III.


Early in November 1913 my attention was drawn by Mr R. Kinghorn, Foulden Moorpark, to a low, grass-grown, stony mound which was situated in a fir plantation called The Hagg, in the parish of Foulden, Berwickshire.

The position was on a prominent knoll, almost 450 feet above sea-level, and some 530 yards north-west of Foulden Hagg cottages. A wide view over the Merse extends to the south; to the north, after a slight fall, the ground rises some 20 feet to a height called the Freestone Hill. It has been suggested, with some probability (the geological formation being Silurian), that this name may have been derived from the sandstone covers of cists having been ploughed up here. Flint implements have been found much more plentifully on this hill than on adjoining fields.

The proprietor of the land, Major J. B. Wilkie-Dalyell of Foulden, readily granted permission for the opening of the cairn, and also gave assistance to my men in carrying out the work. After consultation with Mr A. O. Curle, excavation was begun on 5th November. The stones and earth of which the cairn was constructed were thrown back beyond its boundaries; the subsoil was laid bare in order to reveal the presence of any forced soil; any large stones set on end or in line were left in position, and the work was completed on 11th November.

The original periphery of the cairn was found to be marked by a ring of boulders mostly set on end, leaning slightly inwards; the ring measured 31½ feet east and west, by 28 feet north and south. Outside this ring the stones were mostly small, and placed with no
regularity; they had probably originally formed part of the cairn, becoming displaced later. There was no evidence of a surrounding trench. The height of the cairn at the centre was 3 feet above the original surface of the knoll. Fig. 1 shows the positions of the four cairns, and fig. 2 gives a plan and section of cairn No. 1.

Within the outer ring, at the west side of cairn No. 1, a second wall ran in crescent form from the north side of the cairn to the south, being at its middle point 4 feet distant from the outer ring, and running gradually into it at either end. This wall, some 2 feet in width, consisted for most of its course of a double line of boulders set on end, leaning towards its interior, which was filled with smaller stones also set on end.
To the east of this crescent wall, 7 feet from its middle point, 4 feet 3 inches from its north point of junction with the outer ring, 8 feet 3 inches from its south point of junction, and 3 feet 6 inches from the outer ring to the east, lay an inner ring of boulders 16 feet 3 inches north and south, and 11 feet 6 inches east and west. The boulders were mostly set on end, leaning slightly inwards, and like those of
EXCAVATION OF TWO BRONZE-AGE CAIRNS AT FOULDEN. 319

the outer ring were of an average size of about 1 foot 9 inches by 8 inches, the largest measuring 2 feet 10 inches by 1 foot 3 inches.

Within this inner ring, 2 feet from its east side, lay two cists, with their sides touching and their long axes almost due east and west. The north cist measured 3 feet 4 inches by 2 feet 1 inch, and was 1 foot 10 inches deep. The sides were formed of sandstone slabs set upright, horizontal slabs being placed on the top of these where required to equalise their height. The corners were packed, where necessary, with smaller stones, and a large flag, 4 feet 6 inches by 3 feet by 6 inches, served as a cover. This cover had probably been some 6 inches below the original surface of the ground. The bottom was unpaved, consisting of the red, sandy subsoil of the knoll. The interior of the cist was almost filled with soil, which was duly sifted. An urn of the food-vessel type was found lying on its side near the south side of the cist. Near the west end were found four flint implements. Fragments of oak-wood charcoal, and a number of human bones were also found. The bones were incompletely incinerated, and had belonged to an individual of adult age; they had been placed indiscriminately in the various parts of the cist.

The south cist, the bottom of which was 9 inches above that of the north cist, measured 3 feet 9 inches by 1 foot 10 inches. Its depth was 1 foot 8 inches, and it had no covering slab, the top of its sides being on a level with the top of the cover of the north cist. Several small slabs had been laid horizontally as paving round the cist, at the level of its top, a feature which was also observed in the case of the north cist. This cist also was unpaved. The soil which filled the cist contained an urn of the food-vessel type lying on its side in the north-west corner; a flint knife and a small fragment of flint were found near the centre, and several fragments of oak charcoal were present. No bones or teeth were found.

Close to the inner ring of boulders, at its south side, and 2 feet 8 inches from the south cist, lay a small cist at a somewhat higher
level, part of its side slabs having apparently been above the original level of the ground. It measured 2 feet 2 inches by 1 foot 1 inch, and was 1 foot 1 inch deep. The cover measured 2\(\frac{1}{2}\) feet by 1\(\frac{1}{2}\) feet by 8 inches, and the bottom was unpaved. As this cist was rifled during the temporary cessation of the work, the knowledge of its contents is lost; on sifting, the soil yielded a small fragment of charcoal.

It would seem that the primary interment of the cairn was made in the north cist, which is deepest and occupies the most central position. The south cist, though secondary, was designedly placed in close relationship to it, the similarity of surface paving suggesting no great diversity of date. The small cist, being shallower than the south cist, must also be secondary, the cairn having to be excavated for its construction; there is some evidence that the boulders of the inner ring were moved somewhat to make room for it.

Two feet west of the south cist, and at right angles to it, lay a cist-like pit without slabs. It contained forced soil, the lower stratum of which upon examination proved to be rich in organic matter. The pit measured 3 feet 2 inches by 1 foot 7 inches, and was 1 foot 6 inches deep; a sandstone slab lay sloping into it on its east side, and a smaller slab lay in the bottom. Near the middle lay a human femur, much decayed; and at the south end, where the pit extended a few inches further to the east, remains of charcoal were found, among which were easily distinguishable the stems of heather, which is still to be seen growing in the vicinity; oak was also present.

Midway between the inner ring and the crescent wall, and almost in a line with the north side of the north cist, was found a circular cup-shaped pit, 1 foot 6 inches deep and 1 foot 6 inches in diameter at the top. Beneath forced soil, charcoal remains were found, chiefly of oak, and two halves of hazel-nuts, one of which still retained the kernel. Similar pits are mentioned by Canon Greenwell as being found in the wold barrows of Yorkshire, and in the long barrows of the south-west of England (British Barrows, p. 9), but he remarks their
absence in the North Riding and in Northumberland. These pits were generally circular about 1\(\frac{1}{2}\) feet deep, and the same in diameter; as many as four or five have been found in a single barrow. In most cases they merely contained forced soil, but sometimes bones, charcoal, potsherds, etc., were present. He supposed them to have been receptacles for food, but remarks their not having been usually placed in close contact with the body.

Fig. 3. Urn from the North Cist in Cairn No. 1.

At the spot marked on the plan with a X, within the inner ring, was picked up on the original surface of the ground a finely preserved axe-hammer (fig. 5.)

The urn from the north cist (fig. 3) is made of a yellowish-red clay. The dimensions are as follows:—height, 6 inches; circumference at lip, 19\(\frac{3}{8}\) inches; circumference at moulding, 20 inches; diameter at top, 6\(\frac{1}{2}\) inches; diameter at base, 3 inches; thickness at lip, \(\frac{9}{2}\)-inch; thickness at base, 1 inch. The interior of the lip does not project, but is ornamented for a width of \(\frac{7}{8}\)-inch with two rows of oblique
ribbed impressions \( \frac{1}{2} \)-inch in length. The upper part of the exterior has five rows of the same ornamentation, the lowest row being placed beneath a projecting moulding which encircles the urn, \( 1\frac{3}{4} \)-inch from the top. The obliquity of the impressions here and on the lip is reversed in alternate rows. The lower portion of the urn, which is contracted in a graceful curve to a slight plinth \( \frac{1}{2} \)-inch in height, is marked with oblique cord impressions widely and somewhat irregularly placed.

![Fig. 4. Urn from the South Cist in Cairn No. 1.](image)

The urn from the south cist (fig. 4) is made of redder clay than that used for the urn from the north cist. Its height is \( 5\frac{3}{4} \) inches; circumference at lip, 21 inches; circumference at widest part, \( 20\frac{7}{8} \) inches; diameter at lip, \( 6\frac{1}{4} \) inches; diameter at base, \( 2\frac{5}{8} \) inches; width of lip, \( \frac{3}{8} \)-inch; thickness at base, \( 1\frac{1}{8} \) inch. The interior is much blackened. The lip, which projects prominently both externally and internally, is bevelled inwards very slightly. It is ornamented by a row of circular impressions; the hollow bone or other instrument with which these have been made seems to have been notched. This row has on either side of it a herring-bone ornament of a small pattern. Another line of
herring-bone passes round the outer edge of the lip. The exterior is divided into three zones by two mouldings, the upper of which is placed 1\(\frac{3}{4}\) inch from the lip and 1\(\frac{1}{8}\) inch above the lower moulding. The upper zone contains four horizontal rows of herring-bones similar to those on the lip; the inner two are interrupted at intervals of some 2 inches by two similar rows placed vertically. The middle zone contains three of these rows, horizontal, broken at four places by vertical rows. The lower zone contains, beneath a horizontal row adjoining the moulding, six vertical bands, each of which consists of three vertical rows of herring-bones, similar to those on the other portions of the urn. This part contracts abruptly, and there is little or no plinth. The faint lines of two thumb impressions can be traced on the lower zone.
The axe-hammer is of greenstone, well formed and polished. It measures 4\(\frac{1}{6}\) inches in length, 1\(\frac{1}{8}\) inch in breadth at right angles to the shaft, and 1\(\frac{1}{3}\) inch in depth. The perforation, instead of being circular by drilling, is ovoid and contracted in the middle; it measures at either end 1\(\frac{1}{2}\) inch by 1\(\frac{1}{16}\) inch, and at the middle 1\(\frac{1}{8}\)-inch by \(\frac{5}{8}\)-inch.

![Fig. 6. Flint Implements from the Cairn No. 1.](image)

The flints from the north cist are as follows:

1. Knife of pale grey flint, 2\(\frac{1}{4}\)\(\frac{3}{4}\) inches long by 1\(\frac{3}{4}\) inch broad. The point is broken, the original length having been about 3\(\frac{1}{4}\) inches. It is of dagger shape, chipped on both edges, and has a natural perforation near the base.
2. Small knife of black flint, with the point also broken; length 1 inch, originally about 1\(\frac{3}{4}\) inch, very thin, and \(\frac{1}{2}\)-inch broad.
3. Brown flint, 1 1/4 inch by 3/4-inch, with curved chipped edge at one end, and small hollow scraper at the other.
4. Greyish-black flint, with secondary chipping.
From the south cist:—
5. Knife of dark grey flint, 1 1/2 inch by 1/2-inch.
6. Small piece of black flint, 1/2-inch in diameter, unworked.
The various relics have been presented to the National Museum by the proprietor.

Cairn No. 2.

During the excavation of Cairn No. 1, information was obtained of another cairn some 460 yards to the south-east, and 70 yards north-north-west of Foulden Hagg Cottages, also situated in the Hagg Wood. The adjoining ground rises slightly to the north-east and falls slightly in the other directions. The cairn (fig. 7) was circular, 24 feet in diameter, and was composed of earth and stones. The excavation was carried out on 22nd December, Mr J. Graham Callander being present. Beneath the cairn was found a ring of boulders, with an internal diameter of 13 feet 10 inches east and west and 12 feet 10 inches north and south, intermitted to the north-east for a space of 6 feet. This ring, which was some 1 foot 9 inches in width, was similar in form and dimensions to the hut circles in the district, which, however, usually have a narrower entrance to the south or south-east. The boulders of which the ring was formed were not set on end but laid on their sides in a single row, which became double on the north side; the largest measured 1 foot 9 inches by 1 foot 7 inches by 10 inches. Outside the opening to the north-east was a small piece of paving, 4 feet 6 inches by 2 feet, formed of stones some 9 inches by 4 inches set on end in the ground. Within the enclosing ring, and separated from it by a space varying from 1 foot 4 inches to 3 feet 6 inches in width, was a D-shaped structure enclosing the cist (figs. 7 and 8), which measured 5 feet 4 inches by 2 feet 9 inches by 1 foot 4 inches,
and lay with its long axis pointing east-north-east. The bottom, which was unpaved, was 2 feet 7 inches below the top of the cairn, and some 6 inches below the original surface of the ground. No sandstone slabs had been employed in the construction, and the cist was uncovered.

Three large boulders on the north and three on the south formed the sides of the cist, two were placed at the east end, and at the west end was one large block 2 feet 7 inches by 1 foot 9 inches by 1 foot. Behind these stones was another line of smaller boulders forming the periphery of the D-shaped structure; at the east end a second layer of stones had been superimposed to equalise the height of the complete structure.
Several boulders had been placed at the south side across the space between the structure and the enclosing ring. There was no evidence of a trench having surrounded the cairn. The cist, being uncovered, was filled with soil, in the upper layers of which, near the north side, lay a small sandstone block, having on its upper surface a cup-like concavity 3 inches in diameter and 1 1/2 inch in depth. A somewhat similar marking, 2 1/2 inches in diameter and 3/8-inch in depth, was observed on the upper surface of the large sandstone block forming the west end of the cist. These markings show no indications of tool marks, their sides being weathered like the surface of the stones on which they are placed.

No urn was found in the cist, and bones were entirely absent. A fragment of reddish pottery, 1/2-inch in diameter and 1/4-inch in thickness, was found in the south-east corner; several minute fragments of charcoal were found, and eight flakes of brown and grey flint, one of which showed slight secondary chipping. The flints were found at the
east end of the cist. At a subsequent visit, after the excavated soil had been washed by rain, I found, among soil thrown from the space to the north of the cist, three flint flakes—brown, grey, and black—all of which showed secondary chipping.

Site 3.—About 80 yards east-south-east of the Hagg Cottages, to the north of the public road, and between it and the hedge adjoining it, a cist was found in February 1885, and was described by Dr Charles Stuart (B. Nat. Club, xi. p. 236). It measured 2 feet 4 inches by 1 foot 6 inches by 1 foot, and was formed of slabs of greenstone, with a bottom slab and a cover. The long axis lay north-west and south-east. Bones of a young person were found, but no urn or flints. The position is very similar to that of Cairn No. 2, the ground rising to the east and falling slightly in the other directions.

Site 4.—A prominent knoll, in a field long under cultivation, lies about 160 yards south-east of the Hagg Cottages. As this seemed a likely spot on which a cairn might formerly have stood, it was examined on 23rd December, narrow trenches being cut across the summit. This revealed the former position of two cists, lying nearly east and west, one being about six feet north-east of the other. Small fragments of the original slabs were found, these having probably been removed when the land was first cultivated. The cavities measured roughly 5½ feet by 3½ feet, and were about 3 feet deep. A considerable amount of the charcoal of whin stems was found, also lignite and cinders, and three pieces of flint—one scraper (brown), one pigmy (white), and one fragment showing no trace of secondary working.

An examination of the reports of cairns excavated in the east of Berwickshire shows that in several instances signs of construction have been observed. Unfortunately it is not always clear whether the circle of stones mentioned formed part of the cairn or surrounded it at a distance.

1. More than a hundred and fifty years ago there stood a cairn
300 yards east of Warlawbank Fort. Beneath the cairn was found a cist, and around the cairn was a large circle 40 feet in diameter, with entrance from the east, all paved with stone. (*Scots Magazine*, September 1759, p. 462.)

2. At Little Billy, till shortly before 1836, stood a cairn 100 yards from the monolith known as the Pech Stane. It contained a cist, and is described as a large round cairn in an enclosing ring of large granite blocks, open to the south-east. (*Carr's History of Coldingham*, p. 9.)

3. Dr James Hardy has recorded the removal, in 1832, of a horse-shoe structure, open to the south-west, half way between Craw's Cairn and the Penmanshiel Forts. Six or seven cists were found, all empty. He also mentions two cairns in a hollow to the north of St David's Cairn, one surrounded by a rude wall. (*B. Nat. Club*, iii. p. 104.)

4. The same authority describes cairns on Penmanshiel Moor as circular, with a hollow centre, like hut-circles. (*B. Nat. Club*, vii. p. 264.)

5. In 1887 a cist was discovered at Hoprig in "a well-like construction." (*B. Nat. Club*, xii. p. 131.)

In conclusion I should like to record my thanks to Professor Bayley Balfour, for his report on the charcoal from Cairn No. 1; to Professor Bryce, for an examination of the bones from the north cist; to Mr M'Callum, Edinburgh and East of Scotland College of Agriculture, for testing the soil from the cists of Cairn No. 1; to Mr M'Lintock, Royal Scottish Museum, for examining matter from the cists at Site 4; and to Mr Curle and Mr Callander, for much advice and assistance given throughout the progress of the work.

"Bones from Foulden Cairn No. 1."

"The deposits submitted to me from the Foulden Cairn consist of a considerable mass of fragments of burnt human bones, and a frag-
ment of an unburnt human femur. The burnt bones, which were found within the cist, are not so completely incinerated as is generally the case in burnt interments, nor are the fragments so small as usual. The articular extremities of the long bones have in certain cases preserved their form, and there are several complete phalanges. It is therefore possible to state that the individual was of adult age. When the several groups of burnt bones were compared, it was found that there was no evidence that more than one skeleton was represented, and further that there was no significance in the grouping of the deposits in the cist, because fragments from all parts of the skeleton occur in each.

"The unburnt fragment found in the grave-like depression is too small to permit of any conclusions regarding the characters of the skeleton."

THOMAS H. BRYCE.

NOTE OF A CIST AT EDINGTON MILL, CHIRNSIDE.

While widening the public road near Edington Mill, in the parish of Chirnside, Berwickshire, on 23rd October 1913, the workmen unearthed a cist, the cover of which lay some 18 inches below the surface of the ground.

The situation is 130 yards east-north-east of Edington Mill House, 200 feet above sea-level, and some 10 yards from the edge of the Whitadder ravine, which here is fully 100 feet deep. The ground falls slightly to the west, but to the north and north-east rises gradually for a short distance.

For several yards round the cist a number of stones were found in the soil, probably the remains of a cairn which had formerly covered the spot.

The cist, which measured internally 3 feet 8 inches by 2 feet 4 inches, and was 1 foot 6 inches in depth, was formed of slabs of red and grey sandstone from the adjacent river banks, and lay with its long axis almost due east and west. The cover was a large slab of grey sand-
stone 5 feet 4 inches by 4 feet by 8 inches; three sandstone flags formed the bottom of the cist, and rested on the bed rock. The sides consisted each of one slab. The height of the east end was made equal to that of the other sides by an additional slab laid on its side, and a space in the south-east corner was neatly packed with smaller stones. The interior of the cist was partially filled with soil; standing upright in the north-east corner was found an urn of the food-vessel type. There were also found small portions of another urn, probably a drinking-cup, \( \frac{1}{4} \)-inch in thickness, bearing ornamentation consisting
of short incised lines arranged obliquely in horizontal bands, and long lightly impressed lines arranged horizontally or as cross-hatching. These lines had apparently been made with a notched instrument.

At the east end of the cist were found minute portions of a skull and several teeth, including a molar, a canine, and two bicuspids. From these the dentine had been completely eaten away, leaving only the enamel, which showed no signs of decay. A small piece of charcoal was also found in the cist.

The food-vessel urn is made with much regularity, and shows considerable artistic taste. It is composed of reddish-yellow clay, and measures \(5\frac{3}{8}\) inches in height, 6 inches across the top, 4\(\frac{3}{8}\) inches internally across the top, and 2\(\frac{5}{8}\) inches across the base. The circumference at the top is 18\(\frac{3}{4}\) inches, and at the widest part 19 inches. The lip, which is \(\frac{1}{4}\)-inch wide, is bevelled inwardly, and projects over the interior of the bowl, the sides of which become much thinner at the widest part, and again thicken to \(\frac{3}{4}\)-inch at the base. Along the lip run four rows of dotted impressions, and on its outer edge is a series of slight notches. On the upper part of the exterior five twisted cord impressions encircle the urn, and below these is a band formed by short similar impressions arranged vertically. At the widest part of the bowl are two prominent mouldings, with a hollow between, which is divided into sections by four unpierced knobs connecting the mouldings. On the upper moulding are four horizontal cord impressions—two on its upper and two on its under surface. On the upper surface of the lower moulding is a row of dotted impressions, and on the lower surface three cord impressions, the uppermost of which is placed on the crest of the moulding. The knobs are also ornamented by short vertical cord impressions. The lower portion of the urn bears four equidistant bands, each consisting of three horizontal cord impressions; each band is separated by dotted impressions, of which there are five rows. These lines of ornamentation follow the curves of the lower moulding in an artistic manner, where
the latter is drawn upwards to meet the knobs. The urn is now placed in the National Museum of Antiquities.

As the cist had to be removed for the widening of the road, I took charge of the slabs and re-erected the cist in my garden, placing each slab in its original relative position.