

III.

NOTICE OF A ROCK SURFACE WITH CUP-MARKS AND OTHER SCULPTURINGS, AT BLACKSHAW, WEST KILBRIDE, AYRSHIRE. BY MESSRS D. A. BOYD AND J. SMITH. COMMUNICATED BY R. W. COCHRAN-PATRICK, LL.D., *Secretary*. PLATE VIII.

Near the ruined tower of Law Castle, which stands conspicuously on a small eminence overlooking the village of West Kilbride, an ancient road or bridle-path, long disused and grass-grown, winds steeply round the eastern side of Law Hill. On reaching the summit of the ridge which connects Law and Blackshaw Hills, the road crosses a shoulder of the latter, and descends towards the eastern boundary of the parish, where its track becomes obliterated.

About two miles from West Kilbride, in the descent along the southern slope of Blackshaw Hill, several outcrops of sandstone rock project on both sides of the road. Owing to the firm quality of this stone these outcrops have formerly been quarried for building purposes. Old surface workings may be observed in one or two places, and for some distance the boundary walls are constructed exclusively of this material.

The incised rock is situated on the upper side of the road, from which it is separated by a stone wall. It measures 45 feet in length by 19 feet in breadth at one end and 3 feet at the other. Six feet of the rock at the narrow end, on which no markings are to be found, have not been shown on the plan. The long axis of the rock extends in the direction 67° N.W. (*Mag.*, 1886), the wide end being towards the south-east.

DESCRIPTION OF THE SCULPTURINGS.

In attempting to describe the figures and refer them to the various recognised types characteristic of the British rock-sculpturings, considerable difficulty has been experienced through the weathered condition of the rock. Some of the hollows on the surface appear to have been

cups or other markings, but are now mere irregular depressions. Some of the cups still retain a distinct form, but show traces of additional external markings, which may have been rings either partial or complete; and some faintly-ringed cups show slight indications of a radial groove.

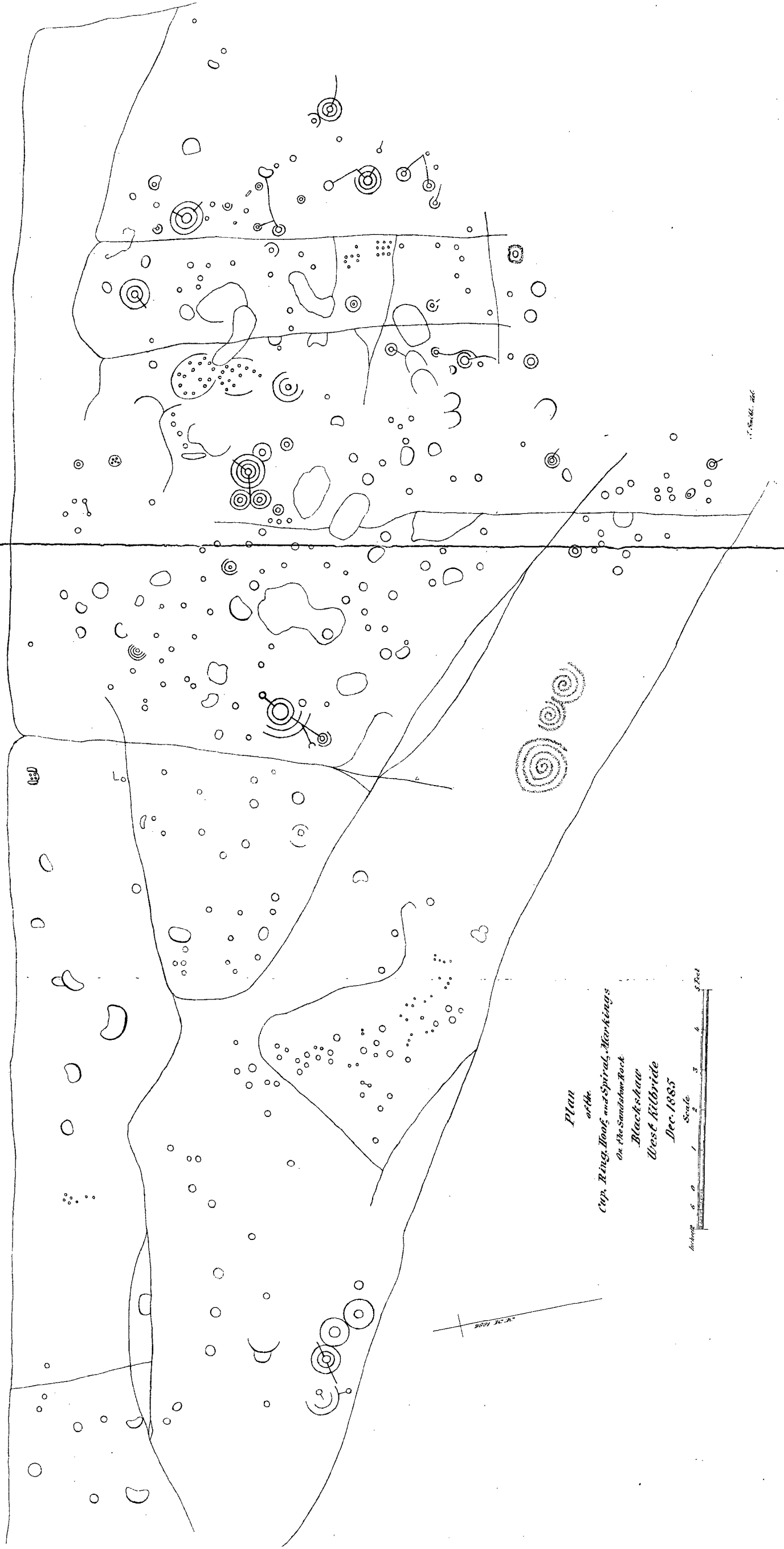
The accompanying plan shows the surface of the rock, so far as marked, and affords a fair representation of the number, character, and arrangement of the various sculpturings. (See Plate VIII.)

I.—INCISED FIGURES.

1. *Cups*.—The cup-markings are very numerous, and more than 300 have been figured on the plan. Many of these are of course very indistinct, the wasting of the sandstone and growth of crustaceous lichens having almost effaced them. As is usual on extensively marked rock-surfaces, the size and depth of the cups vary considerably. Some measure several inches across the mouth, while others are dot-like hollows which can be filled with the finger-tip; some are solitary, while others are arranged in groups or clusters; some are simple cups, while others are surrounded with one or more circles, and occasionally furnished with one or more radial grooves.

Two of the large cups are worthy of special notice. Buried under a deep covering of soil and turf, they have been perfectly preserved; and their rough internal surface shows the pittings of the tool-markings as distinctly as though the sculptor had only recently carved them. These cups are regularly concave, curving gradually towards the bottom.

A remarkable group of cups, shown near the lower margin of the plan, is placed on a sloping slightly-depressed surface, bounded above by an angular line. It has been suggested that this depression has a somewhat artificial appearance, but we are disposed to regard it rather as a natural irregularity of the surface. Of the fifty-four cups placed in this depression, rather more than the half consist of dot-like incisions. Two of the small cups are connected by a straight groove, forming a spectacle-like figure, and near it are placed other three cups. The same figure



*Plan
of the
Cup, Ring, Hoop, and Spiral Markings
on the Sandstone Rock
Blackshaw
West Kilbride
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T. Smith del.

occurs again towards the opposite margin of the rock, and in this case also three cups are similarly grouped near it.

2. *Hoof or Horse-Shoe Markings.*—These are about 40 in number, and are scattered promiscuously over the rock. They point in all directions, and are generally cut obliquely, becoming deeper towards the front. The deep side or front is indicated on the plan by a heavy curved line.

Only two instances of an apparent attempt at grouping can be detected. In the one case six hoofs occupy a division of the rock along with figures of other types; while, in the other case, seven markings of this description are inscribed along the centre of another divided space, and no other figures occur in their immediate vicinity. This remarkable group is shown near the upper margin of the plan.

With the two following exceptions, the hoofs do not seem ever to have been connected with adjacent figures; but in several cases two hoofs have been cut so near each other as almost to form a single figure. A radial groove, which proceeds from a circled cup, terminates in a hoof; and in another case a gutter, formed by the union of radial grooves from two ringed cups, is carried into another hoof. It is noteworthy that in both these cases the connecting groove enters the hoof at its deepest or frontal edge.

3. *Ringed Cups and other Circular Figures.*—The cups which show, with more or less distinctness, an external ring or circle are about twenty-two in number; thirteen cups have two concentric circles; while only three cups appear to be surrounded with three concentric rings.

One remarkable group consists of two adjacent clusters of small cups, apparently numbering thirteen and fourteen respectively, each cluster being surrounded with an irregular oval or ring. Neither cups nor rings have been deeply cut; and the original number of the former is now uncertain, while the latter have been partially destroyed by the wasting of the sandstone. Two similar clusters of small cups are shown on the plan. Of these the one contains eight cups, and the other nine arranged in the form of a square.

One of the figures near the bottom of the plan shows a cup surrounded with an oval ring; another represents a circled cup with an

excurrent radial groove; and above the latter figure is a cup with two concentric circles and a radial groove.

Near the wide end of the rock are several interesting markings. The upper of these is remarkable for the irregularity of the incomplete ring which partially incloses the central cup, and the lower consists of two circled cups from which proceed converging radial grooves that unite, forming an acute angle. Directly above this latter cutting is another remarkable one. A central cup is surrounded with two concentric circles, and furnished with two radial grooves, one of which forms an obtuse angle with a groove proceeding from an adjoining unringed cup. The figure is rather weathered; the outer circle is apparently imperfect, and one of the radial grooves disappears before reaching the outer circle.

To the left of this figure is a central cup with two concentric incomplete circles and a curving radial groove. The circles meet the groove on one side but not on the other, a peculiarity to be observed in several of the Northumberland rock-sculpturings illustrated by Mr Tate. Directly opposite the commencement of the radial groove, another short groove passes from the cup to the inner circle, but cannot be traced further. The outer circle touches the circumference of an imperfect ring which partly surrounds an adjacent cup.

In one very interesting combination which has been previously noticed, two cups are each surrounded with an incomplete ring, which is interrupted on either side of a radial groove passing through the line of its circumference. The grooves meet, forming a slightly obtuse angle; and one of them is continued, curving towards a hoof-mark, into which it passes. These grooves are remarkable for their sharp and regular outline, which seems to indicate that they have been produced by drawing a pointed instrument backwards and forwards rather than by picking out the figure in the manner in which the other incised markings appear to have been produced. Their distinctness, however, as compared with the other portions of the figure, would almost raise a suspicion that they had been "improved" by a later hand; and, but for the weathering of the surface adjacent to their margin, they might be referred to a period later than that to which the other parts of the figure belong.

In the case of a double-ringed cup with two grooves, one of these commences as usual at the central cup, but the other can only be traced from the inner circle outwards.

In one group two cups are incompletely circled, the rings in both cases terminating on either side of a radial groove. The curved groove, which descends from the upper cup, approaches and runs parallel to the ring inscribed round the lower cup, finally passing into the groove from the lower cup, which is slightly curved below the point of union.

Towards the narrow end of the rock is a remarkable group which consists of three circled cups, placed side by side in curving order. Two of the cups are surrounded with single rings, while the third has two concentric rings and two excurrent radial grooves placed directly opposite each other. Adjoining this group is a unique figure composed of a ring-cutting (apparently the only example on the Blackshaw rock of a circle without a central cup), from the circumference of which a small groove projects towards the middle of two semicircles. Near the lower extremity of the outer semicircle another short groove proceeds outward, passing into an adjoining cup.

In another conspicuous cluster of figures a large cup, which forms the central figure of the group, is surrounded with three concentric circles, the outer of which touches the circumference of another circle enclosing a smaller cup. From the large cup proceed two excurrent radial grooves, one of which terminates in the point of contact of the outer circles of two double-ringed cups. It is interesting to notice that the two circled cups first referred to are placed exactly at right angles to the two last mentioned; and, but for the irregularity of one of the rings, the group would have an appearance of almost mathematical precision.

In the striking group situated near the centre of the rock, the central cup is one of the largest on the stone; its sides are nearly perpendicular, widening slightly at the bottom, while in shape it approaches a square form. These divergencies from the normal type may have been produced by the wasting of a soft bed in the sandstone, but the comparative regularity of the figure is suggestive of an artificial origin. This cup is surrounded with a complete circle, placed rather eccentrically, beyond which are two parallel semicircles, the inner almost impinging on a small

cup placed near one of its extremities. From the central cup proceed three excurrent radial grooves; one terminates in a small cup, another projects nearly at right angles to the first, and the third, leaving the cup at a point nearly opposite the first groove and passing through the inner circle and one of the semicircles, branches off into two portions. The branches diverge, pass through the outer semicircle, and terminate respectively in an unringed cup and a cup surrounded with a single circle. This last-mentioned ringed cup has also an outer semicircle opposite the point at which the groove enters.

One group of sculpturings consists of two deeply-cut semicircular grooves enclosing several small dot-like cups. The grooves are not connected at either end, and their direction is slightly divergent.

Another is a group of five cups. One of these is partly enclosed in a figure formed by two straight and two curved lines. The straight lines meet at one end, forming a rectangle.

Several irregular depressions occur on the rock; but we have not attempted to describe these, as they cannot be identified or referred to any recognised type, and are probably either fragments or weathered hollows.

II.—FIGURES CONSISTING OF DOTS OR PITS.

The occurrence in Britain of figures consisting of a consecutive series of dots or pits has not been satisfactorily established by any writer on inscribed rocks to whose works we have had access. Sir J. Y. Simpson refers to these figures, and regards them as belonging to a type of markings unknown in Britain; and if we are correct in supposing that no authenticated examples have been detected in this country since his time, their indubitable presence on the Blackshaw rock will add very much to the interest and importance of its discovery.

Towards the broad end of the Blackshaw rock are several figures which are either wholly or partially "cut out in the form of pits or by punched work, and are not continuous lines." Some of the circled cups afford good examples of the latter class, the circles and radial grooves being traced out merely by shallow pits much resembling those of the circle depression after mentioned, while the cups do not appear to differ

essentially from the usual incised pattern. These mixed figures have not been specially distinguished on the plan, as in many cases the weathering has rendered the determination of the original character of the sculpturings in this respect a matter of some doubt. The interesting examples of the former class shown on the plan consist of a circled depression and a group of spirals constructed entirely of shallow dots, in this respect much resembling the concentric rings on the Asige Moor Stone, Sweden, referred to and figured by Simpson. These figures fortunately occur on parts of the stone which have been well protected by a covering of soil, and their faint outlines are therefore comparatively unimpaired.

Circled Depression.—This marking consists of an oval depression surrounded with an irregular ring. The pittings have been produced in such numbers as to render the marking distinctly hollowed throughout; but neither in depth, regularity, nor sharpness of outline does this figure resemble the incised sculpturings on the other portions of the rock. Its proximity to the two deep and well-preserved cups shown on the same sketch renders the contrast between the different types which these figures represent a sufficiently striking one.

Group of Spirals.—These are undoubtedly the most interesting markings on the Blackshaw rock, and they are especially important as affording apparently the only known instances of volute figures produced in the form of intermittent dots. As the pittings are shallower and fewer in number than those of the figure last described, the markings are entirely superficial, and but for the protective covering under which they were hidden they must long ere now have disappeared.

Sir J. Y. Simpson remarks that "the volute or spiral is perhaps the rarest of the forms of circular ring-cuttings in Great Britain, but this type seems common on the incised rocks in Ireland and Brittany." He refers to examples which have been observed in Lancashire, Peeblesshire, Argyllshire, Orkney, Merionethshire, &c., and remarks on the absence of figures of this type among the numerous rock-sculpturings, amounting in number to over 300, found on the sandstone rocks of Northumberland. Since the publication of his work, however, spiral figures have been discovered in the north-east of Northumberland, and an extensive series, found on the surface of a precipitous sandstone rock overlooking

the River Coquet, behind the village of Morwick, forms the subject of a paper by Mr James Hardy in *The Proceedings of the Berwickshire Naturalists' Club*, vol. x. (1883), p. 343.

The Blackshaw group consists of three figures. The largest, which is solitary, makes four turns in a dextral direction; and its outline is rather irregular and unsymmetrical. The other two, which are placed side by side, are exactly alike, and seem to have made three turns in a sinistral direction, this bringing them into contact. They are, however, apparently defective at the top, a portion of both having been effaced by weathering.

It is noteworthy that the spiral figures stand alone, no other markings being within two and a half feet of them.

PROBABLE NATURE OF THE TOOLS EMPLOYED.—In uncovering the buried portions of the rock, and removing the surface accumulation of soil, a very careful search was made among the débris for any implements—stone or otherwise—which might have been used in cutting out the figures; but nothing was found that could in any way be regarded as throwing light on the nature of the tools employed in the sculpturing.

The tool-marks on some of the cups, and the dotted sculpturings, clearly indicate that the implements used were sharp and narrow-pointed.

RELICS DISCOVERED ON OR NEAR THE ROCK.—In removing the soil from some deep crevices in the surface of the rock, several fragments of wrought coal were discovered. Two of these fit together, and are portions of a ring. These portions are about $\frac{9}{16}$ inch in breadth, and $\frac{1}{8}$ inch in thickness, with the edges rounded on the upper surface. The size of the ring, as indicated by these fragments, exactly corresponds with that described by Sir Herbert Eustace Maxwell, Bart., as “a portion of an unusually large one, finely finished and polished, sent to me by Dr Trotter from Kirkmaiden Parish.”¹

A single fragment of a still larger ring of the same description was also found. It measures about $\frac{3}{4}$ inch in breadth, and $\frac{3}{16}$ inch in thickness.

Several small pieces of coal and flint were picked up in the adjoining

¹ *Archæological and Historical Collections relating to Ayr and Galloway*, vol. v. (1885), p. 35.

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field ; but the most interesting of the objects discovered is a leaf-shaped flint arrow-head found on the surface of a ridge turned up by the plough, at a distance of about 10 yards from the incised rock.