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DISCOVERY OF (1) A SHORT CIST CONTAINING HUMAN REMAINS AND A BRONZE ARMLET, AND (2) A CUP-MARKED STONE, AT WILLIAMSTON, ST MARTINS, PERTHSHIRE. By J. GRAHAM CALLANDER, SECRETARY.

The parish of St Martins, a highly cultivated and well-wooded district, stretching between the river Tay and the lower slopes of the Sidlaw Hills, some five miles north of Perth, must have been inhabited by a considerable population during the Bronze Age, if we may judge by the surviving monuments and the discoveries of graves, within its bounds, which it is customary to assign to that period. Five, if not six, stone circles remain in a more or less dilapidated condition, and the site of another is noted on the Ordnance Survey map; five cup-marked stones are to be seen at, or near, their original sites, and a sixth, found in the parish, is preserved in our National Museum of Antiquities; a burial mound largely composed of earth, bearing the peculiar name of Tammyteethie, also survives. The ground is undulating, rising in many places in steep ascents from the level of the river towards the hills to the east, and it is drained chiefly by the St Martins burn, which, in its tortuous course, has cut deeply into the fluviatile deposits and underlying Old Red Sandstone that occur all over the parish. As it is a tract of knowes and ridges and naturally welldrained slopes, with sheltered dens and hollows, in few places rising over the 400 feet level, it is not surprising that it should have been selected for human occupation by a people who had got beyond the mere hunting and pastoral stages, and were well acquainted with, and no doubt practised, the growing of grain.

The farm of Williamston, situated about one mile west-north-west of the parish church, has proved very rich in prehistoric remains, as the stone-circle site above mentioned lies some 230 yards north-west of the dwelling-house on the farm, Tammyteethie stands about 525 yards to the north-east, and the cup- and ring-marked stone in the museum was unearthed about 250 yards south-east-by-south of the same building. In addition to these monuments, two ancient burial sites are mentioned on the Ordnance Survey map, the first noted as "Stone Cists found," lying in the same field as Tammyteethie, and the other as "Human Remains found," on a ridge south-east of the steading. On the field

¹ In the *Proceedings*, vol. xxiii. p. 142, it is stated that this stone was found 120 yards south of the steading, but the distance and the direction were wrongly estimated.

to the south of that in which Tammyteethie stands, but on the neighbouring farm, the map shows another record of "Stone Cists found" (fig. 1). The cup- and ring-marked stone was discovered by Mr Robert T. Bruce when a young man working on the farm of which his father was tenant, and whom he succeeded. As a boy he remembered the stone cists on Williamston being found. There were four or five of them, and he thought they were rather smaller than the short cist recently discovered,

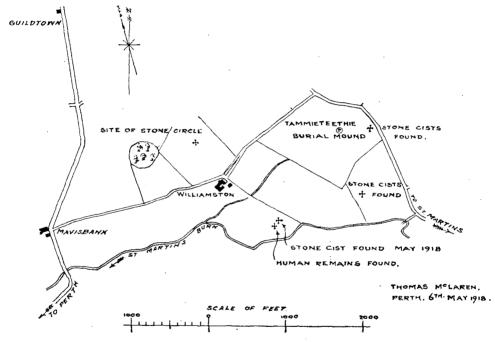


Fig. 1. Plan of Williamston Farm, St Martins, Perthshire, showing Site of Stone Cists.

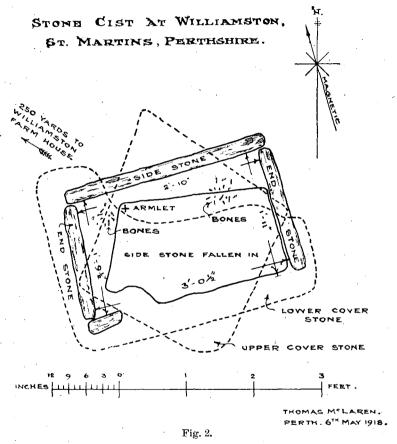
but formed of slabs in the same way. Human remains were found in them, but no urns. Subsequent to these discoveries, another stone-lined grave was found in the same field, nearer to, and south of, Tammyteethie mound, but it was long and narrow, and consequently may have been of later date. The position where the human remains mentioned on the map were found is a very striking one, as it lies near the crest of a narrow ridge or spur which stretches out in a west-south-westerly direction towards a bend in the St Martins burn, and rises some 40 to 50 feet above its base, the summit being about 240 feet above sea-level. The south-eastern flank is specially steep for about two-thirds of its height, but

for the last 30 yards before the crest is reached the slope becomes quite easy. This higher declivity, facing the morning sun, was chosen by the ancient inhabitants as the site of more than one grave, as a second sepulchral deposit in the form of a short cist was discovered there in the spring of 1918. When the position of the first grave, as it is marked on the Ordnance map, is compared with that of the recently discovered cist, it is seen that the distance between them must have been a matter only of a few yards, if not feet.

On Saturday, 4th May, the discovery of the cist was made by James Donaldson through the teeth of the grubber which he was driving coming in contact with a large slab, one of the covering stones of the grave. The lower or eastern end was about 8 inches under the surface of the ground, and the higher or western end about 12 inches. The cist was opened and cleared out later in the day, when human remains and the fragment of a bronze armlet or bracelet were found within it. On Monday morning, Mr Bruce notified the discovery and sent the armlet to Mr Coates, Curator of the Perth Museum, who that afternoon visited the spot accompanied by Mr Thomas M'Laren and myself. We saw the place under very bad weather conditions, as it poured the whole time we were Although we were unable to sift the soil thrown out of the grave, we obtained a clear account of the circumstances attending the discovery and subsequent excavation, and secured complete measurements of the cist, as three of the walls still remained in position. We also recovered the osseous remains which survived, and picked up a second fragment of the armlet.

It was a typical short cist of the Bronze Age, formed of four thin slabs of dark brown, micaceous sandstone, set on edge (fig. 2). As the slab on the south side was rather short, a narrow slip of stone had been inserted to fill up the vacancy at the west end. The mouth had been closed with two cover stones, one superimposed upon the other. The longer axis lay almost east and west magnetic, in a line not parallel to the crest of the ridge, as might have been expected, but approaching the diagonal. was placed about 10 yards from, and 3 feet lower than, the summit, some 250 yards south-east-by-east of the steading, and 27 yards south-west of the fence on the east side of the field. The internal measurements of the chamber were 2 feet 10 inches and 3 feet 1 inch along the north and south sides, 1 foot 11 inches and 1 foot $9\frac{1}{2}$ inches across the east and west ends, and from 1 foot 6 inches to 2 feet in depth, the side and end slabs varying from 2 inches to 3 inches in thickness. A squarish slab, measuring from 2 feet 6 inches to 2 feet 8 inches across, and 6 inches in thickness, formed the upper cover stone. It was placed diagonally over the grave resting on the lower cover, and its size was such that the corners would reach VOL. LIII.

just beyond the ends of the cist and project a few inches over the sides. The lower cover, which was broken to facilitate its removal, was oblong, and completely covered the mouth of the burial chamber. It measured 3 feet 9 inches in length, 2 feet 9 inches in breadth at the western end, which had not been broken, and 2 inches in thickness. After this stone



was removed and a quantity of sand thrown out of the grave it was seen that the slab on the south side had collapsed, falling inwards, probably at an early period. The larger portion of a bronze armlet was found lying on the top of the stone, close to the edge of what was now its north-west corner. Under the stone, embedded in sandy clay, were the remains of a human skeleton, lying along the northern side of the cist. The presumption is that the stone in its fall struck the arm of the skeleton on which the armlet had been placed, fracturing the bone and causing the armlet

to spring up on to the top of the slab. The skeletal remains, which were very fragile and much broken, were thrown out on to the edge of the excavation; but as they had been subjected to heavy rains during the week-end, as well as a visitation from crows, before our visit, very few fragments were recovered by us, and these were of small size. Nothing was observed that would indicate that the grave had contained an urn; but even had there been such a vessel, doubtless it would have been crushed completely by the fall of the stone. It was impossible to detect any traces of pottery amongst the soil removed from the cist when we saw it, as by that time it had become of the consistency of a mortar formed of sandy clay. One mass was noticed to contain several streaks and thin layers of a dark substance resembling charred wood. If we are right in our conjecture that the armlet had been allowed to remain on the arm of the corpse when it was buried, from the positions of the ornament and the

skeleton, the former towards the northwest corner of the cist and the latter along the northern side of the chamber, the inference is that the body had been placed in the grave in a crouching position, on its right side, the head near the north-west corner facing the south, with the hands drawn up in front of the chest or neck.

The remains of the armlet consist of two pieces, which when placed end to



Fig. 3. Bronze Armlet from Williamston.

end almost complete the circumference of the ring (fig. 3). the fractures fit together, but the fragments are much corroded in places and slightly twisted. A glossy, bluish-green patina covers the greater part of the surface of the larger fragment. In its original condition the bracelet must have been a very fine ornament, displaying workmanship of a high quality. Of the two fragments, the larger, which consists of more than half the ring, is in the form of a thin, broad band, flat on the inside, and decorated on the exterior by three encircling, flattened cordons or mouldings, separated by hollows of a width equal to that of the raised parts, the edge of the mouldings being bordered by a row of small punctulations, $\frac{1}{16}$ inch apart. The second fragment, besides being smaller, is in a worse state of preservation than the first; it extends only to about one-fourth of the circumference, and shows no more than a width of two cordons, with the greater part of the intermediate hollow worn away. When complete, the armlet had an internal diameter of about 2½ inches, and its greatest thickness is $\frac{1}{16}$ inch. Although the width of the larger of the two fragments is $\frac{21}{32}$ inch, it does not form a complete section of the ring, as one edge is broken off. It is quite clear that of the surviving cordons only one is a marginal moulding; it measures $\frac{5}{64}$ inch in breadth, and bears no punctulations on the outer border. The other two are $\frac{5}{32}$ inch in breadth, double the width of the first, and as the outer of these has a ragged edge and bears a punctulated line along its outer side, there is no doubt that, like its neighbour, it was one of the interior bands, and that at least one marginal moulding is amissing on this side. Such being the case, if we allow a width of $\frac{5}{64}$ inch for the missing band, the same width as that on the opposite side, we find that the bracelet must have been almost exactly $\frac{7}{8}$ inch in breadth. Of course, the missing

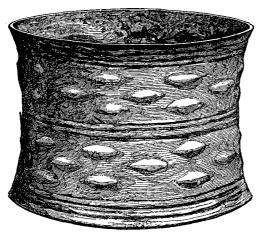


Fig. 4. Bronze Armlet from Melfort.

part may have been of a greater width, occupied by one or more mouldings in addition to the one on the edge, but I think this is unlikely, because no fragments of such a part were found. If this surmise is correct, the complete armlet would show four encircling bands, a narrow one on each edge and two broader ones between.

Discoveries of bronze armlets have been made so seldom in Scottish graves of the Bronze Age that any new record is of no little importance. Those found are usually of cylindrical section, flattened more or less on the inside, and seem to have been made by bend-

ing a bar of metal round in a circle and fitting the ends closely together, instead of casting them in complete annular form. Although this is the case, we know that rings of the latter type were made in Scotland during the early part of the Bronze Age, as a mould for casting flat bronze axes, found in Marnoch, Banffshire, also bears a matrix for making a ring of this class. The only occurrence of the thin, broad type of armlet in a Scottish Bronze Age grave that I know of, is the pair discovered with a jet necklace in a cist at Melfort, Argyll 2 (fig. 4). One of these armlets was smashed up, but the other is nearly complete. Its breadth, 2 inches, is probably greater than that of the Williamston specimen before it was broken; it also differs from the latter in being slightly constricted round the middle instead of being flat, and in being ornamented with encircling

¹ Proceedings, vol. xxii. p. 369.

² Dr Anderson, Scotland in Pagan Times: Bronze and Stone Ages, p. 57.

parallel lines, and rows of lozenge-shaped projections beaten up from the inside, instead of simple raised bands. These, however, are only differences of detail and not of character. A closer parallel occurs in the pair of flat bronze armlets found at Migdale, Skibo, Sutherland, in a hoard of weapons and ornaments dating to the early Bronze Age, which amongst other relics contained buttons of jet, two flat bronze axes, and four pairs of plain bronze armlets convex on the exterior and flat on the inner side. The flat armlets from this hoard are in an excellent state of preservation, and bear a marked resemblance to the Williamston example (fig. 5). Like it, their ornamentation consists of encircling flattened mouldings, with broad hollows between, but they have only three of these raised bands instead of at least four. The hollows on the Migdale rings show the

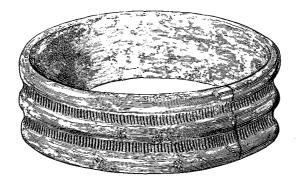


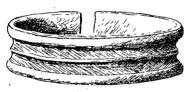
Fig. 5. Bronze Armlet from Migdale.

additional feature of being decorated with graved parallel lines, closely set together, perpendicular to the edges of the mouldings. These armlets are rather thicker, and are $\frac{7}{8}$ inch broad, the same breadth as suggested for the bracelet under review, moreover they have the same internal diameter, $2\frac{1}{2}$ inches, which is also that of the Melfort example. Like the plain armlets with which they were found, the Migdale pair had a closely fitting joint. Owing to the imperfect condition of the armlet from Williamston it is impossible to say whether it had been fashioned in this way, but on the analogy of the Melfort bracelet it may easily have been cast in the round. This would entail a very delicate operation, and indicates what capable craftsmen were the metal-workers of Scotland during the Bronze Period. I think that even greater skill was required for the production of the Melfort armlet than for the manufacture of our finest bronze spear-heads, and many of these display technique of a very high standard.

¹ Proceedings, vol. xxxv. p. 269.

Although the circumstances attending the discoveries of the Williamston and Migdale cordoned armlets indicate that they belong to the Bronze Age, this type of ornament seems to have survived to considerably later times, as an armlet very similar to the latter example was found during the excavations carried out at the Roman fort at Cappuck, Roxburghshire (fig. 6). This armlet, which was of bronze and measured 21 inches in diameter, was encircled with three cordons, the one in the middle being about half the width of those on the margins. It also showed a further resemblance in having a break in the ring. The carefully squared ends, however, in the Cappuck specimen were not fitted closely together when found, but were nearly 1 inch apart. From this it need not be inferred that the ring should be considered penannular, because from the way the ends are finished it is a reasonable presumption that they would be pressed closely together when clasped round the wrist.

As we had been informed, at the time of our first visit, that the plough



had struck some other large stones below the surface, a few vards from the cist, we returned to the site on the afternoon of Saturday, 18th May, to make further investi-Mr Bruce not only gave us permission to dig, although the field had been Fig. 6. Bronze Armlet from Cappuck. sown since our first visit, but he let us have the assistance of Donaldson, who had made

the first discovery. Some 22 feet north-north-east of the cist, by the use of an iron probe, we located some fairly large stones, over an area about 6 or 8 feet broad. Digging was commenced at a place where several stones were felt closely grouped together, and at a depth of about 10 inches under the surface an irregular block of micaceous sandstone was immediately laid bare. Its upper surface was found to be cup-marked, eight of these carvings being counted after the stone had been cleaned (fig. 7). The block measures 2 feet 4 inches in extreme length, 1 foot 6 inches in breadth, and 8 inches in thickness, but evidently it is incomplete, as the fracture on one side cuts across a cup-mark. The cups vary from 11 inch to 3 inches in diameter, and the two largest are remarkable not only for the clean cutting which they exhibit, but for their depth, which is $1\frac{3}{8}$ inch; the smallest is $\frac{3}{8}$ inch deep. Two of the cup-marks lying towards the centre of the stone are joined by a broad, shallow hollow, but possibly this feature may have been caused by the natural disintegration of the stone.

Immediately below the cup-marked stone was a rounded block of whinstone, about 2 feet in greatest diameter, with several others of 1 Proceedings, vol. xlvi, p. 474, fig. 11, No. 5.

rather smaller size, embedded in the surrounding soil. Four or five of these stones, which showed no signs of having been placed in position, were removed, and the soil was cleared out of the cavity. At a depth of 2 feet 9 inches we came on the top of a block similar to those thrown out, but we did not lift it, as to excavate the site properly would have disturbed too great an area of turnip drills, and we did not care to trespass further on Mr Bruce's good nature. The soil thrown out in the course of this excavation had been disturbed at some previous time, as

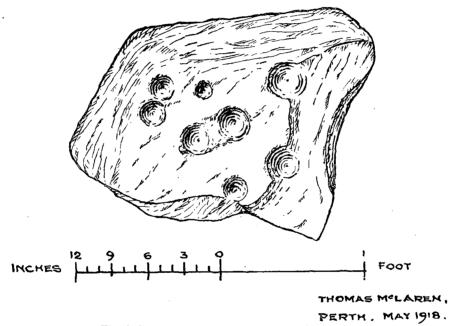


Fig. 7. Cup-marked Stone found at Williamston.

not only was it darker in colour than its surroundings, but it contained many fragments of charred wood, of which the largest, measuring 3 inch by inch, was found with a small piece of bone at the bottom of the cavity. Apparently we had happened to hit on the edge of the forced soil, as undisturbed red sub-soil was encountered immediately to the west of the boulders.

The cup- and ring-marked stone which was found near this spot, in 1888, is described as being only a portion of a larger slab. Mr Bruce was under the impression that it was unearthed about 20 yards to the south-west, it is quite possible that the two blocks fitted together may complete the original slab.

24 PROCEEDINGS OF THE SOCIETY, DECEMBER 9, 1918.

While probing the ground round about the spot where we got the cup-marked stone, the presence of other blocks was detected, and we hoped to be able to make further excavations later on. Circumstances have not permitted this to be done.