nearly straight. At the ends and on the S.W. face they apparently consisted, when Mr Turnbull's plan was taken, of two ramparts, each with a trench in front, and such is their present condition, except that now there is no outer trench at the N.E. end. These ramparts are

apparently of earth, although some stones lie about them. Mr Turnbull described the trenches as still from 12 to 15 feet deep in some places, but 11 feet is the most I observed, and generally it is much less. The outer trench is only 3 or 4 feet below the exterior. As the lines bend round at the two ends towards the edge of the steep descent to the river, they fall off in strength, and, in conformity with the usual practice in works so situated in Scotland, they might be expected to cease altogether on a side so strongly defended by nature; but in this case, the two lines are continued along the edge, although their character alters. As shown in my section (fig. 25, B L A), the inner line becomes a stony scarp (L) 6 or 7 feet high, which probably may have been defended by a palisade, and the outer one is changed to a stony mound 15 feet wide, supported on the edge of the bank by a retaining-wall (A), neatly built, 18 to 24 inches high. Southward these lines get broken up by enclosures that line the S.E. entrance.

There are two original entrances, besides an evidently modern one. That at the narrow S.E. end (fig. 24) is close to the edge of the steep descent, and after penetrating the entrenchments, is continued in the interior of the work as a narrow approach towards an enclosure containing the broch, between straight walls, flanked by stone foundations of various shapes and sizes, minutely described by Mr Turnbull. This passage makes its way for about 60 yards, or $\frac{2}{3}$ of the distance to the broch, which is placed near the further or N.W. end of the interior. The other entrance (G, fig. 25) is situated where the nearly straight ramparts of the S.W. side meet the curved ramparts of the N.W. end. It pierces the two ramparts (G to H) as if making direct for the broch, but is then suddenly blocked by the salient angle of a massive mound (E C) apparently mainly of earth, but with many stones lying on it, the south-eastern arm of which (C), parallel with the ramparts of the S.W. face, is straight, and regularly diminishing in bulk, disappears after a course of about 30 yards; while the northerly arm, straight at first, bends slightly eastwards, and joins the inner rampart of the N.E. face after a course of 60 yards. Mr Turnbull traced the easterly arm also round to the N.E. face (fig. 24), so as, with the northerly one, to form an inner or third line of defence to the broch, but I failed to observe this. Nearly

half-way along the northerly arm there is a break (fig. 25, M), through which may have been the entrance to the enclosure containing the broch (B). If so, the entrance, after encountering the salient angle of the mound (C E), must have turned sharply to the left through a slightly hollowed way between the northerly arm (E) and a platform (K) in rear of the inner rampart of the enceinte.

In the interior, but S. of the broch enclosure proper, eight circular and two rectangular enclosures have been excavated (fig. 24). Four of the circular ones, varying in internal diameter from 16 to 47 feet, and with stone walls from 3 to 8 or 9 feet thick, are in the larger space to the S. of the long eastern entrance-passage, and some unexcavated mounds in this space, abutting on the inner rampart, may contain others.

In the contracted space to the N. of the passage, between it and the steep descent to the river, are four more circular enclosures 16 to 20 feet in internal diameter, and two rectangular depressions, one of which is partially enclosed by a wall, and measures about 12 by 10 feet internally, but the other is indistinct. There are considerable remains of paving in some of the circular floors, particularly near the entrances.

The broch is notable as being one of the very few found S. of the Forth. It is also the largest known example, the dimensions as given by Mr Turnbull being—

N. to S.	92½ feet.	E. to W.	90 feet.
S.E. to N.W.	92½ „	S.W. to N.E.	92 „
Interior diam.	55 „	Thickness of wall,	15 to 20 feet.

As shown on the plans, the wall contains the chambers and beginning of the staircase characteristic of the brochs, although the height of the wall now nowhere exceeds about 6 feet.

The forts in the following group, though not all strictly in the Whitader district, are so closely connected with each other that they cannot properly be separated. They are situated where the undulating table-land of the Lammermoors ends eastwards by a sudden dip from Buncle Edge (750 to 850 feet) to the valley through which the coast line of railway sends off a branch southwards to supply the Merse or lowlands of Berwickshire. Buncle Edge faces S.E. and is about 2 miles

long, but the high ground continues to run eastward for 2 miles more. On the Edge and the slope to the valley below no less than ten fort sites are marked on the O.M., but there is nothing to be seen now on three of them, and the claim of the remains on three others to have been forts is questionable. Altogether there has been a remarkable group of apparently prehistoric enclosures here, but only four of them can now be proved to be forts.

75. *Warlawbank*, the most northerly of the group, is on the top of Horsley Hill (860), an eastern prolongation of Buncle Edge, and lies 100 yards W. of the farm-house of Warlawbank. The top of the hill is a broad-backed ridge, so that the site is almost level. The oval fort, much flattened by frequent ploughing, consists of two concentric mounds with a trench between, with a third mound at the E. and weakest end. From crest to crest, the distance from the inner to the middle rampart here is 42 feet, and from the middle to the outer one 30 feet. In some places the trench is still 5 or 6 feet deep below the interior. The dimensions of the fort on the O.M. are 480 by 330 feet over all, but Mr H. Hewitt Craw, F.S.A. Scot., who paced it for me, made it somewhat less. The interior, from crest to crest of the inner rampart, he made to be 357 by 225 feet. Probably this was an earthwork, although a good many small stones lie about the mounds. The single entrance is from the S.E.

Fosterland Burn.—About 1200 yards S. of the last, 200 yards E. of the burn, and a little more than 600 feet above the sea, the "supposed site of a camp" is marked on the O.M. I did not go to it.

An almost level walk of a mile from Warlawbank along Horsley Hill leads to the N. end of Buncle Edge and the Dogbush plantation, a narrow fir-wood which lines the Edge without a break for 2 miles, sending tongues down the slope here and there, making Buncle Edge a conspicuous landmark from great distances to the E. and S.

76. *Buncle Edge No. 1*.—120 yards from the N. end of the plantation, completely crossing it, and emerging slightly on the elevated moor to the W., and on the slope to the E., is an oval fort, 510 by 390 feet over all on the O.M., but which by Mr Craw's pacing is reduced to about 440 feet by 360 feet. The single mound and trench occupy a width

of 30 feet, and the trench is nowhere more than 5 feet below the crest of the mound ; breaks in which, however, show so much stone, that in all probability we now see the mere overgrown debris of a stone fort.

The interior has been quarried, and several ramps that cross the trench have probably been caused in quarrying operations, or in plundering the wall of its stones.

A few yards to the S.E. of this fort a straight entrenchment runs north-westward, partially in the wood, but mainly in the open moor, for a total length of 600 feet. About 750 feet south-westward a similar entrenchment runs parallel to the other, also partly in the wood, partly on the moor. The ends of these in the moor are connected by a slightly curved entrenchment, 750 feet long, convex outwards. Thus three sides of an enclosure are formed, the fourth side, towards the S.E., or edge of the hill, being open. The entrenchment consists of a slight mound and trench, altogether only about 15 feet wide, the mound being only 2 feet high at most. It is marked "camp" on the O.M., but has probably been a fence in connection with the neighbouring fort ; the length of the sides is taken from the O.M. (6 inch).

About 550 yards S. by W. of No. 3, on the slope of Bunclie Edge, in a field more than 600 feet above the sea, near the farm-house of Marygold, the site of a "camp" is marked on the O.M. I did not visit the spot, but, looking from above, could see no remains.

Skirting along the plantation for $\frac{1}{4}$ of a mile, another enclosure is met with like the one in connection with Bunclie Edge fort No. 1. It is entirely on the moor, however, the length of the two short, parallel, straight sides, which start from the edge of the plantation, being respectively 50 and 300 feet, while that of the curved side on the moor is no less than 1500 feet. Towards Bunclie Edge the enclosure is quite open. The structure consists of a mound about 18 feet across and 3 feet at most, above a trench 3 feet wide at the bottom, with another trifling mound to the outside. This also is called a camp in the O.M., but although of stronger make than the last, it too is more likely to have been a fence in connection with one or other or both of the two following "camps."

One hundred and fifty yards S.W. of this enclosure, outside the

plantation, on the moor, the site of a camp is marked on the O.M. No trace of it appears to remain.

77. *Buncle Edge No. 2*.—One hundred and fifty yards from the last, and $\frac{3}{4}$ of a mile S.W. of *Buncle Edge No. 1*, in the plantation, is a fort of much the same character, which must have been almost in contact with the large enclosure just described. It is an oval, measuring over all 510 by 405 feet on the O.M., but according to Mr Craw's pacing only 324 by 303 feet, of which the interior claims 243 by 219. The defences consist of a single mound rather more massive than that of *Buncle Edge No. 1*, with a trench in front; and in some parts an outer, much smaller mound. The main mound is rough and steep, a good many large stones lie about it, and the probability is that it was a stone wall, now demolished, and overgrown with grass, bracken, &c. The interior, which slopes gently to the S.E., is also rough and irregular. Near the S.E. end a straight mound traverses the interior, but only extends half way across it from the S.

About 500 yards S.W. of the last, 700 feet above the sea, on the ploughed slope, where it suddenly becomes steeper, looking down upon and about 350 yards due W. of the poor remains of Buncle Castle, 200 feet below it, a "camp" is represented on the O.M., oval, with a single enceinte, and measuring about 240 by 150 feet. It is now quite indistinguishable as a fort, although the surface is still unploughed. The position is not a natural one for a fort, being not at the edge of a steep descent, but on the beginning of the descent itself, and it looks almost as if it had been quarried. The surface is covered with irregular grassy mounds and scattered heaps of small stones. This may have been an early village rather than a fort.

78. *Preston Cleuch* (fig. 26).—Six hundred yards S.W. of the last, at the S.W. end of Buncle Edge. The road here, ascending from the Merse to Lammermoor, winds through a little pass called Preston Cleuch. On the N.E. side of the road rises the commencement of Buncle Edge and the Dogbush plantation, and on its S.W. side a steep ascent of about 30 to 40 feet forms the N. front and part of the E. end of a strong and unusually well-preserved fort. At the W. end there is also a rise in two stages from the road, but the whole S. face has no natural advantage,

the ground in front being nearly level with it. This disposition of the ground causes a variety in the kind of defence. On the strong N. and N.E. there is simply a scarp, partly furnished with a parapet, descending to a level terrace (A B C), 6 or 8 feet below, cut on the slope ; but

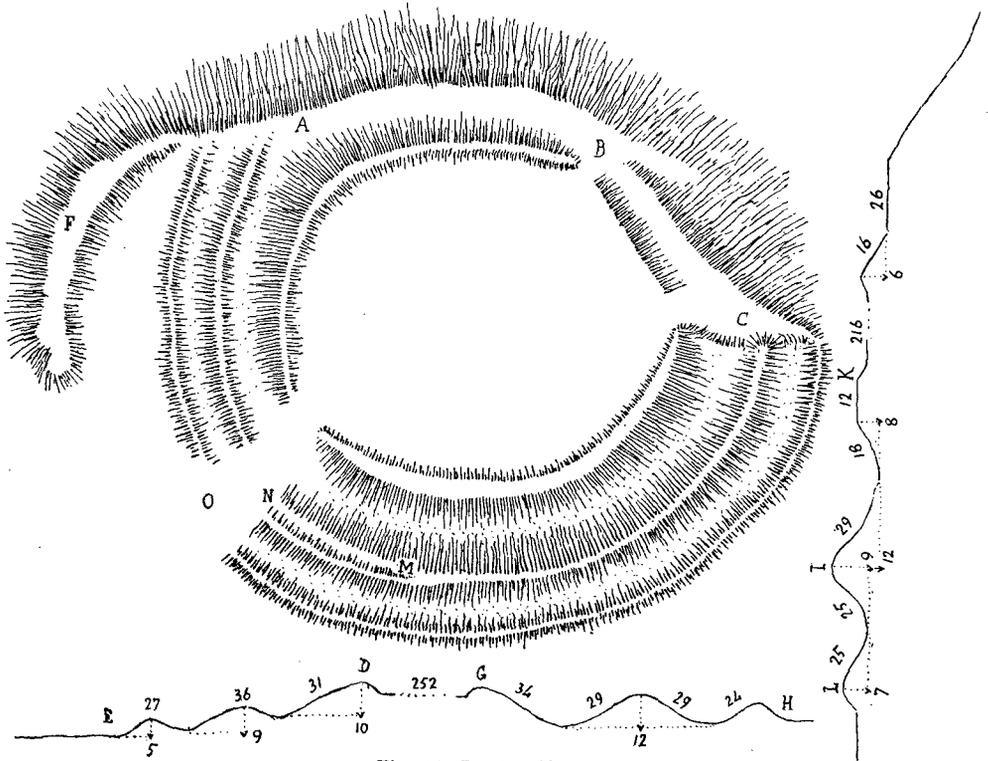


Fig. 26. Preston Cleuch.

the weaker W. end and the S. front, which has no natural strength, are fortified by three concentric ramparts with intervening trenches. The inner rampart at the W. end thoroughly commands the two outer ones (section D E), as they are on the slope below it, but beyond there is a level space about 40 feet in width, bounded westwards by a natural

mound (F in plan), behind which a considerable body of assailants could shelter, completely concealed from the fort. On the S. and S.E. (sections G H, K L) the fortifications assume more formidable proportions, the inner trench being from 10 to 12 feet deep in places, and the outer one 6 to 7 feet below the top of the outer mound, which rises only a foot or two above the exterior. It is singular, however, that to the S. the middle rampart (I in section K I L) is much higher than the inner one (K), completely cutting off its view of the outer rampart (L) and country beyond. It is possible, indeed, that the inner rampart was originally raised to a higher level, perhaps by a wooden or stone erection, as the top is flat and 12 feet wide. The crest of the middle rampart, on the contrary, is sharp, but towards its W. end it gives off a narrow path or terrace (M N) cut on the inner side of the rampart, and descending westward, of no apparent use, as it is too low down to serve as a banquette; perhaps this terrace is not original. The ramparts end abruptly on the East at C, but in such a manner that their trenches command and flank the terrace (B C) at the N.E. end of the fort. The entrance has apparently been at the N.W. end (B) of this eastern terrace, and is flanked by the E. end of the higher and wider terrace (A B) of the N. front. From the S.W. a wide opening (O) penetrates the ramparts, but it is either entirely modern, or if it was another entrance, it has been much altered and its original character destroyed. The interior slopes gently from N. to S., and apparently contains some obscure foundations, but the indications are too dubious to be deciphered without excavation. According to Mr Craw's pacing, the fort measures 462 by 368 feet over all, and its interior 252 by 216 from crest to crest of the inner rampart.

79. *Habchester*—(fig. 27)—on the western edge of Lamberton Moor, where the elevated ground falls steeply towards Basselrig farm, although not in the Whitader district, is the only fort in the long stretch of 10 miles of high ground from the Buncle Edge group to the sea, overlooking that district, and therefore may be fittingly included here. It stands 700 feet above the sea, and commands an extensive view towards the N. and W. The southern half of this oval fort is very well preserved, while the northern half, in a different parish and farm, is

totally obliterated. Probably it was never so massive as the southern half, because the defences of the latter begin to lose strength as they bend northward, and the natural strength of the northern half was greatest, as it was near the edge of the steep descent. The existing defences consist of two remarkably high and regular, narrow-crested mounds, with two trenches, the inner one being in places 9 or 10 feet deep, while the outer one in some parts is 6 feet below the top of its counterscarp, which has no parapet. These defences end eastward at what has been the entrance, as seems proved by the neat rounding off of the inner trench. But where they near the entrance the ramparts have been destroyed, as the outer trench falls short of it by 20 yards, and the inner rampart, from a distance of 12 yards, falls rapidly in height



Fig. 27. Ramparts, Habchester.

till it disappears at the entrance. The length of the inner rampart I paced as 420 feet along the crest. The over-all length of the long axis of the oval on the 6 inch O.M. is about 450 feet. Close in rear of the parapet of the inner rampart is a zone about 12 feet wide, occupied by a series of little mounds and hollows, probably the remains of some kind of huts, and in rear of these is a slight hollow like a roadway between the zone of mounds and the centre of the interior. The fort is evidently an earthwork in the main, but there are some signs of a wall having been erected on the top of the inner rampart, which, however, may have been modern. I give (fig. 27) a view of the unusually well-preserved ramparts and trenches.

80. *Chester Hill, Aytoun*.—A mile and a half E.S.E. of Aytoun church, 539 feet above the sea, on the edge of a steep bank. The O.M. represents the fort as of an oval form, measuring 450 by 250 feet, the N. side being formed by the bank, and the S. represented by a dotted line, as if merely traceable. I understand that no vestige now remains.

(H.) GROUP OF FORTS NEAR ST ABB'S HEAD AND COLDINGHAM LOCH.

This remarkable group (Map, fig. 28) comprises ten of fourteen forts marked on the O.M. in the hilly district that lies between the Eye Water

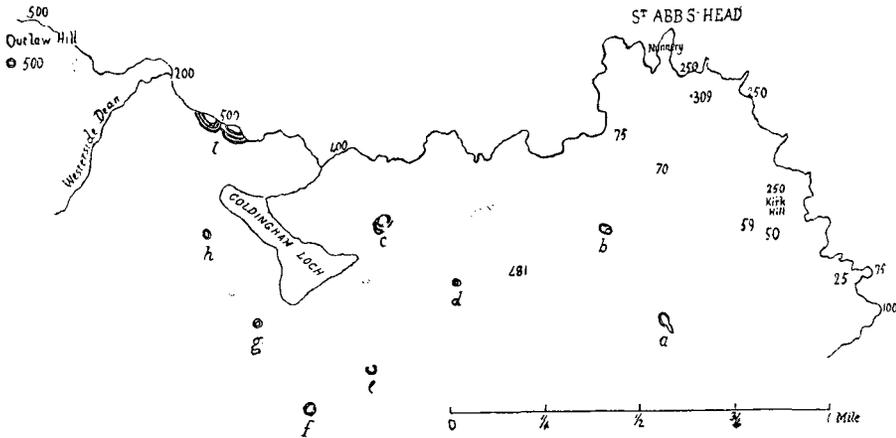


Fig. 28. Position of Forts at St Abb's Head and Coldingham Loch.

and the coast. Seven lie within a radius of half a mile from the S. angle of Coldingham Loch, and all ten in a space 2 miles long and half a mile wide, where now there are but three farm-houses, and probably not a score of inhabitants. In the map the position of the forts is shown by letters which correspond with those in the text; the figures give the height above sea of the cliffs on the coast and of some parts inland. The forts may be divided into a St Abb's group of two and a Loch

group of eight, as the two groups are separated by high ground which conceals them from each other.

81. The *St Abb's group* is situated on the S. side of a little valley that descends to a level of only about 50 feet above the sea. On the N. side rises the steep slope to the edge of the St Abb's cliffs, which presents a fine, irregular outline against the sky as seen from the forts. Eastwards they command a fine view towards Coldingham shore and

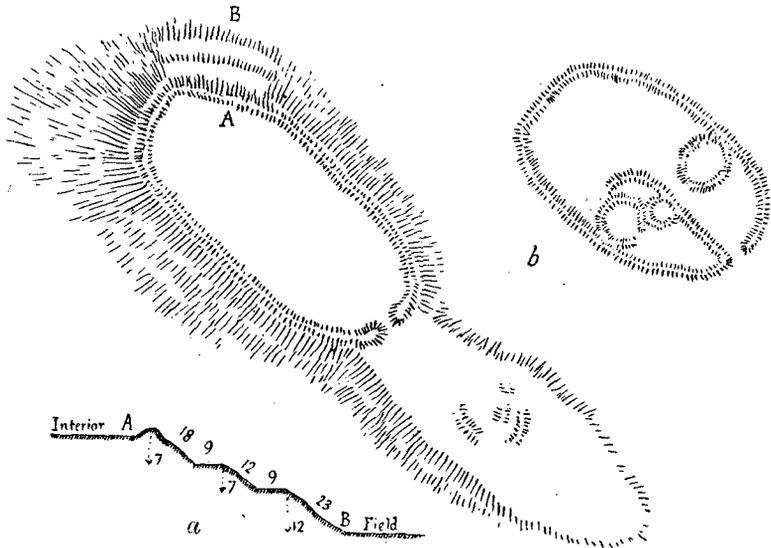


Fig. 29. Forts near St Abb's Head.

Eyemouth. They thus look from no great distance upon the supposed sites of Ebba's Nunnery to the N. and of St Abb's Kirk to the E. Their green sites, still undefaced by the plough, rise conspicuously from cultivated fields.

a.—(figs. 28 and 29)—stands about 270 feet above the sea, $\frac{3}{4}$ of a mile due S. of St Abb's Head, on a steep little flat-topped knoll, 40 feet high at the N.W. end, but diminishing to the S.E. till it is nearly level

with the field from which it rises. A single rampart, apparently of earth and stones, girdles the N.W. half of the top, and has an entrance towards the S.E. half, or accessible neck, upon which are remains of other mounds, too much destroyed to be interpreted. On the steep N. slope are two terraces (between A and B), 9 feet wide, conspicuous from afar. The dimensions of the oval enclosure are about 210 by 96 feet. In the interior are some rectangular grassy "foundations."

b.—(figs. 28 and 29)—a quarter of a mile N.W. of the last, 370 feet above the sea, on the highest part of an elevated field, but with no immediate natural strength. It is of a squarish oval form, and has a single, much dilapidated rampart, apparently of earth and stones, with an entrance to the S.E. From the W. side of the entrance a "foundation" runs straight into the interior for about 70 feet, then curves as if to rejoin the rampart on the W. side. Within the space thus almost enclosed, and at its N.W. end, are two "hut circles," about 25 and 21 feet in diameter respectively. Outside this enclosure, and abutting on the E. rampart, is another, 32 feet in diameter. The over-all dimensions of the fort are about 175 by 120 feet.

82. *Coldingham Loch group.*—The loch lies about 430 feet above the sea, in a hollow $\frac{1}{4}$ of a mile S. of and 50 feet below the edge of the cliffs that run westward from St Abb's Head. It is of a triangular form, with a straight base 450 yards in length, running from S.W. to N.E. It rapidly contracts to a narrow point to the N.W. Its length is about 700 yards. Around the loch, although not all in sight of it, are no less than eight forts, if they all deserve the name.

c.—(fig. 30)—lies 1100 yards due W. of *b*, the nearest and highest of the St Abb's group, but, like all the members of its own group, at a much higher level. It is about 540 feet above the sea, and is situated about 150 yards from the E. angle of the loch and 250 from the cliff edge, on the top of a rocky knoll, from which the ground slopes pretty gently, except northwards, where it falls abruptly and roughly, a height of about 30 feet. It is oval in form, and is defended by (1) an inner rampart running all round, and measuring about 400 feet along the top; (2) a middle rampart, not continued on the steep N. side; (3) an outer rampart, also deficient on the N. side, remarkably distinct and regular

on the W. and S., but apparently stopping abruptly on the E., unless it is represented by a not very well marked terrace.

The entrance is to the S.E., and passes straight through the ramparts. On either side of it there is a complex network of "hut circles," constructed partly in the ramparts, partly between them, only one being in the interior, close to the W. side of the entrance. The total number that can be distinctly made out is six on the W. and as many on the E. side of the entrance, and they vary from 18 to 30 feet in diameter from crest to crest of their mounds.

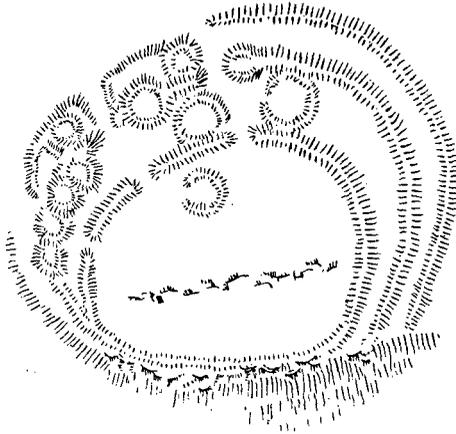


Fig. 30. Fort near Coldingham Loch.

The dimensions of the fort over all are about 280 by 230 feet, the interior being 170 by 125, and the width across the three ramparts on the S. side 105. The interior slopes from N. to S., and is bisected by an outcrop of rock from E. to W. Openings in the turf of the ramparts show small stones unmixed with earth, and there are no true trenches.

d. About 400 yards S.E. of the last, and the same distance E. by S. of the E. angle of the loch, 450 feet above the sea. A doubtful fort. It is of a squarish oval form, with a single slight rampart, entered from

the N.E., and is completely commanded on the S.E. by a little height, which rises directly from the rampart by a steep rocky slope 10 or 12 feet high. The enclosure measures 100 by 70 feet over all.

e. About 500 yards S.W. of the last, and somewhat less S. by E. of the E. angle of the loch, 450 feet above the sea, on a good defensible site, with short, steep descents, except northward, where the approach is gentle. The single inclosing mound is much injured by a quarry and general dilapidation, but is substantial in some parts, and is stony. It runs in a semicircle round the southern half of the site, but assumes a straight course on the N. Thus only the half of the elevated site is enclosed, but it is probable that the other half was originally also taken in, as is indicated by some obscure remains. The original form, therefore, may have been an oval, bisected by a central rampart. The dimensions of the existing enclosure are about 160 by 140 feet over all. The straight rampart is 105 feet long at present, but is broken off by the quarry at the W. end.

f. A quarter of a mile S. by E. of the S. angle of the loch, but not in sight of it, 485 feet above the sea, on the top of a gentle rise, and much impaired by quarrying and general decay. It seems to have had a single rampart, apparently of earth and stones, running in a somewhat irregular oval course, except on the N., where it is straight for about 100 feet. The dimensions over all are 200 by 170 feet.

g. Close to West Loch farm-house, 100 yards S.E. of the S. angle of the loch, and 492 feet above the sea, there is a work of doubtful character. It has no natural strength, and consists of two circular mounds, the inner of which is much nearer the outer at the N. side, where the entrance is, than elsewhere. The outer mound, apparently of earth and stones, is irregularly formed, and apparently well preserved, but it is only 3 or 4 feet high, and of slight width. It is slightly trenched in front. The interior is planted, and but for the too regular and substantial character of the rampart, and its entrance, the work might be taken for one of those circular plantations surrounded by a mound which are so frequent in Scotland. The inner mound is only

about a foot in height ; its diameter is only about 40 feet, and that of the whole work 130, on the O.M.

h. This work is placed on the O.M. 500 feet above the sea, and 200 yards S.W. of the W. end of the loch. It is represented as nearly rectilinear, with a single rampart, and measuring 120 by 90 feet over all. I could not find any trace of it on or near the spot marked on the map.

i. Earnsheugh (fig. 31).—This is the most important fort of the group. Its situation also is one of the most remarkable in Scotland, perched as it is on the edge of the highest point of the magnificent line of cliffs that fringes the Berwickshire coast. Here the precipice rises almost perpendicularly from the sea to a height of exactly 500 feet, or about 300 above the cliff at the renowned headland of St Abb's, which lies a mile and a quarter due E. of it. The fort consists of two parts, each rudely oval in form, one side in each being the unfenced edge of the precipice, and the other a triple rampart on the landward side, where the ground slopes, directly from the edge, gently towards the marshy hollow at the N.W. end of the loch. The two parts touch each other in their long axis, but their ramparts are only partially connected, and in such a manner that each part is separately defensible. Additional strength is given by a steep descent 300 feet deep to Wester Dean Burn on the extreme W., and by indentations of the cliff at the extreme E. end, and in the centre where the two parts meet. Owing to the fall in the ground landward, the fort, viewed from the opposite side of the loch, which lies 70 feet below the edge of the cliff, appears to be on a little height, called Tun Law.

The Western division or fortlet appears to be the stronger of the two. Its defences consist first of an inner rampart, rudely semioval in plan, and ending on the edge of the cliff at either end. Its scarp falls upon a platform beginning at the entrance, which is near the W. end, where the position is most defensible, and gradually expanding to a width of 30 feet at the E. end. This platform, with the middle rampart in its front, constitutes the middle line of defence, the outer one being formed by the third rampart, which, however, has no platform in its rear. As the defences approach the E. end, they are modified so as to afford a

better protection in case the eastern fortlet were stormed. The inner rampart turns abruptly towards the cliff, so as to form a nearly straight face towards the E.; the platform in its front is widened; the middle rampart stops (at A in the plan), but the line is immediately resumed by a stronger rampart, which, beginning close in front of this sudden stop, bifurcates at once, enclosing a second platform (B), triangular in plan, its base resting on the precipice edge. In front of this the outer rampart is continued without change to the edge. Thus a front is presented towards the eastern fortlet of four ramparts and two platforms, or one more of each than on the landward front. Moreover, as only the outer rampart joins the other fortlet, the connection of the two is so slight that in the event of the easterly or weaker one falling into an enemy's hands, the defensibility of the more important work would be but little impaired. The chief dimensions of the ramparts at three points are given in the sections D E, F G, and H I.

The interior, roughly oval, measures about 200 by 100 feet on the O.M. Ranged against the inner rampart are eight more or less circular foundations or hut-circles, and there are four more standing free in the centre. They vary in size, the largest being 36 feet in diameter. Some stone is visible about them.

Breaks in the ramparts show stones mixed with earth, and in one place apparently rudely built stones, but excavation is necessary to show the structure of the ramparts, and whether there have been any trenches. The living rock crops out both in the interior and on the scarps.

The entrance, situated near the W. end, passes straight through the ramparts. It is much strengthened by the steep descent in front of the ramparts, between it and the cliff-edge, of 300 feet to Wester Dean Burn.

The Eastern division or fortlet has also three ramparts and a platform, but the latter, instead of being between the inner and middle ramparts, as in the western division, is between the middle and outer ones. It is also wider than that of the W. division, averaging 30 feet. The inner rampart is quite independent of the W. fortlet, the sole connection with which is by the middle one, which springs from the outer rampart of the W. fortlet (C on the plan) 80 feet from the cliff, and

after running a straight course of about 60 feet, gives off the outer rampart, from which it is separated by the wide platform already mentioned.

The entrance, which is near the W. end, passes obliquely through the ramparts. There are no hut circles in the interior, which measures about 250 by 130 feet. The length over all of the two fortlets is about 720 feet, the breadth of the eastern one over all being 230 and of the other 190, as given on the O.M.

z. This fort stands somewhat apart from the general group, separated from it by the deep hollow of Western Dean. It stands on or near the top of Outlaw Hill, 500 feet above the sea, 1450 yards W.N.W. of the W. end of the loch, and 250 yards from the cliff edge. I had not time to go to it, but it is represented on the O.M. as a small work, with a single rampart of a somewhat semicircular form.

In concluding this account of these two groups, it may be noticed that they all have apparently a large proportion of stone in their ramparts, and that they are destitute of true trenches. Whether any of them were really of built stone can only be determined by excavation. "Hut circles," generally of a large size, occur in three of them. The entrances to these hut circles could, I believe, be made out easily enough, but there was so much to do in my two visits to this rather remote spot that I neglected to note their position, except in one or two instances. But for the valuable help rendered by Mr H. H. Craw, W. Foulden, and Mr Ferguson, Duns, my notice of these interesting groups would have been more defective than it is.