I.

NOTICES OF SCULPTURED ROCKS AND BOULDERS RECENTLY OBSERVED IN OHIO AND KENTUCKY, UNITED STATES OF AMERICA, AND OF THE PROBABLE ORIGIN OF THE CUP-MARKINGS WHICH OCCUR ON STONES THERE AND IN OTHER COUNTRIES. IN A LETTER TO DR JOHN STUART FROM PROFESSOR DANIEL WILSON, LL.D., TORONTO, HON. MEM. S.A. SCOT.

Univ. Coll., Toronto, 25th April 1875.

MY DEAR DR STUART,—When our valued and much lamented friend, Sir James Y. Simpson, took in hand, in his thorough and exhaustive fashion, his monograph on the "Archaic Sculpturings of Cups, Circles, &c., upon Stones and Rocks in Scotland," and elsewhere, as he drew towards a close he asked (p. 147), "Do they appear in Asia within the bounds of the Aryan or Semitic races? Or can they be traced in Africa, or in any localities belonging to the Hamitic branches of mankind? Do they exist upon the stones or rocks of America or Polynesia?" To the question relative to this western continent I am now able, very unhesitatingly, to return an affirmative reply; though, alas! too late to reach the ears of the friend by whom it was craved.

Part of last summer I devoted to an exploratory ramble in Ohio and Kentucky, chiefly with a view to inspect the mounds and remarkable earthworks which abound in the Ohio Valley. My direct object was the determination of certain points by personal observation, preparatory to a new edition of my "Prehistoric Man," now at press. But I was abundantly rewarded in other ways; and among the rest by finding numerous traces of stones and rocks marked with cups and other indentations analogous to those which have in recent years attracted the attention of European archæologists. Nothing, indeed, has come under my notice which can be compared with the groups of concentric rings around single cups, as at Auchenabreach, Argyleshire, and other examples figured by Sir J. Y. Simpson; or the still more notable square and concentric groups, as at Dod-Law, Northumberland, shown in the "Incised Markings on Stone found in the County of Northumberland, Argyleshire, &c.,"

prepared at the cost of the late Algernon, Duke of Northumberland. Some of these still appear to me more satisfactorily referrible to primitive chorography than anything else. Here we seem to have the chief town or entrenched stronghold of Celtic Briton, or older race; and in other cases, as at Dod-Law, the Roman style of castrametation, with its square enclosures rounded off at the angles. Smaller towns and villages lie beyond, with lines of road connecting the whole. But it may be a delusive analogy; for it will not fit other and more numerous examples of the incised and cupped rocks; and a very different theory has suggested itself to me to account for the origin of the Ohio cup-stones.

Here is an example of an incised boulder of fine grained granite, measuring about 9 feet long, 4 feet 6 inches high, and 3 feet in greatest breadth, in Forsyth County, Georgia, to which attention was first called by Mr C. C. Jones. (fig. 1). Like various British examples referred to

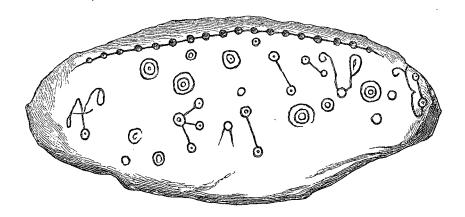


Fig. 1.—Incised Boulder of Granite in Forsyth County, Georgia.

by Sir James Y. Simpson, there runs along one side of the boulder a row of cups, "like drill holes," as Mr Jones describes them, "eighteen in number, connected by an incised line." On both sides of the rock are groups of cups surrounded by concentric lines, and connected by lines running

from one to another, as in British examples. In Ohio and Kentucky they are more frequently found on sandstone rocks and boulders, though examples of them also occur on the harder rocks. I forward herewith a photograph of a large sandstone boulder, at Tronton, Ohio, which was described to me by a local antiquary as "a rock which had been used by prehistoric man as a stationary grindstone" (fig. 2). You

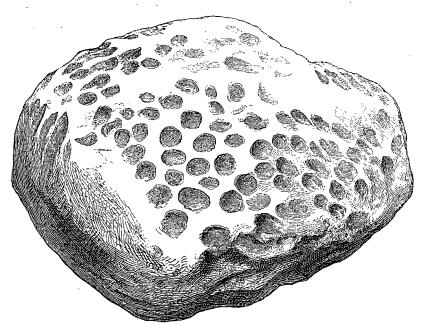


Fig. 2.—Sandstone Boulder, with Cups, at Tronton, Ohio.

will observe that in addition to the cup-like hollows with which its surface is so largely indented, there are on its two sides (see the woodcut) long grooves, showing where the rough, gritty character of the sandstone boulder has been turned to account, in grinding and polishing implements, most probably of stone. Large boulders and rocks of this class are common in the Ohio Valley. Dr H. H. Hill, of Cincinnati, described to me one above Mayville which has thirty-nine cups; and another, close

to the bank of the river, on which he counted upwards of eighty cups, besides other linear markings.

But besides the large boulders and rocks marked with the cup indentations, numerous smaller stones occur in the ploughed fields with similar hollows wrought in them. I gathered several specimens, and could have procured many more, on Ohio farms. They are mostly of rough sandstone, though also of harder materials. On some of them the cups occur on both sides, smoothly hollowed, from one to two inches in diameter.

In others the hollow is roughly picked, or only partially worn into a smoothly hollowed cup. Their sides also showed that the same stones had been used for rubbing and grinding some hard substance. same fields stone axes, pestles, and the like neolithic implements, are turned up by the plough. The rounded ends of these stone implements. in many cases, fit exactly to the cups; and the conclusion I arrived at was that the latter resulted simply in the process of their manufacture. The stone axes, pestles, and mauls, were ground into shape on the larger boulders, or with the smaller grinders; and their rounded ends were brought into shape in the same process which gradually wore the roughly picked hole into a smoothly polished cup. I have selected two specimens—one of the finished cups, and another of the roughly picked hollow—so as to illustrate the subject. The exigencies of transportation to so great a distance necessarily compel me to choose smaller examples than would otherwise be desirable for the S.A. Scot. Museum. will suffice to illustrate the analogies referred to.

I fear our friend, Sir James Y. Simpson, would have regarded it as a kind of sacrilegious profanity to descend from Phœnician, Druidical, Mithraic, or still older theories of mystic usages, practised long before the historic dawn, and to refer the fancied "blood focuses of the Druid altars," or other relics of primeval religious rites, to so simple a source as the grinding of stone axes, mauls, and other implements. Such, however, I have no doubt, has been the source of the abundant American examples; and it seems to me no extravagant idea to surmise that many of the cups so common on boulders and standing stones in Britain and elsewhere may have had a similar origin, though other meanings may attach to the more elaborate designs of which they form so prominent a feature. The stone hammers, celts, postles, and mauls of the European neolithic era

required the same processes of grinding and polishing as those of America; and numerous as they are, we may look for some such traces of their manufacture. You have in the S.A. Scot. Museum a fine large stone hammer of grey granite, found in digging the Caledonian Canal, to which I have drawn attention in the "Prehistoric Annals of Scotland." The hole is only partially bored, leaving on either side a cup-like hollow, precisely similar to the "focuses" on many boulders and standing stones. Mr F. C. Lukis, in 1847, submitted to the Archæological Association a sketch of the cromlech on L'Ancresse Common, Guernsey, and drew attention to a row of indentations or cups along the edge of one of the stones, "probably," he says, "made with a view to trim the side-prop to the required size of the capstone." A similar row of cups or shallow perforations runs along the centre of the large capstone of the Witch's Stone, at Bonnington Mains, Mid-Lothian, and this also I long ago suggested as "possibly indicating a design of splitting it in two."

A little incident which occurred during my Ohio rambles may not be without its significance. I was making a sketch of a large mound, a few miles from Newark, while my guide sat near me, whistling to beguile the time, and listlessly scrawling, as it seemed, on an exposed rock near at hand. When I had finished my sketch, I was struck not only with the fact that the surface of the rock was pitted with various cups, or focuses, but also that my companion had been amusing himself by drawing a series of concentric rings round the cups, and here and there tracing a line from one group to another, as a child would go to work on his slate. Keller, of Zurich, has found just such cupped-stones among the Swiss lake-dwellings as I picked up in ploughed fields of the Ohio valley. Cup-hollows are also now known to be common on rock surfaces and erratic blocks in the same Swiss valleys. Professor Nilsson reports their occurrence in Sweden; and if my theory be correct, they may be looked for in every area of neolithic art. But to him they present evidence of Phoenician intercourse with Scandinavia, long prior to the intrusion of Celtic races or Druid rites, and point to the worship of Baal, the Eastern sun-god, in the prehistoric north and west.

I never have been able to sympathise with this kind of speculation, by means of which mere names of Phœnician, Druid, or the like, become valuable chiefly because of their vagueness. No one less sympathised with the arbitrary substitution of intangible fancy for honest induction and historical research than Sir J. Y. Simpson. To him Vallancey, Stukely, Daves, and the whole school of old dreamers, who built up grand theories out of sheer moonshine, were utterly distasteful. But he judiciously reserved his final judgment in reference to a class of sculpturings, rude and archaic in appearance as the cromlechs, caers, and standing stones on which they so frequently occur.

The remarkable examples of primitive art, seemingly contemporaneous with the mammoth and the reindeer of southern France, which have been recovered in recent years in the caves of the Dordogne and its tributaries, show that the seeming artlessness of the cup and ring carvings is no indisputable evidence of their primeval antiquity. The cave men of Cro-Magnon amused their leisure with carvings of a greatly more artistic character, and yet with no sacred purpose or religious motive. But the ancient cave men and the modern savage manufacturer of stone implements appear to have worked very much in the same fashion, by like processes, with a common aim, and on the whole with wonderfully similar results.

You will observe the roughly hewn, unground hollows on two sides of the small stone sent. It is a poor specimen, but any others I could get hold of were too large for me to impose on the kindness of the friend who undertakes to leave this for you at the museum; and small though the stone is, it fully illustrates the character of the roughly chipped focuses on larger stones and rocks. The other stone, though also small, is ample for the purpose of illustration. It has, as you will see, two well-formed cups on one side, and three on the other, and thoroughly shows the character they present on larger surfaces. In another specimen which I have two cups are run together, as in an example figured by Dr Keller, from Font, Lake Neuchâtel. The prolonged use of the three cups in the example sent, for the purpose of grinding pestles or mauls, would have produced just such an equilateral trefoil as Dr Keller points out on the Font stone.

It is only necessary further to add, that cupped stones of the class here referred to are styled in America "Nut Stones." The hickory and other native nuts of the walnut class are so hard that if laid on a stone and struck with an iron hammer, they bound off unbroken. The Indians

and their European successors have learned, accordingly, to hunt up a cupped stone, and laying the nut in the hollow, it is easily broken by repeated blows. It has thence been surmised that this is the actual purpose for which these cupped stones were made. But this theory is wholly inapplicable to such examples as the Tronton boulder, and many others of a like kind, and is inconsistent even with the occurrence of the cups on two or more sides of the smaller stones, as in the example now sent. This also shows on its sides the traces of its use for polishing the implements which, as I conceive, were finished at their rounded ends by means of the hollows which thus attract our attention from their analogy to the markings so common on the ancient megalithic monuments of Europe.