

III.

NOTICE OF A COLLECTION OF PERFORATED STONE OBJECTS, FROM
THE GARIOCH, ABERDEENSHIRE. BY J. GRAHAM CALLANDER,
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Many perforated articles of stone of greater or less antiquity have been found, the use of which we have no difficulty in defining. Among such articles are stone axes, stone hammers, whorls, beads, and sink-stones for nets or lines; but this collection of perforated stones from Central Aberdeenshire seems to be quite different from any of the recognised types.

Localities.—The collection, which consists of sixty-five specimens, has been gathered during the last five years in the Garioch district of Aberdeenshire from eight different localities in five parishes:—Eleven are from Newbigging, parish of Culsalmond; one is from the Kirkyard of Culsalmond; five are from the adjoining farms of Jericho and Colpy, Culsalmond; two are from Johnstone, parish of Leslie; one is from Cushieston, parish of Rayne; one is from Lochend, Barra, parish of Bourtie; three are from Harlaw, parish of Chapel of Garioch; and forty-one are from Logie-Elphinstone estate, also in Chapel of Garioch.

All the specimens have been turned up by the plough, none having been found associated with burials or dwelling sites; at the same time many flint implements have been found in most of the localities named, especially in the first, third, and last-mentioned ones, these, I believe, having been more thoroughly searched. The Logie-Elphinstone district, which has produced about two-thirds of the collection, has been found to be very rich indeed in prehistoric remains, many urns, stone axes, hammer stones, arrowheads, and other flint implements having been recovered.

Description.—The materials out of which they have been made are usually slate and the common "heathen" stone, which is found scattered all over the fields. Slate is plentiful, the Foudland Hills on the N.W. boundary of the Garioch being composed of this material. Very few of the specimens have been made from water-worn stones. The smaller

ones, which are usually made of slate, have been dressed flat on both sides and ground round the periphery, and the larger ones, which are made of various kinds of stone, have been chipped into the requisite shape. Some of the latter, however, are naturally fractured stones, the only artificial work on which is the perforation.

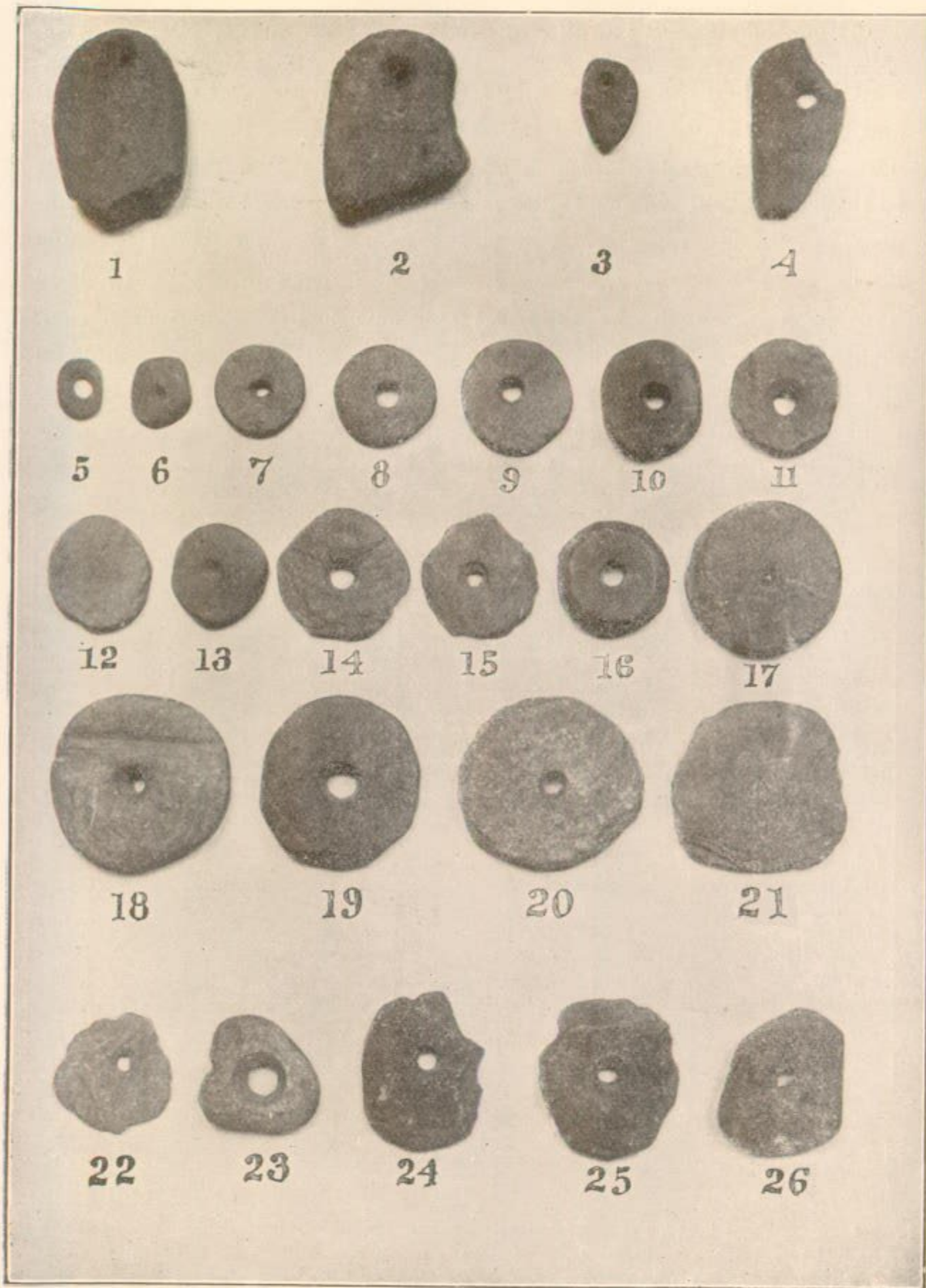
With the exception of four of the specimens, which are bored near the end, the perforations are all at or near the centre of the objects. The holes, which are generally bored in the smaller specimens, and are picked out in the larger ones, have been made from both faces. In the majority of cases the perforation goes through the object at an angle, the centre of the bore on one side not being exactly opposite the centre on the other side. Several of the specimens show the perforation begun and not finished. In fifty-three specimens the making of the hole has been completed, twenty-seven having been bored and twenty-six having been picked out, while in eleven specimens the hole has been commenced but not finished. In four of these eleven cases the process has been by boring, and in seven by picking out. One specimen, No. 12, has been neatly brought to the required thickness and ground round the circumference to an almost circular shape, but there is no sign of the perforation having been begun. This one, along with No. 13, which has been brought to the required shape, and in which the boring of the hole has been commenced, seem to show that the making of the hole had usually been left to the last; one specimen, however, No. 15, which has the perforation complete and which is rather irregular in shape, seems to have a circular marking across one of the projecting angles, as if it had been intended to reduce it to a circular shape, in which case the making of the hole was apparently the first and the shaping of the article the last process. The specimens with the unfinished perforations show that when the perforating was commenced by boring it was finished by boring, and when it was commenced by picking it was finished by picking. The two processes were therefore not employed in making the same hole. It is impossible to say which process is the older. In two of the groups, into which we have divided the collection, and which are composed of the smaller and

more finely finished articles, the boring process alone has been in vogue, while in the third group, in which the articles are much larger and more roughly finished, both the boring and picking processes can be seen. From this it appears that the two processes may have been in use at the same time.

The objects (figs. 1 to 65) arrange themselves into three distinct groups, the first of which, numbering four specimens, Nos. 1 to 4, is composed of those articles which have the perforation near the end, and which all have the holes bored. The holes are countersunk from both faces of the object, and taper towards the centre from both sides. These four specimens are all more or less water-worn, the largest and the smallest being flattened oval pebbles. Nos. 1, 2 and 4 are from Logie-Elphinstone district, and No. 3 is from Newbigging.

The second and third groups are composed of those articles which have the perforation at or near the centre, and they form practically the whole of the collection. They number sixty-one specimens, and seem to be composed of objects which have not been put on record before, so far as Scotland is concerned. These two groups seem to go together, and if one group is found in a district the other may be expected. At least, I have found it so in three different localities.

The second group is composed of the smaller and more finely finished articles, and numbers seventeen specimens, Nos. 5 to 21, of which eight are from Logie-Elphinstone, one is from Colpy Farm, one is from the Kirkyard of Culsalmond, one is from Lochend, Barra, three are from Harlaw, and three are from Newbigging. Most of them are carefully manufactured to the desired thickness, and are well dressed to an almost circular shape. They vary in size from $\frac{5}{8}$ of an inch to $1\frac{1}{8}$ inches in diameter, and from $\frac{3}{32}$ of an inch to $\frac{1}{4}$ of an inch in thickness. The holes, which, with the exception of No. 16, are all countersunk and taper in from both sides, vary from about $\frac{1}{32}$ of an inch to $\frac{1}{4}$ of an inch at the narrowest part, the two smallest holes being found in No. 6, one of the smallest, and in No. 21, the largest specimen of this group. No. 16, from Newbigging, differs from all the others in having its hole drilled



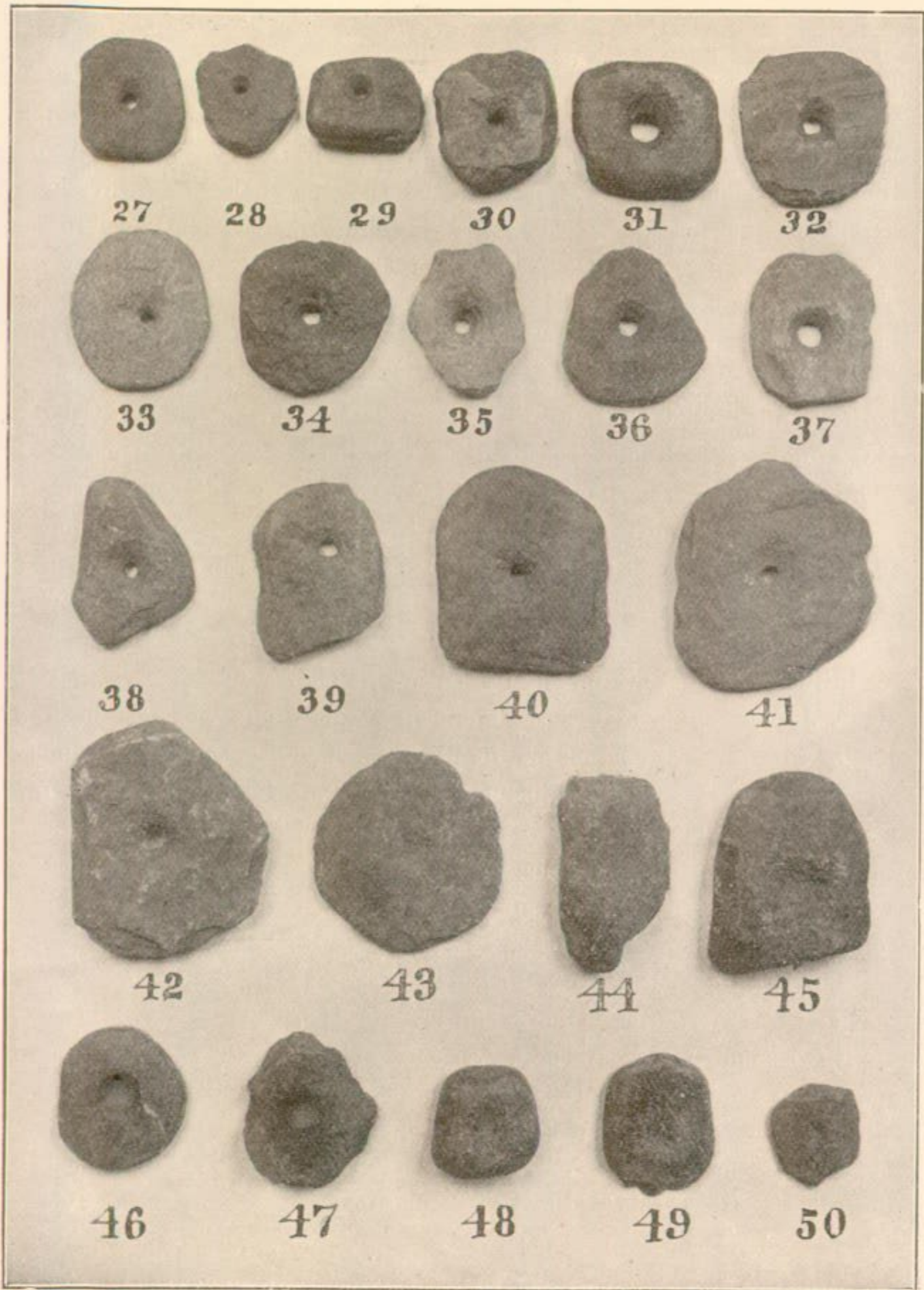
Figs. 1-26. Perforated Stone Objects from the Garioch. (Scale, $\frac{1}{2}$ linear.)

straight through the stone with no tapering, and also in having the top and bottom sides bevelled all round for about $\frac{3}{16}$ of an inch from the outer edge. No. 12 before mentioned, from Colpy Farm, which belongs to this group, and which has been carefully dressed to the desired thickness and ground round the circumference, shows no trace of the hole having been commenced. No. 14, from Harlaw, shows a second hole to have been begun on one side, but apparently after it had been commenced it was found to be too far out of the truth to meet the hole on the other side, and being discontinued another hole was bored in the right place. Another specimen, No. 13, from Newbigging, shows the boring to have been started from both sides but not completed.

Localities.	Type I.	Type II.		Type III.				Total.
	Perforation Complete.	Perforation Complete.	Perforation Incomplete.	Perforation Complete.		Perforation Incomplete.		
	Bored.	Bored.	Bored.	Bored.	Picked.	Bored.	Picked.	
Newbigging,	1	2	1	1	3	1	2	11
Kirk of Culsalmond,	...	1	...	...	...	...	...	1
Jericho and Colpy Farm,	...	...	1 ¹	...	4	...	...	5
Johnstone,	...	...	...	...	2	...	...	2
Cushieston,	...	...	...	...	1	...	...	1
Lochend, Barra,	...	1	...	...	...	...	...	1
Harlaw,	...	3	...	...	...	...	...	3
Logie-Elphinstone,	3	8	...	7	16	2	5	41
Total,	4	15	2	8	26	3	7	65

The third group is composed of the larger and more roughly formed articles, and numbers forty-four specimens, Nos. 22 to 65, of which thirty are from Logie-Elphinstone, four are from Jericho and Colpy

¹ In this specimen the perforation has not been commenced. Since this notice was written I have received from Scotston, Inch, a specimen almost similar to No. 12. It has been ground round the periphery, and the perforation has not been begun.



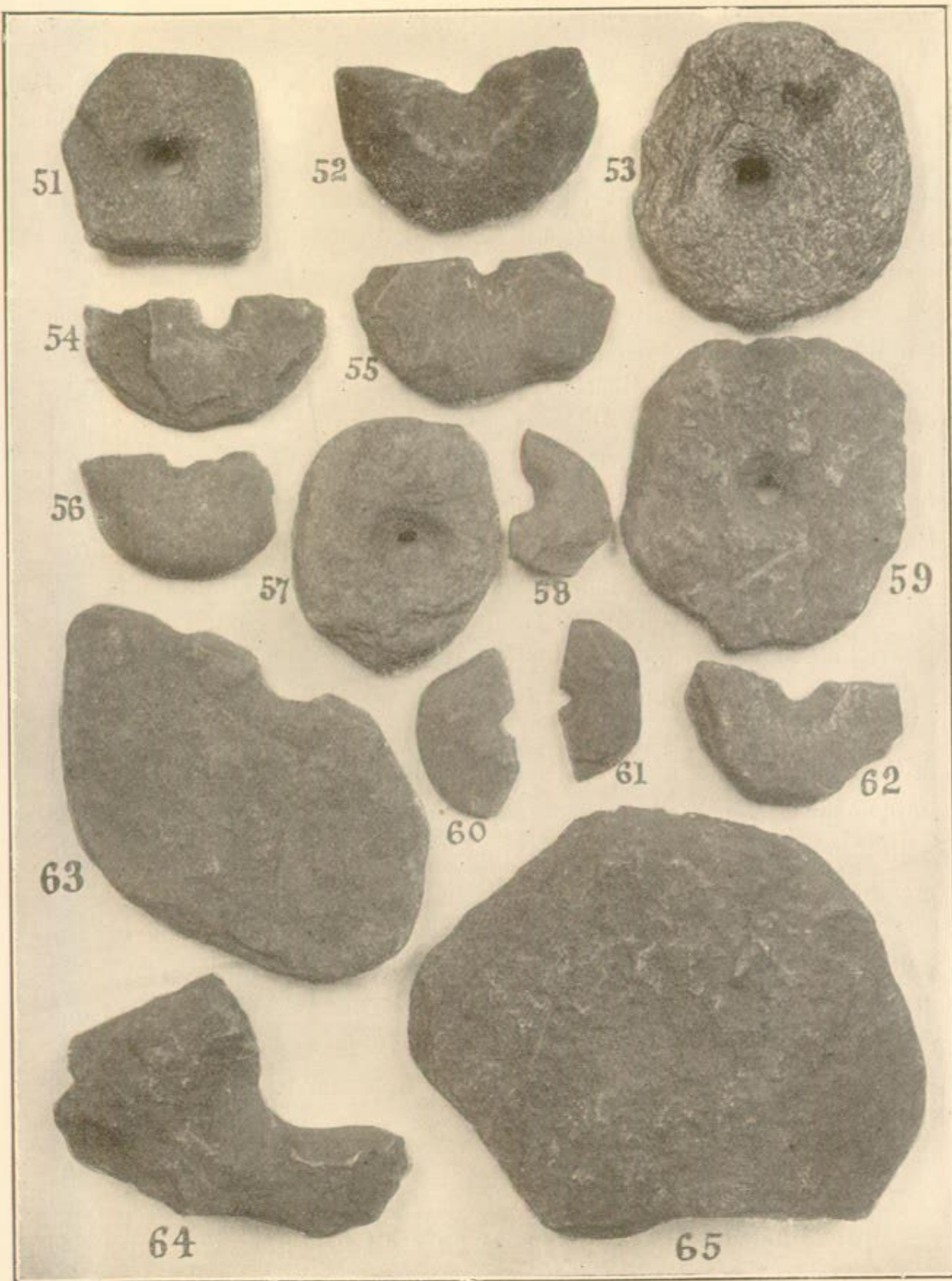
Figs. 27-50. Perforated Stone Objects from the Garioch. (Scale, $\frac{1}{3}$ linear.)

Farm, two are from Johnstone, one is from Cushieston, and seven are from Newbigging. Some of them are roughly circular, others are triangular, some are four-sided, and many can hardly be described, the stones being naturally fractured and showing little or no dressing except the perforation. They vary in size from about 1 inch to 7 inches in diameter, and from $\frac{1}{8}$ of an inch to $1\frac{3}{4}$ inches in thickness. The perforation is complete in thirty-four specimens, twenty-six having been picked and eight bored. The perforation has not been finished in ten specimens, in three of which the process had been by boring, and in seven by picking. The holes at the narrowest part vary from $\frac{3}{16}$ of an inch to slightly more than 1 inch in diameter.

Probable uses.—The question now is, What was the probable purpose of these objects, which from their numbers must have been in common use among the ancient inhabitants of so many parts of the “Howe o’ the Garioch”? Were they implements, ornaments, weapons, amulets, toys, or articles of dress?

On the face of them they do not seem to have been either weapons or toys. I mention toys because I have a small axe of slate, $1\frac{15}{16}$ inches long, $\frac{1}{4}$ of an inch thick, and $\frac{3}{8}$ of an inch at its greatest breadth, which was found in the Logie-Elphinstone district, and which apparently was a toy. No doubt the ancient inhabitant of Scotland provided toys for his children, as did the ancient Egyptian. I have been informed that within the last thirty years an old lady in Roxburghshire kept a perforated stone hanging behind one of the doors of her house for luck. It was almost identical to No. 59 both in shape and size, and it was always spoken of as a charm. We are quite familiar with flint arrow-heads, stone axes, and beads having been used as charms in the not far distant past, so we may take it that these objects were not made as amulets, although later we find them invested with an odour of superstition. This limits the question to whether they were implements, ornaments, or articles of dress, and it seems probable that each of these three types is represented in this collection.

Taking the first group of four specimens with the hole near the end,



Figs. 51-65. Perforated Stone Objects from the Garioch. (Scale, $\frac{1}{3}$ linear.)

it is quite obvious that three of them, Nos. 1, 2 and 3, were pendants, and very likely were ornaments. It is extremely improbable that they could have been used as sink-stones, both on account of their lightness and on account of the distance at which they were found from any water of importance where they might have been used. The two specimens Nos. 1 and 2, from Logie-Elphinstone, were found near the top of a ridge of land about half a mile from the nearest water, the Ury, which is a quick running stream of no great size. No. 3, from Newbigging, is only $\frac{1}{8}$ of an inch at its greatest diameter, and is thus far too small for a sinker, while the nearest burn is little more than a ditch. The holes in these three specimens are so very small that it is not at all likely that the fishing lines used by prehistoric man would have been fine enough to go through them. It therefore seems probable that they were simply ornaments strung like beads. The remaining specimen of this group, No. 4, from Logie-Elphinstone, differs from the three others in having a much larger hole and in being incomplete. If not an ornament like the other three, it is quite possible that it may have been a stone bracer which has got broken. One of the bracers in our Museum was found within three miles of this district, at the Rayne Stone Circle, and I have an oblong slate implement, $1\frac{5}{8}$ inches long, $\frac{1}{8}$ of an inch broad, and $\frac{7}{32}$ of an inch thick, with a hole at each end, from the same Logie-Elphinstone district, which may have been a bracer, though it seems rather small for that purpose.

The second group is composed of seventeen specimens all having the holes bored and none picked out. These look like whorls at the first glance, but on better consideration it is seen that they are thinner; and the holes are smaller than in the ordinary Scottish whorl. Again, with the exception of No. 16, all the holes are tapered from both faces and they go through the object at an angle, so that it would have been impossible to have adjusted them on spindles, even had the spindles been small enough for the holes. Like the previous group they are all too light for sinkers, and they have all been found at a distance from water. The most of the specimens in this group would have made very serviceable buttons if a thong were passed through the hole and

then knotted, the countersinking forming a receptacle for the knot. Sir John Evans says:—"Sir Wollaston Franks has suggested that some perforated discs may have been used as dress fasteners, and mentions that very similar objects have been found in Mexico which there is every reason to believe were used as buttons. He also instances a specimen from South Wales which has evidently had a cord passed through it, as the edges of the hole in the centre are much worn by friction. Such a view carries much probability with it so far as it relates to thin discs of stone with small central holes not parallel but tapering from both faces."¹ No. 5, from Logie-Elphinstone, and No. 6, from Newbigging, seem too small for buttons, while in the first-named specimen the hole is far too big in proportion to the whole object to have been used in this fashion, and in the last mentioned one the hole is too small for this purpose, it being only $\frac{1}{32}$ of an inch in diameter. These two may have been used as beads.

Coming now to the third group, which comprises forty-four specimens, embracing all the larger and more roughly formed articles, we find that thirty-three of them have the holes picked out and eleven are bored, the bored ones being found among the smaller specimens, whereas the picked ones include all the larger.

When we review the whole of the second and third groups together, so gradual and complete are the various stages in the development of the objects from the smaller and more finely finished ones to the larger and rougher ones, that it seems as if the whole parcel of relics contained only one class of object, the use of which we are unable to conjecture. But if we accept the smaller and more finely finished articles as buttons or beads, then the larger ones must represent a different type of article altogether. If the two largest specimens Nos. 64 and 65, or even if any of the five specimens Nos. 43, 44, 45, 48 and 49, with their unfinished picked holes, had been found singly by themselves and not in conjunction with the other groups of this collection, we should readily have accepted them as anvil stones, but when we find the article with the hole complete, we see that what we might have

¹ Sir John Evans, *Ancient Stone Implements*, 2nd edition, p. 439.

taken for an anvil stone was no such thing ; that the abrasion on the stone was only the beginning of a hole which was to go right through the object, a thing that never occurs on an anvil stone. Apparently then they are not anvil stones. As there is no body of water in the vicinity of where they were found we must find for them some use other than that of sink-stones. "In Samoa flat circular discs of stone 2 inches in diameter, with central holes, are used to prevent rats from reaching provisions, which are suspended in baskets by a cord. One of these discs strung on a cord suffices for the purpose."¹ Some of these objects would have answered this purpose well enough. It has been suggested that some of the larger specimens may have been fixed on the end of a wooden shaft and used as clubs. Weapons of this type are used in Queensland and New Guinea, the stone disc being fixed in its proper place by having a ribbon of plaited grass wound round the shaft on both sides of the disc. Some of the objects show the picked holes worked quite smooth by friction at the narrowest part, while others show all the picking clearly defined. Others, again, show the picking to have been worn almost smooth on both sides. One, No. 38, from Logie-Elphinstone, is worn smooth on one side only, and several show grooves running round the inside and outside of the hole. These seem to suggest that some sharp pointed spindle or other implement had been rotating in the hole and had occasionally jumped out. Possibly this may have been some kind of bow drill which required the upper end of the spindle to be kept steady, a perforated stone held in the hand being used for that purpose. The whole of this group, with the exception of two or three of the largest specimens, would have been quite handy and suitable for this purpose. If they were used to produce fire, it is strange that the same fire drill was not in use in other parts of the country ; and if it were to drill holes in stone, bone, or horn, we should surely find a greater abundance of objects with drilled holes. Out of this collection of sixty-five perforated objects only one, No. 16, can be said to have the hole drilled.

¹ Sir John Evans, *Ancient Stone Implements*, 2nd edition, p. 439.

We have thus what seem to be three distinct types of perforated stone objects, the first group being composed of pendants, which may have been ornaments, the second group being composed of discs, which may have been used as buttons and beads, and the third group being composed of irregularly shaped stones, of which the greater number have apparently been used to steady the end of a rotating spindle or shaft.

While many parts of Scotland have produced numbers of perforated discs of stone, yet so scattered has been their occurrence, that they never seem to have been recognised before as other than sink-stones, notwithstanding that they have been very often found far distant from any place, which, either in ancient or modern times, has been covered with water, where they could have been used. It is strange that so many specimens should have been found in this single district, and this leads us to think that possibly a seat of manufacture of these objects was in the Garioch, from which they were distributed to other localities. Now that attention has been called to them, we may expect to hear of greater numbers being found in other parts. Still, if they were common articles of use all over the country, it is surprising that they have not been found in larger numbers in the Culbin, Glenluce, Shewalton, and Stevenston Sands—areas which have each produced such large numbers of so many different types of prehistoric objects. These areas have been so thoroughly searched that, if these discs had been in common use there, it is certain that they would have been discovered.

As none of the articles in this collection have been found directly associated with any special prehistoric type of object, we are not able to assign the relics to any particular period. Perforated stones of some of these types have been found in crannogs and have been considered whorls. They have been discovered to have been in use in ancient hill forts in Ayrshire. The district where most of them were found is very rich in stone implements and Bronze-Age burials, and it is quite possible that while some of these objects may belong to comparatively recent times others of them may go back to the very beginning of the Iron Age or even further.