

III.

NOTICE OF SOME CURIOUSLY CONSTRUCTED WOODEN OBJECTS FOUND IN PEAT BOGS IN VARIOUS PARTS OF EUROPE, SUPPOSED TO HAVE BEEN OTTER AND BEAVER TRAPS. BY ROBERT MUNRO, M.A., M.D., SECRETARY.

My attention was first directed in the summer of 1888 to the very remarkable and puzzling objects which I am now about to describe. In laying the facts before you, I find it preferable to deviate from the chronological order of their discovery, which in ordinary circumstances would have been the better method, and to follow that by which the details of the respective objects came to my knowledge. One reason for the selection of this method is that this is the first time all the objects in question have been correlated and shown to be individual members of one specific group, whatever their purpose may have been. Also, the order of my narrative closely coincides with the steps of the generalising process which led to this deduction, and consequently it forms a special feature of my communication.

In the vicinity of Laibach, the capital of Carniola, there is an extensive peat moor, known to have been formerly a lake, in which, in modern times, the remains of several pile-dwellings have been discovered and investigated. Among a large and varied assortment of relics, chiefly of

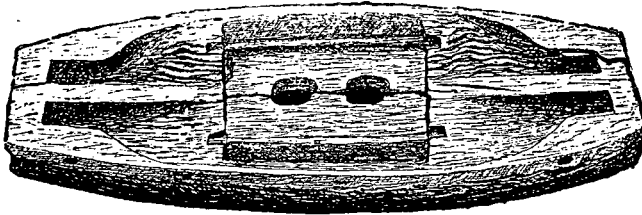


Fig. 1. Wooden Machine from Laibach, 32 inches long.

the Stone and early Bronze Ages, disinterred from these habitations, were two wooden objects, the meaning or purpose of which for several years completely baffled the late Dr Karl Deschmann, Curator of the Landesmuseum there, and other experienced archæologists who had seen them.

A drawing of the most perfectly preserved of these objects is here given (fig. 1), from which you will readily understand its main structural features. It consists of a flat solid piece of oak, shaped somewhat like a boat, and measuring 32 inches long, 12 broad in its widest part, and 4 thick. It is perforated in the centre by a rectangular opening 9 inches in length and 5 in breadth, into which are fitted two movable valves, each revolving on its posterior margin as an axis lying in a groove, and having a projecting pivot at each end which fit into corresponding cavities in the framework. These valves are freely movable when pushed upwards, but this motion is arrested, just a little short of the perpendicular, by the slanting shape of their posterior margins, so that, when left to themselves, they always fall inwards—never backwards—and so close the aperture. In this condition—*i.e.*, closed—the valves are at rest, and are prevented from falling downwards by about an inch of chamfering at each end of the aperture. The two terminal and symmetrical spaces which occupy the rest of the surface of the machine are each occupied by two elongated hollows, which, commencing near the margin of the central opening, gradually become deeper, till they end abruptly within a few inches of the extremities. The medial septum, towards its distal end, and the lateral margins formed by these hollows, are perforated transversely with round holes in line, so that a stick could be passed from side to side, leaving, of course, the portions crossing the hollows free. Along with the oak framework were found a few bits of round sticks, which Herr Schulz, Dr Deschmann's assistant, who was present at the discovery, believed to be the decayed remains of some kind of mechanism for working the machine. The other analogous object was in a fragmentary condition; but, so far as could be judged from what remained, it was both in structure and dimensions identical with the former.

As these singular objects were found not exactly on, but at a little distance from, the site of a lake dwelling, they were not at first included in the general collection of lake-dwelling remains—though, being found in the same archæological stratum, there was no valid reason for their exclusion—and so they lay in the museum for several years as objects of a *sui generis* character. It was not till some German anthropologists

happened to visit the museum, and recognised their similarity to a series of objects found in North Germany, that any theory as to their function was formulated.

The first of the analogous objects thus referred to was figured and described by Dr Hildebrandt, of Tribsees, Neuvorpommern, in the *Zeitschrift für Ethnologie* for 1873 (*Verhand.*, vol. v. p. 119). A mere glance at the accompanying sketch (fig. 2) shows how closely it resembles the Laibach machines both as regards form and structure. It has a central aperture closed by two valves, two elongated hollows, and a lateral perforation at each end. Its dimensions are stated to be $29\frac{1}{2}$ inches long and 6 inches broad at the extremities. It differs from the one figured from Laibach in not having any semi-lunar cuts in the free edges of the valves, which, as will be seen from the drawing (fig. 1), are so arranged in the latter that they form, when the valves are brought together, two oval perforations. It had been found in a peat-bog at a

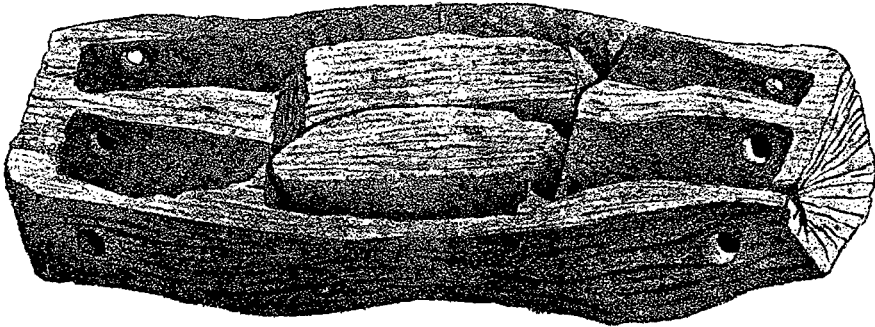


Fig. 2. Wooden Machine from North Germany. Length, $29\frac{1}{2}$ inches.

depth of 5 or 6 feet, and shortly afterwards sent to Dr Hausmann for the Archæological Museum at Greifswald. As to its use, it was conjectured to be part of an apparatus for catching or retaining fish (*Fischbehältniss*) by means of a net attached through the lateral holes.

In the following year, Professor F. Merkel, of Rostock, in reply to Dr Hildebrandt's communication, figured and described in the same journal (vol. vi. p. 180) another object of the same kind which had lately been

found, at a depth of 6 or 7 feet, in the Moor of Samow, near Gnoien, and was then preserved in the Museum of Rostock. Its dimensions are stated to be 3 feet in length, 11 inches in greatest breadth, and $3\frac{3}{4}$ to 5 inches in thickness—the thickest portions being near the extremities. The resemblance of this one to the Laibach machine is still more striking than that of Tribsees, from which it differs only by having three semi-lunar cuts, instead of two, in the valvular edges (fig. 3).

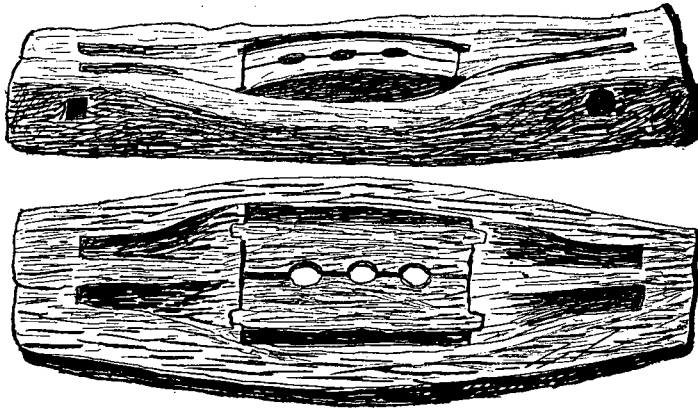


Fig. 3. Wooden Machine, 3 feet long, from North Germany.

Associated and apparently connected with this machine were about half a dozen bits of round sticks some $1\frac{1}{2}$ inch thick, a small portion of wrought wood, and a shovel-shaped piece of horn said to be that of the Elk (*Cervus alces*). According to the opinion of Mr Boldt, its discoverer, it was a trap for catching otters.

A few years later Mr Friedel announced (*Ibid.*, vol. ix. p. 162) that a third example of the so-called otter-traps had just been sent to the Märkisches Museum. It had been disinterred from a peat-moor at Friedrichsbruch near Flatow, in the province of West Prussia. This object is not figured nor described beyond the statement that it strongly resembled those already noticed from Tribsees and Rostock. Major von Heister, a sportsman, is reported to have pronounced it also an otter-trap. He considered that elastic rods extended from the end hollows to the valves, on which

they were made to press hard, especially when the latter were open. In setting the trap, the valves were kept asunder by a bit of stick, to which the bait was attached, and on its removal—a contingency which would occur if an otter grabbed at the bait—the valves would immediately close by the pressure of the elastic rods, and so the animal became trapped. Although Mr Friedel does not specify the depth at which this supposed trap had been buried, I am enabled to supply this information from a small publication which has just come to hand from Danzig (*Festgabe für die Theilnehmer des III. Deutschen Fischereitages zu Danzig*, 1890). In this brochure there is an article on prehistoric fishing, by Dr Conwentz, Curator of the Danzig Museum, and among the fishing gear therein described he includes this otter-trap. According to him, the trap had been disinterred from a depth of 7 feet 10 inches. Dr Conwentz also suggests a *modus operandi* somewhat similar to that of Major von Heister, and adds that when the otter inserted its head into the space left free by the open valves, they—*i.e.*, the valves—closed over its neck, and so the animal became ultimately either drowned or strangled.

Profiting by the published descriptions of the analogous objects thus brought under his notice, Dr Deschmann at once considered how the trap theory would apply to those in his possession. Looking at the vast amount of osseous remains collected from the debris of the lake-dwellings—a characteristic feature of which was the great preponderance of those of wild animals—he ascertained that while the bones of the beaver were unusually numerous, representing at least 140 individuals, there were actually none of the otter. Consequently, Dr Deschmann came to the conclusion that the hitherto unexplained machines from Laibach Moor were the very traps with which the lake-dwellers hunted and captured so many beavers, which, it was evident, had formed no inconsiderable portion of the dietary of this prehistoric colony.

Such was the substance of the information I received from the authorities of the Landes Museum at Laibach when I last visited that most excellently conducted institution. By this time the *Biberfalle* had been assigned to a prominent position among the rarer objects from the lake-dwellings, and the whole story seemed to me so curious and inter-

esting that I thought it worthy of a place in my Rhind Lectures, which were delivered in the following October (1888).

So the matter stood till January 1890, when my attention was re-directed to the matter in the following manner: Just while the proofs of my work on *The Lake Dwellings of Europe*, containing my report of the so-called otter and beaver traps, were lying before me, I received from Dr Luigi Meschinelli, of the Geological Museum of the Royal University of Naples, a copy of an article by him entitled "Studio sugli Avanzi Preistorici della Valle di Fontega." The objects described in this memoir were found in the course of excavating peat in a small valley opening into Lake Fimon, the site of a well-known lake-dwelling in the vicinity of Vicenza. Among a quantity of the industrial remains of man, consisting of fragments of pottery, various implements of stone and flint, a bronze celt and a Roman coin of the time of the Emperor Hadrian, were three curious-looking and novel objects of wood shaped like a canoe in miniature. One of these objects—the best preserved though not the largest—was carefully described and figured (fig. 4). On

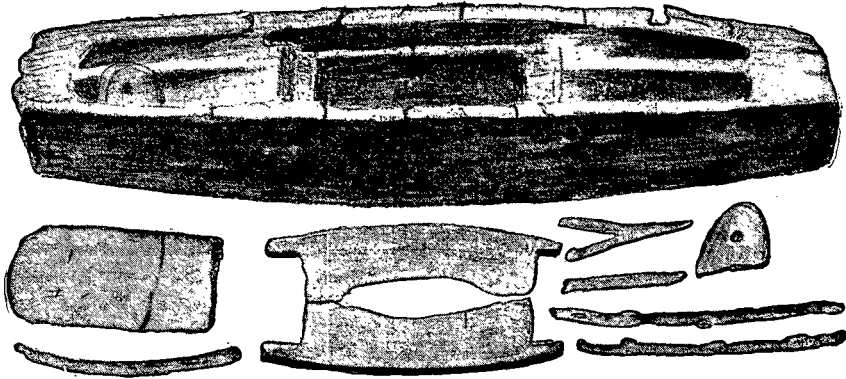


Fig. 4. Wooden Machine from Fontega, 28 inches long, with detached valves, and some worked sticks found along with it.

examining the memoir so opportunely brought under my notice, it seemed to me that we had here to deal with three more of the so-called traps which I have already described as having been found in Laibach Moor and various places in North Germany. The example here figured

was constructed out of a solid piece of oak, measuring 28 inches in length, $6\frac{3}{4}$ in breadth, and $2\frac{3}{4}$ in thickness. The opening in the centre was fitted with two valves (here represented detached), and measured $6\frac{1}{2}$ by $3\frac{1}{2}$ inches, this being the actual size of the aperture when the valves were in position and open. On the off side of the drawing there is seen a deep groove, in which the corresponding valve revolved; also at each end of the aperture the transverse chamfers, which supported the valves when closed, and prevented them from falling through. On the under surface of the machine the sides of the central aperture are described as not being cut perpendicularly, but slanting outwards so as to assume a considerably larger size, viz., 11 inches by $5\frac{1}{2}$. In addition to the elongated hollows and the transverse holes near their distal ends there are four other small perforations noticed—one opposite each of the valvular pivots, into which pins were inserted, evidently for the purpose of preventing the displacement of the valves. In one of the elongated hollows and in a line with the transverse hole there was found a small semi-lunar piece of wood containing a perforation corresponding to that in the framework. It may also be observed that along the free edges of the valves, which did not come into actual contact, there were some holes, three on one side and four on the other, into which small wooden projections appear to have been inserted, thus forming a kind of lattice-work when the valves were closed. Associated with this machine, as seen in the illustration, were several worked portions of sticks supposed to have been the debris of some kind of mechanism.

The other two found at Fontega were, according to Dr Meschinelli, precisely similar, so that in all essential particulars they agree with those previously described.

In attempting to assign any utilitarian purpose to these novel objects found at Fontega, Dr Meschinelli (who was then unaware of the existence of similar objects elsewhere) was evidently much puzzled, but ultimately suggested, though somewhat hesitatingly, that they were models of prehistoric boats.

After the careful perusal of this paper I wrote the author a long letter describing what I had heard and seen of analogous objects in other localities in Europe—in fact, I detached from my proofs the portion

bearing on the subject, and enclosed it, along with a drawing of the Laibach *beaver trap*, in my letter. The result of this was the appearance of a second memoir by Dr Meschinelli (*Su alcuni strumenti di legno provenienti da varie abitazioni lacustri di Europa*), in which he reproduces all the facts and illustrations of these perplexing machines so far as then known. He then criticises and rejects all the previous theories and explanations suggested as to their function, as inapplicable at least to those from Fontega, and comes to the conclusion that if the latter were traps at all they were used for catching water-fowl, which, in prehistoric times, he considered, would have been very abundant in the vicinity of Lake Fimon. This opinion he partly based on the difference of structure in the valves of the Fontega machines, which, as I have already described, had at their free margins a kind of lattice-work or grating (*una specie di graticcio*).

But Dr Meschinelli's valuable contributions do not by any means exhaust the interest and curiosity of the subject. Shortly after the receipt of his first memoir I happened to be turning over the leaves of a volume of the *Ulster Journal of Archæology*, for the purpose of verifying some references, when I came across a plate illustrating a curious-looking object described as "an antique wooden implement," and said to have been extracted from a bog in the townland of Coolnaman, parish of Aghadowey, County Derry, Ireland. Fortunately the editor of the journal, to whom the object had been forwarded, recognised its archæological value, and published a careful description of it, together with three illustrations showing its appearance in different positions, from which I quote the following extract:—

"It was discovered embedded in a solid bank of turf, at a depth of 4 feet from the surface, the bog extending to a great depth underneath. No other article was found near it. It is entirely of wood, and measures as follows:—Extreme length, 3 feet 5 inches; breadth across the centre, $7\frac{1}{2}$ inches; depth, $2\frac{1}{2}$ inches; lid, 14 inches long and $3\frac{1}{2}$ inches broad; under hole, $12\frac{3}{4}$ inches long and $3\frac{1}{2}$ inches broad. The upper edges have evidently been higher on all sides, when perfect—probably on a level with the lid or small door, or even extending still higher—so as to form a kind of trough. The lid is now somewhat narrower than the opening which it is intended to close, but, no doubt, was made to fit accurately when in use. It moves up and down on a hinge formed by two projections which lie in corresponding

hollows, and seems to have been opened and shut by means of a handle inserted into a hole in its centre. These hinges have, no doubt, been kept in their place by some part of the wood above them which is now lost. From each end of the lid, and on a level with its upper surface, there runs a hollow groove, sloping regularly downwards to the end of the implement, and terminating in a hole which perforates the bottom, seemingly for the discharge of a liquid. Towards each end are two lateral holes placed opposite to each other, one in each lip of the groove, apparently to receive a rope passed through them to serve as a handle for removing the article from place to place. The under side of the implement is flat, having in its centre an oblong hole (the bottom opening of the cavity covered by the lid), which has all its four edges sloped or bevelled. Coolnaman, which gives

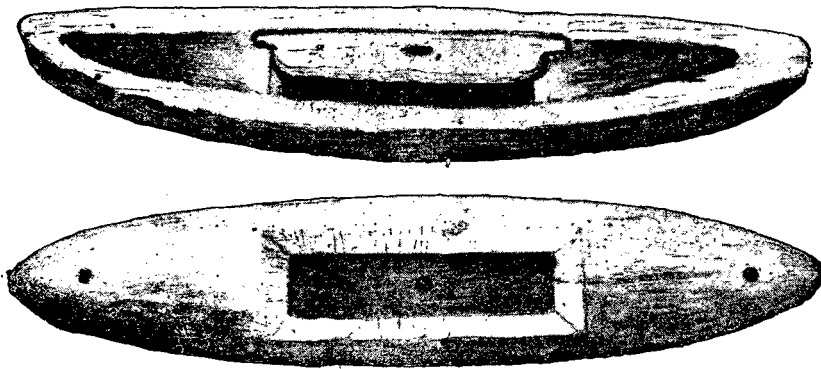


Fig. 5.—Antique Wooden Implement from Ireland, showing upper and under surfaces. Length, 3 feet 5 inches.

name to the townland, is a considerable hill, entirely cultivated, but surrounded at its base by a bog of unknown depth, which evidently occupies the site of an ancient lake. On the side of the hill where the implement was discovered, the turf has become quite solidified, and forms a dense black mass up to the surface" (*Ulster Journal of Arch.*, vol. vii. p. 165).

It will be at once seen from a glance at fig. 5, which shows both the upper and under surfaces of this object, that it belongs to the same category as its continental analogues, and differs from them only in having one valve and a single terminal hollow at each end instead of two. In addition to the lateral holes, which are common to all, there is in the former a small perforation passing from the

deepest part of the terminal hollows to the under side of the machine. Mark, also, that the outward bevelling surrounding the central aperture on the under surface is a feature common to it and the Fontega examples.

Neither the editor, nor any of the parties who had examined the "antique implement" from Coolnaman at that time had ever seen anything of the kind before. One thought it was a fish-trap intended to be placed in a stream; another that it was a kind of pump; a third that it was a machine for making peats; and a fourth that it was a cheese press (*Ibid.*, p. 289).

Such was the state of my acquaintance with these researches at the time the final proofs of my work on *The Lake Dwellings of Europe* left my hands, and so I took the opportunity of supplementing my original remarks with the additional facts above recorded. A few days after its publication I happened to be in London, when I met Mr Romily Allen, who informed me that, while turning over the leaves of my book, he became much interested in the curious machines which I had figured as otter and beaver traps, because they brought to his recollection that a somewhat similar object had been found in Wales, of which hitherto no rational explanation had been offered. On learning that it had been figured and described in the *Archæologia Cambrensis*, I went straight to the British Museum Library, where I hunted up the volume containing the details of the discovery, and soon satisfied myself that it was indeed another example of the same mysterious class of objects. Its identity with the "antique wooden implement" from Coolnaman had already been pointed out by Mr E. L. Barnwell, and it now only remains for me to show its relationship to those on the continent.

From Mr Barnwell's description of the object in question, the following extracts will sufficiently explain the circumstances which brought it to light:—

"It was discovered in August last, on a mountain, and was secured by Mr J. M. Davies, the hospitable entertainer of the members of the excursion on August 20, 1878. It had, however, been dug up, about three years before, on the farm of Nant-y-rast, in the parish of Caio, by the tenant digging for peat, who threw it aside on the ground at the edge of the bog, where

Mr Davies found it. That gentleman has made inquiries of carpenters and others in the district as to its nature ; but all that he seems to have elicited was that it was a musical instrument of some kind or other. It is curious that Professor Westwood, when he saw it in the local museum, whither it had been subsequently transferred, at once pronounced it a musical instrument, although he had not heard at that time what local tradition had called it. Other suggestions were that it was part of a yoke or a breast plough" (*Arch. Camb.*, vol. x., 4th ser., p. 4).

About six months later the same writer recurs to "the supposed musical instrument," and thus introduces a second notice of it:—

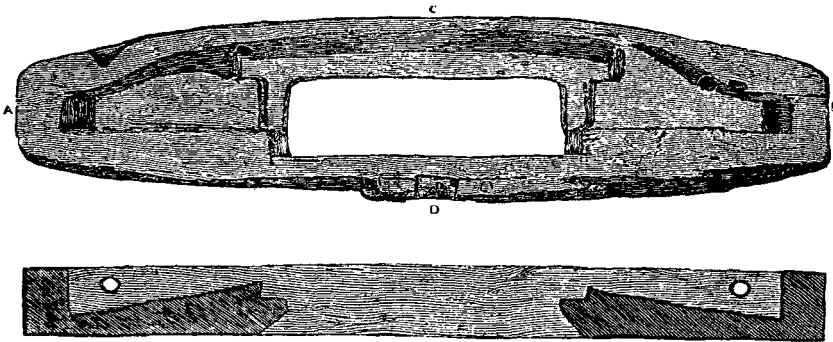


Fig. 6.—Wooden Implement from Wales, showing upper surface and section through AB. Length, 30 inches.

"After the notice of this curious article had been printed in a former number, it was ascertained that a similar one had been described in vol. vii. of the *Ulster Journal*. This discovery makes more than doubtful the conclusion that the article was in any way connected with music" (*Ibid.*, p. 188).

Mr. Barnwell then goes on to show that it was a machine for making peat-bricks—a purpose which, it will be remembered, had been already suggested as the probable function of the Irish example; but into the details and arguments by which this opinion was supported, I need not here enter.¹

¹ This object is still preserved in the Library of St David's College, Lampeter, where, quite recently, I had an opportunity of inspecting it. It is made of a solid piece of oak, with the following dimensions, viz., 2 feet 6 inches long, 7 inches wide at the middle, tapering to 4 at each extremity, and 2½ inches thick. The central

Reverting now for a moment to the chronological order of these various discoveries—a point, however, which is of little consequence, as they were quite independent of each other—we see that Ireland takes the lead as early as 1859. Next comes the German group, three in number, which became known through the *Proceedings of the German Anthropological Society* for 1873, 1874, and 1877. The excavations which revealed the two Laibach ones were conducted intermittently from 1875 to 1877—a period which almost coincides with that during which the so-called Welsh harp lay weathering on the moor of Froodvale, after the peat-cutter had tossed it aside as useless rubbish, till rescued by Mr Davies in 1878. Dr Meschinelli's first description of the three examples from Fontega was published in 1889, and in March of the following year the same author discussed their relation to analogous remains in Europe in the *Proceedings of the Royal Academy of Sciences* of Naples. In *The Lake-Dwellings of Europe*, the field of these researches has been extended so as to include Ireland, and to this extension I now add Wales. We have thus to deal with no less than ten wooden implements or machines, all made of oak, and so ingeniously constructed as to leave no doubt that they were intended for some specific purpose. What this purpose was is a problem which is still *sub judice*, and on which you have now an opportunity of trying your skill, as the solutions that have been hitherto proffered disclose a considerable divergence of opinion.

Looking at these objects as a whole, we see that they can be readily arranged into two classes, according as they have one or two valves, and

aperture is 11 inches long and $3\frac{1}{4}$ inches wide, and along its margin at each end there is a chamfer an inch broad, and of the same depth as the lateral groove in which the valve rotated. The total length of this groove is $14\frac{1}{2}$ inches, hence the valvular hinge must have had a considerable projection at each end of its axis. The transverse perforations near the extremity of the machine, as shown in fig. 6, measure $\frac{3}{4}$ of an inch in diameter. The valve appears to have been lost, but there can be no doubt that it formerly existed, and Mr Barnwell gives a second illustration showing the restored valve and the pins for keeping it in position. The under margin of the central opening is bevelled in the same way as the Irish and Fontega examples. This implement does not, however, like the Irish one, contain an upright perforation in each of the terminal hollows, but in this negative aspect it agrees with all the continental types.

it is remarkable, or at least suggestive, that the geographical area of the former is confined to the British Isles. I do not think, however, the differential character of this classification is of much consequence. The apparent complexity of the bivalvular machines is simply due to a reduplication of the structural elements of the univalvular ones. Each valve is characterised by a series of appurtenances so ingeniously arranged as to make it highly probable that their combination, whether in the simple or compound form, was the product of one original or central invention. Some of the minor, and apparently non-essential, details would also seem to strengthen this opinion, as, for example, the outward bevelling on the under margin of the central aperture, which is common to those from Italy, Wales, and Ireland. The examples from the two former countries also agree in having transverse pins to keep the valves in position. The technical skill displayed in the construction of both classes is, however, precisely the same, though it may be that the bivalvular was a later and more effective instrument—a sort of advanced evolutionary stage of the other and simpler form.

To find so many of these unique machines in such widely separated districts as Ireland, Wales, North Germany, Laibach, and Italy, must be a matter of interest to archæologists; and no one can positively assert that a correct explanation of their function is to be found in any of the numerous suggestions hitherto offered on this point. I may direct attention to one fact which may help the solution of this problem, viz., that the examples in Italy, Laibach, and Ireland, were all found in peat-bogs that are described as having been formerly lakes. Perhaps this is true as regards the others, but the point is not referred to in the short notices of them which have been published. If these machines were really used as traps, an opinion which seems to me the most probable, they could only be made to operate in water where the animal could insert its head from below, and among amphibious animals the *otter* and *beaver* are the only ones to which all the conditions involved in the trap-theory would apply. Professor Flower, F.R.S., who presided at the sectional meeting of the British Association for the Advancement of Science held at Leeds, where I shortly discussed this subject, pointed out that they could not be traps for both the otter and beaver as a

different bait would be required. I do not think there is much force in this objection, as the change of bait would be a simple matter. Nor is there, in my opinion, any difficulty about the variation of size of the aperture, as the head of either animal could be inserted into them all. The association of the Laibach machines with the remains of the fauna of the lake-dwellings, in which the beaver was so largely represented, is confirmative, or at least strongly suggestive, of the correctness of Dr Deschmann's opinion that they were beaver-traps. Although this animal is now all but extinct in Europe, there is undoubted evidence that, in prehistoric times, it was not an uncommon inhabitant of this quarter of the globe. Its bones are among the osseous remains collected by Mr Boynton in the recently investigated lake-dwellings in Holderness; and indeed there is historical evidence to prove that the animal was living in Wales and Scotland as late as the middle of the 12th century.¹ I am not aware that its remains have ever been found in Ireland; nor are they included among the osseous debris collected now or previously in Lake Fimon. So far, therefore, there is no presumptive evidence that the machines found in these localities were beaver-traps. That, however, the beaver frequented the Po Valley, we have positive evidence in the discovery of its bones in several localities, as, for example, the *terremare* of Castellaccio and Cogozzo.² They have also been frequently met with among the remains of the lake-dwellings of Switzerland and North Germany.³

After the foregoing notice was in print I received a communication from the Rev. Canon Grainger, D.D., Broughshane, Ireland, in which he announced that there was in his collection an object very similar to the so-called otter and beaver traps, and invited me to come and inspect it. This I did on the 1st May, and it is through his extreme kindness and courtesy on that occasion that I am now enabled to supplement my previous remarks by a short description of the object in question. From a glance at the accompanying sketch (fig. 7) it will be at once seen how strikingly it agrees in all the essential features of structure with the

¹ *Giraldus Cambrensis Itiner. Kambrice*, cap. III.

² *Lake Dwellings of Europe*, pp. 182 and 274.

³ *Ibid.*, p. 586.

two examples already found within the British Isles (figs. 5 and 6). This example, like all others of its kind hitherto known, is made of oak, and bears evidence of having been constructed with special regard to strength and solidity. It is 2 feet 7 inches long, 8 inches wide in the middle, tapering to 4 at both ends, and 3 inches thick. The central aperture has a clear opening of $11\frac{1}{4}$ inches long by 4 inches wide, and at each end there is a rectangular cut about an inch in breadth and of the same depth as the groove in which the valvular hinge rotated. On its under side the aperture is slightly bevelled outwards, similar to the "antique wooden implement" from Coolnaman (fig. 5). The transverse bars, which, as seen in the sketch, cross the terminal hollows are still *in situ*, and underneath one of them there lay a broken portion of a prepared stick, which also appeared to be in its natural

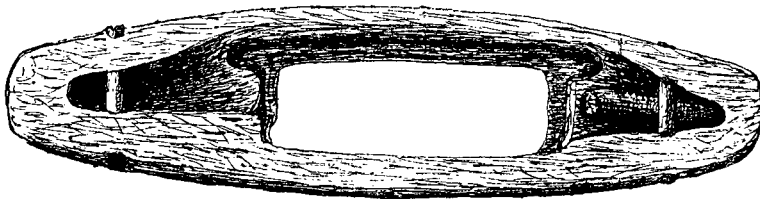


Fig. 7. Wooden Machine from Ireland.

position, and to have been made to move when in use backwards and forwards—an inference which I base on the fact that the under side of the bar is worn nearly half through. As this was the case also with the other transverse bar at the opposite end, a further deduction, viz., that the fragmentary stick was part of an elastic bow which extended from the extreme ends of the hollows, passing over the valve but beneath the transverse bars, became inevitable. As a consequence of this simple mechanism the forcible opening of the valve would bend the bow upwards and backwards, and so cause its ends to slip nearer the centre, thus accounting for the friction marks on the under side of the bars. Moreover, as the downward pressure of the valve would be in proportion to the strength and elasticity of the bow, it would follow that if the counteracting force which retained the valve open (probably a bit of

stick to which the bait would be attached) were suddenly removed, the latter would close with a bang, and so jam the intercepted neck of the animal against the edge of the aperture.

On closer inspection of this trap I noticed several other points of minor detail which might be adduced as evidence that this was its real *modus operandi*. Thus the position of the friction marks on the under side of the transverse bars is not actually in the medial line, but a little nearer the hinge side of the valve, while both the corresponding margins of the terminal hollows curve considerably outwards and show a slight groove, also with friction marks, into which the edge of the bow appeared to fit exactly. The body of the bow, as shown by its section, was of an oval shape with a greater flattening on its under side, and, judging from the fragment still extant, it tapered slightly towards the ends, and each extremity formed a smooth blunt point. The diameter of the transverse bars is about three-quarters of an inch, and underneath each of them there is a clear space of $1\frac{1}{2}$ inch in depth. I may also observe that there is a free interval between the bars and the terminal ends of the hollows—a fact which is equally applicable to them all—so as to allow of the to-and-fro action of the bow necessitated by the opening and shutting of the valve.

Unfortunately, the previous history of this trap, so far as known, throws no additional light on the problem of its use nor on the time when it was made. It was procured some five years ago by Dr Grainger from a local pedlar, who thought it was an otter for fishing. According to his statement, it had been found on a neighbouring farm, but neither the circumstances of the discovery nor how he came in possession of it have transpired. It is curious how the word "otter" was associated with it, as it has no resemblance whatever to the well-known implement of this name formerly used by anglers in loch fishing. Is it possible or probable that the pedlar received the machine as a real *otter-trap*, which became transformed in his mind, by a mere process of association of ideas, into the better known angler's otter?

In the above notice of these curious implements, now numbering eleven, I have restricted my remarks to a brief statement of the main facts in regard to their discovery and structure, as disclosed by archæological

research. But the field of inquiry might with advantage be considerably enlarged, and I would solicit information from at least two other sources, which are sufficiently defined in the following questions—(1) Have we any historical or traditional evidence that our prehistoric forefathers were in the habit of using traps to catch such animals as the otter and beaver? (2) Have sportsmen nothing to say on the subject?—by what means are these animals hunted by modern trappers?