I.

NOTES ON THE CONTENTS OF A REFUSE-HEAP AT THE BASE OF THE FORTIFIED ROCK KNOWN AS DUN FHEURAIN AT GALLANACH, NEAR OBAN. RECENTLY EXCAVATED BY MR J. PATTEN MACDOUGALL OF GALLANACH. BY JOSEPH ANDERSON, LL.D., ASSISTANT SECRETARY AND KEEPER OF THE MUSEUM.

The object of this paper is to describe certain relics exhibited to the Society by Mr J. Patten MacDougall of Gallanach, Oban, Argyleshire. They consist partly of a large collection of animal remains, and partly of a collection of artificial objects, all found in the course of the excavation of a very large refuse-heap, accumulated at the base of an isolated stack of rock which seems to have been occupied as a prehistoric fort, and is known in the locality and shown on the Ordnance map as Dun Fheurain. This dun is referred to by Dr Christison in his description of the Duns and Forts of Lorne as follows:—

"Dun Fheurain, pronounced by a native Airen, with an emphasis on the first syllable, 100 yards north of the head of Port Lathoich, and 60 south of Kerrera Sound, is an irregularly shaped rock fortalice of conglomerate. The ascent on the only accessible side is by a tortuous, dangerous path, commencing on a tongue of grass, and continued over slippery rocks and grass. The only evidence of fortification is at the entrance, on each side of which stones have been piled to heighten the little natural cliffs. The available space on the level top is only 63 by 45 feet."

I have not seen the place, but Mr Patten MacDougall informs me that he is satisfied of the existence of some kind of defensive construction on the top of the rock, and that the refuse-heap below appears to be the accumulations of a long period of occupation of the fort. Some idea of the extent of this accumulation may be formed from the fact that, from first to last, somewhere about 800 cartloads of earth have been removed from the talus in which the remains occur, and that the refuse extends to a depth of between 15 and 20 feet from the upper surface of the talus, although at that depth the bones are almost completely decayed. The bulk of the bones and other remains sent to me

for examination were found at a depth of about 10 feet, and are for the most part in fairly good preservation. The domestic animals represented appear to be the ox, horse, sheep or goat, and swine; the latter, however, judging from the very large size of the tusks, may in some cases have been the wild-boar. The red-deer is also abundantly represented, and the roebuck is present, though not in such numbers. The bones are all more or less broken and split up for culinary purposes. This breaking and splitting of the bones "for the marrow" or fat which they contain is a modern as well as an ancient custom, and has therefore no special significance as an indication of the time of the deposit. The manufactured objects found in the refuse-heap are not numerous, but they include articles of stone, bone, bronze (or brass), iron, and pottery.

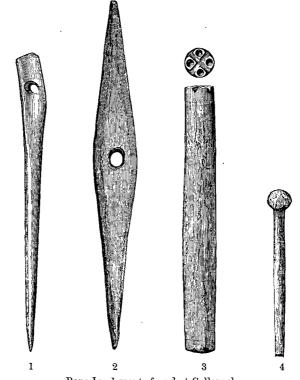
Stone.—Several quern-stones were found, the most interesting of which is a broken upper stone,  $13\frac{1}{2}$  inches in diameter, formed from a naturally rounded boulder of a greenish chloritic rock. The upper side presents the natural and irregularly rounded surface, the lower side being flattened, and the centre, which is  $3\frac{3}{4}$  inches in thickness, pierced with a hole  $1\frac{1}{4}$ inches in diameter, widening towards the upper surface into a cup-shaped orifice 4 inches in diameter, by which the corn was fed into the mill. There was apparently no provision for a birt being placed in the eye of the quern to enable it to revolve freely, and the upper stone must therefore have ridden upon the lower one, with or without a "washer" between them. The most remarkable feature of the stone, however, is that, after it was broken irregularly across, and thus rendered useless for grinding, the part of the flat grinding face left was converted into a mould, for what at first sight looked like a rather long and narrow flat axe-head of bronze. The cavity of the mould, however, does not conform to the shape of a flat axe so closely as these founders' stone moulds usually do, and the probability is that it was a blacksmith's mould for fashioning a triangular crusie, by beating into it the red-hot plate of iron from which the shell of the crusie is formed. The cavity is  $6\frac{3}{4}$ inches in length,  $2\frac{1}{4}$  inches broad at the wide end, and  $\frac{3}{4}$  of an inch in depth, the bottom being quite flat.

Whetstone or burnisher of fine micaceous claystone,  $3\frac{3}{4}$  inches in length by  $\frac{3}{4}$  inch in breadth, and  $\frac{1}{2}$  inch in thickness, finely polished by use.

Bone.—Needle of bone (fig. 1),  $3\frac{1}{8}$  inches in length, with flattened head, bent to one side, and a circular eye.

Needle of bone,  $2\frac{1}{4}$  inches in length, with flattened head and circular eye.

Netting-needle (fig. 2), or similar implement of bone,  $3\frac{1}{2}$  inches in



Bone Implements found at Gallanach.

length, slightly curved both ways in the same direction from the middle, where it is perforated by a circular eye, and tapering equally to both ends.

Stamp of bone (fig. 3), being a cylinder  $2\frac{3}{4}$  inches in length by  $\frac{1}{4}$  inch

in diameter, with one end cut into a stamp formed like a cross, with a

Similar stamps, but of larger size,

have been found on Romano-Gaulish pottery.

pellet in each of the four quarters.

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Pin of bone (fig. 4),  $1\frac{3}{4}$  inches in length, part of the point-end broken off, the shank straight and about  $\frac{1}{8}$  inch diameter, the head globular and  $\frac{1}{4}$  inch in diameter.

Broken portion of a bone pin or needle, 2 inches in length.

Bodkin or borer of bone,  $3\frac{1}{4}$  inches in length, pointed at both ends, but thicker and less tapering towards the one end than the other.

Bodkin or borer of bone,  $3\frac{1}{2}$  inches in length, pointed at one end, the other end broken, and roughly flattened on the under side.

Portion of bodkin or bone tool, 3 inches in length, one end broken, the other of spatulate form.

Three teeth of a heckle or wool-comb, made of bone, 4 inches in length. They are quite slender, regularly rounded and tapering equally to very fine points, the bases square in section, and presenting the appearance of having been fixed in wood.

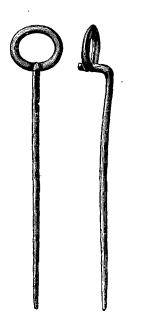
Two slender bones,  $3\frac{1}{4}$  and  $4\frac{1}{4}$  inches in length, the articular ends remaining, the shafts scraped down, the points broken away.

Bronze or Brass.—Penannular ring, slightly oval in shape, 1 inch by  $\frac{3}{4}$  inch in diameter, made of a rounded wire somewhat less than  $\frac{1}{8}$  inch in diameter, expanding slightly towards the extremities, which are close together, but not joined.

Pin of bronze or brass (fig. 5), 3 inches in length and less than  $\frac{1}{8}$  inch in thickness, having the upper part bent at a right angle so as to project about  $\frac{1}{4}$  of an inch, and then bent to the left and upwards, so as to form a complete circle, the end being again bent forward in the line of the projecting part and cut short off. Except that it is made of a wire of bronze bent into shape, this pin bears much resemblance to a pin of iron (fig. 6) found in the Broch of the Laws, Monifieth, Forfarshire. Another pin, with the upper part projecting forwards, and carrying an ornamented circular head, found in the Broch of Bowermadden, Caithness, is of the same type, but has been cast in a mould. A clay mould for casting this form of pin was subsequently found in the Broch of Lingrow, near Scapa, Orkney.

Pins with an open circular head, carried on a forward projection, are not uncommon both in Scotland and Ireland. They are, however, later than those of somewhat similar form, with discs carried in the same manner, which belong to the Bronze Age.

Iron.—Pin of iron, 3 inches in length, with part of an open circularly twisted loop at the end opposite the point. Along with it is



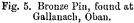




Fig. 6. Pin of iron, from Laws.

a flat slender bar of iron,  $2\frac{1}{2}$  inches in length by  $\frac{1}{4}$  inch in width, and somewhat less than  $\frac{1}{8}$  inch in thickness, which is bent towards one end. Putting the two together, they suggest the broken remains of one of those bow-shaped fibulæ of simple form with a spring-pin, the partial twist remaining in the head of the pin being part of the usual spiral spring. Fibulæ of this form in iron have not hitherto been found in

Scotland, so far as I am aware, but they occur in the South of England in association with remains of the period of the Roman occupation.

Flattened and slightly bent skewer-like pin of iron,  $6\frac{1}{2}$  inches in length, with the butt-end rounded off to an expansion of  $\frac{3}{4}$  inch in diameter, and tapering thence in a long curve on both sides to the point. The thickness is scarcely more than  $\frac{1}{6}$  inch throughout.

Portion of an iron implement, 4 inches in length and 2 inches in diameter in the upper part, which has been turned over at the sides as if to form a socket, widening to  $2\frac{1}{2}$  inches at the lower part, which is flat. It may have been part of the sock of an old plough or a *cas-chrom*.

Portion of thin iron or steel,  $1\frac{1}{2}$  inches in length and  $1\frac{7}{8}$  inches in width, with straight sides and rounded end, the sides and ends having an equally fine edge, and the thickness in the middle not exceeding  $\frac{1}{8}$  inch. It resembles nothing so much as the broken point-end of a large broad-bladed sword.

Portion, 9 inches in length, of the point-end of a double-edged sword-blade,  $1\frac{3}{8}$  inches wide at the upper end, tapering to 1 inch in width at the part where it begins to taper rapidly to an acutely shaped point, which is  $1\frac{1}{2}$  inches in length, having the angles at the junction with the line of the edge somewhat rounded.

Pottery.—Part of the upper portion of a vessel of unglazed pottery which has been at least 6 inches in diameter, and of somewhat globular bowl-shape, with a slightly constricted neck and everted rim, which shows the finger-marks of the potter beneath the turned-over part. It is made of a fine and rather sandy paste mixed with mica, and has not been thrown on the wheel, but moulded by hand. In some parts the outside retains the irregularly impressed markings of the stalks apparently of grasses, impressed when the clay was soft. It has been burned in an open fire, and in shape and general character it bears considerable resemblance to some of the pottery of the brochs.

Small triangular fragment (about 2 inches by 1 inch) of the upper part of a bowl-shaped vessel of the red lustrous ware commonly called Samian, showing remains of the characteristically rounded lip, and a peculiarly arranged pattern of fine linear ornamentation impressed on the surface underneath the rim. The same variety of ornamentation occurs on fragments of Samian ware found in London, and now in this Museum.

In regard to the antiquity of this deposit, there are no very definite indications to be derived from the general nature of its contents. It is clearly a refuse-heap or kitchen-midden, consisting chiefly of the shells of mollusca and the bones of animals that have been apparently consumed for food. The shell-fish are the common edible varieties of the neighbouring sea-shore, and the animals are the common domestic and wild animals of the district. Their bones have been utilised, however, for the manufacture of bone implements of various kinds, as well as for culinary purposes. Some of the long bones of the larger ruminants have been split up in a peculiar manner, which seems to imply an intention of using them as currying tools. similarly split by removing the larger portion of one side are still used for cleaning skins by some tribes of North American Indians, and are said to be quite well adapted to their purpose. Portions of the split bones have also been manufactured into needles and pins, borers, &c., and the deer horns are sawn or cut across, apparently for conversion into tools or handles of tools. Some of the rib-bones bear marks of cuts with keen-edged implements such as axes or knives. Some of the sawcuts on the deer-horns, however, are so rough and wide that they appear to have been done with a more clumsy instrument than a properly made These indications are, however, too vague to possess any chronological value.

On the other hand, there are no stone implements of Stone Age types or bronze implements of Bronze Age types. The presumption is, therefore, that the deposit may be assigned to some period well within the Iron Age, so far at least as its manufactured relics are concerned. And this is certainly borne out by the few indications of correspondence with a definite period which the characteristics of some of these relics supply. If we take the pottery, for instance, we find that the small fragment of Samian ware limits the period to some time after the Roman invasion of Britain. This ware can scarcely be supposed to have come into Scotland before the time of the Roman occupation. On the other hand, it is plentifully found on almost all the Roman sites in Britain; and it occurs occasion-

ally as far north as Caithness and Orkney, where it can hardly be supposed to have been carried by the Romans. Like other articles of luxury and display with which the influence of the Roman civilisation had familiarised the inhabitants of Britain, its possession was no doubt an object of ambition in places to which the Romans themselves had never penetrated, and where, though their power was neither felt nor feared, their merchandise was coveted for the profit it brought to the adventurous trader, and the local importance its possession conferred on the fortunate possessor. It has been found occasionally in the brochs of Caithness and Orkney, in circumstances which suggest that it was both rare and highly valued, the few pieces found rarely implying the presence of more than one vessel in the same broch, and the fragments themselves sometimes showing by old breaks clamped with lead that they were considered more than ordinarily precious. The other piece of pottery from the refuse-heap has also a considerable resemblance to broch pottery, and may well be of that period. It cannot, at all events. be classed with any variety of pottery known in this country to be of the Stone or Bronze Age, and must therefore be assigned either to the Iron Age or later. On the other hand, it is not wheel-made, and has not been glazed, so that it does not go with ordinary mediæval pottery.

The bronze and bone pins accord with forms in use of the same period. Bone pins with globular heads are plentiful among Romano-British remains, and also in the brochs. A pin of bronze, with an open circular head carried on a forward projection of the stalk, was found in one of the brochs of Caithness, and a clay mould for making the same form of pin in one of the Orkney brochs. The whetstone and the querns are not decisive of the period further than that their presence prevents any higher antiquity being assigned than that already given, although they might go well enough with a much later time of the occupation, which is thus shown by the relics to have lasted from some time in the early centuries of the Christian era till some time in the Middle Ages.