ON A PARTICULAR KIND OF FLINT KNIFE COMMON IN THE COUNTY OF ANTRIM, IRELAND. BY REV. GEO. RAPHAEL BUICK, A.M., FELLOW OF THE ROYAL HISTORICAL AND ARCHEOLOGICAL ASSOCIATION OF IRELAND.

Some time ago, when reading Dr Anderson's Scotland in Pagan Times (Bronze and Stone Ages), I was struck with the close resemblance between a little flint object described and figured by him, and a series of small implements fashioned out of the same material which I happen to have in my collection of Irish antiquities. The object in question was found in the chambered cairn of Ormiegill, in Caithness. It is represented by figure 245 on page 246 of the work referred to, and is described as "an arrow-head of flint, triangular in form, but lop-sided and hollowed at the base." Evans, in his Ancient Stone Implements of Great Britain, gives the same woodcut, and speaks of the object itself in similar terms. I have not had an opportunity of seeing it, but I am so familiar with objects like it in make and shape that, assuming the representation in the books not to be misleading, I feel inclined to question the application to it of the term "arrow-head."

I may be wrong, I admit, in so doing; but, at any rate, a description of the small implements resembling it in my possession, and which have suggested the possibility of a mistake as to its real character, may not be without interest to the members of the Society of Antiquaries of Scotland. They are very common here in Mid-Antrim. They have also been met with in the countries of Derry and Donegal, and I daresay in other parts of the country as well. Locally, they are known as knives, and there can be no doubt but the name is in accordance with the uses to which they were once put. Their average length is from about an inch and a half to two and a half inches. Some are as much

as 4 inches long, others do not measure an inch; but these extreme sizes are comparatively rare. They have been formed from thin leaf-shaped flakes by chipping away one side as far as the ridge or midrib,



Fig. 1.

and then working a tang at the butt by means of which the blade might be inserted in a handle. As the result, we have a knife the edge of which is formed by the natural fracture of the flint—a part, in fact, of the sharp margin of the flake operated upon—and with a back thick and strong like that of an ordinary razor (fig. 1).

A blade of this kind mounted securely in a handle of wood or horn would be almost identical in shape and size with the knife at present in general use by shoemakers,—especially when it has been somewhat worn through use,—and would answer admirably for cutting the skins



Fig. 2.



Fig. 3.

of which, it is just possible, the garments of the original owners were made. Nor would its use in all likelihood be confined to tailoring of this description. It would serve a variety of useful purposes, and when worn out and useless could easily be replaced.

The particular shape, which the blade so made assumed, depended as a matter of course to a considerable extent on that of the flake operated upon. If the flake was long and narrow, the manufactured implement was of the same length, but only about half the breadth. If the flake was short and broad, the resulting blade was also short and comparat tively broad. Compare fig. 1 with figs. 2 and 3.

When it so happened that the length was less than the breadth, the completed knife had its edge almost at right angles to the tang. One of this description, set after the same fashion as the ordinary stone hatchet in a handle of wood or horn—that is, with the cutting edge parallel to the handle and protruding from it but a little—would make



Fig. 4.

a capital fleam. I fancy many of them were thus set, and afterwards used for bleeding cattle.

The shape of the knife also depended upon the particular part of the flake which was chipped away. Suppose we take a thin triangular flake, and place it with the butt directed toward us and the ridged surface uppermost. If we chip away the half to the right hand (I



Fig. 5.

refer to a flake the ridge of which is central or nearly so), and then work a tang at the butt, the blade so formed will be what is called "a right-handed" one, i.e., it will be one best fitted for cutting towards the person. But if we chip away the half to the left hand, the result will be a left-handed blade, or one specially fitted for cutting away

from the person. Figs. 1 and 2 represent left-handed knives: fig. 5 represents a right-handed knife.

The one kind of knife is about as plentiful as the other. Out of a hundred specimens taken at random, 57 were right-handed and 43 left-handed.



Fig. 6.

As to the tangs themselves, they are sometimes round, but generally flat. When flat they are often worked so as to present a concave appearance on the edge away from the back (see fig. 5). When there is no such hollow, the tang is of a neat triangular form (see figs. 2 and 6).

Sometimes the flat or broad tang is worked on both sides; sometimes only on one. If the original flake was thin enough very little work was expended upon it, and this, as a rule, was confined to one side. If the flake was rather thick, the tang was dressed on both sides until it was reduced to a size suitable for insertion. Comparatively few blades are found broken across the tang, a proof that when the knife was fairly treated it answered thoroughly the end for which it was designed.

Like the tang, the back of the blade was sometimes worked, or chipped, on one side, sometimes on both. Those which are worked on both sides have it usually very sharp. But this sharp back was certainly not used,

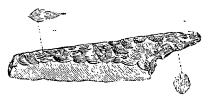


Fig. 7.

as some have supposed, for cutting. It never shows any signs of wear and tear. These evidences of use are always found on the part formed by what remains of the unchipped margin of the original flake. This,

and this alone, deserves the name of edge. It is always formed by the natural fracture of the flint. In many instances this edge is greatly worn and deeply indented, as though the owners had used them much and roughly. A few specimens have been met with (one or two out of every hundred), the edges of which have been dressed or chipped by way of resharpening them. I have tried the cutting powers of both kinds on pieces of leather, and find that the *undressed* blade is the superior of the two; doing the work more neatly, and with greater ease to the operator, than the other.

The point of the blade, as a rule, is sharp, but there are many exceptions. Not a few have it truncated or rounded off by chipping. Some, after being chipped, have been ground to make the rounded end perfectly smooth. At first I was inclined to believe that specimens of this kind had been tampered with, but I soon found reasons to discard the supposition. Blades with the point chipped or ground off are met with under circumstances which preclude the possibility of Besides, tanged and untanged flakes with the any such tampering. points chipped off are common enough in the neighbourhood of the localities in which the knives I am describing abound. They are to be met with all along the banks of the river Bann, which separates the county of Antrim from that of Derry. At Toome, where the river leaves Lough Neagh, they are fairly abundant. Many are dug out of the diatomaceous clays which line the banks, especially in the neighbourhood of Portglenone. These flakes are of a good size—from 3 to 5 inches being the usual lengths. Evans, who was the first to describe them, regards them as having been spear-heads or javelins. It is much more likely, however, that they were knives. If they were intended to be used as spears why touch the point at all? Why destroy the symmetry of the flake or interfere with the keen sharpness of the original point? And more, many of these flakes never had a sharp point, as is evident from the remains of the outer crust of the core from which they were struck still adhering at the spot where the point should have been. And yet these pointless flakes are tanged, and show signs of wear and tear on the edges, so that evidently they were used for cutting rather than for piercing.

In my opinion, they were used principally for scaling and cutting-up fish.

The Bann has always abounded in trout and salmon, and flakes of this description are more abundant in its immediate neighbourhood than anywhere else.

Flakes of the same kind, i.e., with truncated point, but untanged, These were used in the hand immediately, and withare also common. out a handle of any kind. The tanged ones had handles attached to them, or were wrapped round at the butt with fibre or skin. One with the wrapping of fibre still upon it was found a few years ago, and was exhibited at the Paris Exhibition in 1876. But whether handled or not it would be a great advantage in either case to be able to apply the forefinger to the point of the blade without risk of being wounded, since in this way an amount of pressure otherwise unattainable could easily be applied to it. Here, then, is the reason why the particular knives under consideration have their points rounded off or removed altogether. The part so rounded off, either by chipping or grinding, formed a convenient rest for the forefinger of the hand in which the The additional force thus applied enabled the operator knife was held. to do work with the knife which, without such a contrivance, would have been practically impossible.

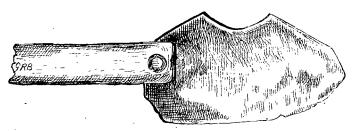


Fig. 8. Bronze Knife, after Keller.

It is worth while to note, in passing, that certain bronze knives from the Lake Dwellings of Switzerland exhibit a similar contrivance. They have a peculiar hollow or indentation on the back. Keller figures several, and asserts that the hollow was intended to receive the point of the forefinger, and thus to facilitate the management of the implement. The correctness of this opinion is borne out by the fact that in those instances in which the knife was handled the hollow or indentation is nearer the tang than in those specimens which were used in the hand immediately and without a handle.

If I am correct in this interpretation of the truncated point (and I don't see what other probable reason can be assigned), then it is clear the objects under consideration cannot be arrow-heads. Here, as elsewhere, the more specialised form explains the use and design of the less

specialised. And yet they have often been described as such. In not a few museums they are labelled "single-winged arrow-heads." One enthusiastic antiquarian in the north of Ireland has recently figured them in a prominent archæological journal as "borers."



Fig. 9. Flint Knife, with rounded Point.

These descriptions are wide of the mark. An odd specimen, here and there, might indeed serve at a pinch as an arrow-point, but the majority are altogether unsuited to do anything of the kind. Instead of helping to make an arrow, if attached to it, an effective weapon, almost any one of them would in reality render it worse than useless. Sir William Wilde saw this clearly, and accordingly, when arranging the Museum of the Royal Irish Academy, he put the nine specimens which were there into the department, not of the arrow-heads, but of the knives.

And now, accepting them as knives, are we to regard them as the prototypes of the metal knife? Or, are we to look upon them as copies in stone of bronze and iron blades with which their makers were already familiar, and which, from the principle of economy or a scarcity of metal, they set themselves to imitate? These questions are full of interest, and they are not altogether unimportant.

The evidence available for their solution is partly negative and partly positive. Taking the negative evidence first, it just amounts to this, that no knife of this particular class has been found in any cairn, barrow, or cist, associated with the interment of bodies burned or unburned. (I am taking it for granted that the somewhat similar object figured by Dr Anderson, and to which I referred at the beginning of this paper, is

really an arrow-point, or at any rate that it does not belong to the class of implements with which I am dealing.) There is nothing like them from the Lake Dwellings of Switzerland. Nor have they been found in any Scotch or Irish crannog. In Canon Grainger's fine collection of Irish antiquities at Broughshane, near Ballymena, county Antrim, there is, I find, a single specimen labelled as coming from the Lisnacroghera crannog, and associated with the magificent sword sheaths of bronze and other objects of rare interest from this particular spot. But it is not at all certain that it came from the crannog, or even belongs to it. The neighbourhood of Lisnacroghera is one of the localities in which objects of this kind abound, and I understand that the person who sold it to Dr Grainger merely stated that it came from Lisnacroghera, a rather vague description, since this is the name of a large townland as well as of the crannog which is situated within its bounds.

So far then as the negative evidence is concerned, it is against the supposition that these knives have come down to us from the Stone Age.

But what of the positive evidence? This in itself is somewhat meagre. Such as it is, however, it throws a little additional light upon the subject. It amounts to this. A few specimens have been found at the so-called prehistoric sites among the sand dunes along the sea coast of Antrim, Derry, and Donegal, at Castlerock, Portstewart, White Park Bay near Ballintoy, and Bundoran. Here they were associated with arrow-heads, scrapers, hammer-stones, flint-flakes, cores, unglazed pottery, and other objects of a primitive kind. There is no reason, however, to believe that these objects belong to a very ancient civilisation. Certainly they do not deserve to be classed as neolithic in the proper I have worked among them diligently for years, and sense of the term. can perceive many indications pointing in the direction of the conclusion that they are comparatively recent. For example, bronze in small quantities is met with at Castlerock and Portstewart. And at least two bronze pins have lately been found at White Park Bay, Ballintoy, lying on the surface amongst the scrapers, flakes, hammer-stones, and other stock in trade of the former residents. No bronze, indeed, has been met with as yet in "the black layer"; that is, the hitherto undisturbed surface upon which the people who occupied the spot lived and worked, and which has been coloured, in a way to justify the name given to it, through the decay of vegetable and animal matter. But there is no good reason for denying the possible connection of what little has been found with the other remains.

Again, at all the places just mentioned the pottery which is abundant is identical in make and ornamentation with that which belongs to, and is characteristic of, the Bronze Age. It is hand-made; for the most part

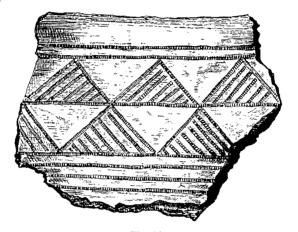


Fig. 10.

imperfectly burnt; unglazed; and much of it is ornamented with incised lines arranged in rectilinear patterns. In no respect does it differ from the burial urns which have been recovered from cists, and barrows, and megalithic structures all over the north of Ireland, the majority of which are referable to the latter part of the Age of Bronze. Here, however, there is this peculiarity. It is not associated with burial at all. The remarkable thing about it is that at the places mentioned, and at other spots along the north-east coast, it occurs in kitchen-middens. It must have formed part and parcel of the domestic possessions of the so-called prehistoric occupants. Now, according to Canon Greenwell (see British Barrows), pottery of this description is only found in

England in connection with interments. It is never met with at the spots where the original possessors lived, but solely at the places where they were buried. Domestic pottery is never ornamented. That employed for burial purposes usually is. But here we find ornamented pottery of precisely the same character as that almost universally associated with other grave goods amongst the usual kitchen-midden finds. How is this to be accounted for? What is the explanation? It seems to me to indicate for the occupation of the sites a period subsequent not only to the introduction into this country of bronze, but subsequent also to the introduction of Christianity. The spread of the Christian religion would put an end both to cremation and to the feeling of sacredness associated with a species of earthenware which for ages had been reserved for the tombs of the dead. Henceforth, there would be nothing to prevent the use of this ornamented pottery for domestic purposes, and we might therefore expect to see



Fig. 11. Flint Knife, mounted in handle.



Fig. 12. Shoemaker's old Knife, for comparison; blade of iron, handle of wood.

traces of its employment in this very way during the period intervening between the general establishment of Christianity on the one hand, and the introduction of the potter's wheel and the art of glazing fictile ware on the other. Reasoning thus, I would refer to this period those small communities which have left behind them along the shores of Antrim, Derry, and Donegal the many traces of their poor and somewhat archaic culture.

If I am correct in so doing, it would necessarily follow that the knives found at Castlerock, Portstewart, Ballintoy, and Bundoran, and indeed the entire class to which they belong, cannot be the prototypes of the metal knife. And if they are not the prototypes, what can they be but copies; imitations in flint of implements much needed, but which must have been for a long time rather rare, and in consequence very costly?

In the Catalogue of the Royal Irish Academy, there is a sketch taken from an illuminated copy of the *Topographia Hiberniæ* of Giraldus Cambrensis, page 312, fig. 197. It represents "the Scribe writing the marvellous Kildare Gospels." He is seated in what is called a bird-cage chair. Before him is a desk which supports the work he is engaged on. The person is probably an ecclesiastic, as the top of his head is shaved. In his right hand he holds a pen, and in the left a knife with which he keeps the page in its place. This knife corresponds in shape to those under consideration. One of the latter set in a handle would match it exactly. Could it have been that they were used by the monks of the Early Celtic Church in preparing the skins for their illuminated manuscripts, and for making erasures when these became necessary as they proceeded with their work?