ON A BRONZE OBJECT BEARING A RUNIC INSCRIPTION FOUND AT GREENMOUNT, CASTLE BELLINGHAM, IRELAND.

By Major-General J. H. LEFROY, R.A., F.R.S., C.B.

THE Tumulus, in which the object to be presently described was found, is known as *Greenmount*, in the ancient Parish of Kilsaran, Barony of Ferrard, County of Louth, now united to Gernon's-town. It is a neighbourhood very early mentioned in Irish history, and rich in remains of antiquity. As Ard Cianachta, "the hill of the tribe of Cian," it commemorated a victory, in A.D. 226, of the son of Cian over the forces of Ulster; and the Feara-Arda Cianachta, "The people of the Height of Cian," have bequeathed their name to the modern territorial designation Ferrard.[1] Within a dozen miles of the spot, to the north, is the gigantic mount of Dun-Dealgan, now Castleton, by Dundalk, which remounts, according to the Annals, to the first century of our era. About as far south is the "Cave of the grave of Boden, that is, the shepherd of Elcmar," which was "broken and plundered by the Foreigners," A.D. 861, and is still so well known as the Tumulus of Dowthe.[2] A rath at Dromin, a mount at Drumleek, another at Moy Laighaire (Moylary), another at Dunleer, and yet another at Drumcashel, on a very large scale, are still nearer. The parochial name Kilsaran, Cill-saran, Saran's church, recalls St. Saran, Abbot of Beannchair (Bangor, County Down), whose death is recorded by the Four Masters A.D. 742. Indeed most of these spots have their place in the annals: Dromin

[1] See note p. iii. in Dr. Reeves's Life of S. Columba by Adamnan, and The Origin and History of Irish Names of Places by P. W. Joyce, LL.D., 2nd edit., 1870, p. 129.

[2] This remarkable tumulus, and those of Newgrange and Knowth in its immediate neighbourhood, are referred to by Dr. Petrie as examples of the sepulchral monuments of the Tuatha De race (Round Towers, p. 103). Dr. Todd asserts without qualification that the Tuatha De, People of the Gods, were British Druids driven to the west by the advance of the Roman arms in the first century (Irish Nennius, p. xcix), a view which assigns at once a definite antiquity to these venerable and mysterious monuments.

(Druim h'Ing) was plundered by the Foreigners A.D. 834. The Irish, under Domhnall, son of Muircertach, plundered Mainister-Buith "against the Foreigners" in A.D. 968, and if the ecclesiastical establishment is meant, it must yet be certain that the rath of Moylary in the same parish, and only a mile or two distant, did not escape. The researches of Dr. W. Reeves have fixed the famous Lann Leire or Church of Austerity at Dunleer, anciently Lann Leer, the nearest country town.

The author of 'Louthiana'[3] gives a view of Greenmount as it was a century ago, which still represents it fairly well. He gives also a plan of it, which shows an entrenchment all round the mount; there are still some traces of this on the north-west, but elsewhere it has disappeared. His description being very short, may be quoted in full:—

> "*Greenmount* near Castle Bellingham (known also by the name of *Gernandstown*) appears to have been formerly a very strong camp, in the shape of a heart; 'tis situated on the top of a fine green hill, and overlooks all that country. The people that live near it have a tradition that here was held the first Parliament in Ireland, but there are other accounts, and not without as good foundation, that make the first meeting of an Irish Parliament in the adjacent County of Meath. There is a *Tumulus* or Barrow in this camp, which probably is the sepulchre of some eminent warrior, such being commonly found in or near most forts and camps of any consequence, and known to be a practice of the *Danes*."—Pt. I. p. 9.

The enclosure and cultivation of the ground, and the growth of trees to the south, has altered the character of the "fine green hill," which perhaps was more conspicuous when the country was more open. At present it would not be described as on the top of the hill. The actual summit is only about 150 feet above the sea, but it commands an extensive and beautiful view.

The Irish language is still understood by a few of the older peasantry in the neighbourhood, by one of whom I was told that in Irish the name was Drum-ha, but *in English* Drum-Chah; but the difficulty, to an English ear, of

[3] Louthiana, or An Introduction to the Antiquities of Ireland, by Thomas Wright, London, MDCCLVIII.

catching an Irish sound is extreme, and I have been favoured, by Professor J. O'Beirne Crowe, with a note which shows the latter to be the proper designation. He says : " The place of the tumulus is in Irish Ꝺꞃuımm Caꞇa, in Roman letters Druimm Catha, and means in English " Ridge of Battle," *Dorsum Pugnæ.* The combination could mean also Ridge of Battles, as the irregular dependent genitive Caꞇa may be either singular or plural. The mount itself is specially called in Irish Moꞇa Ꝺhꞃomma Caꞇha, Mota Dhromma Catha, that is, the Mount of the Ridge of Battle, or Battles ; in Latin, " Agger Dorsi Pugnæ, or Pugnarum." To the same effect the learned Irish scholar and topographer already quoted, Dr. W. Reeves, who says : " Druimcha is clearly Ꝺꞃuımm Caꞇa, Dorsum Prælii. I have a townland in Tynan parish, called Derryhaw, which I have no doubt is Ꝺoıꞃe Caꞇa, Roboretum prælii."

The Tumulus proper is about 210 feet in circumference, and 12 feet high, above the level of the ridge or dorsum to the east and south ; but on the west side, where it terminates the ridge, it is twice as high ; and on the north side there is a much greater declivity, by estimation as much as 70 feet to the present boundary. It is difficult to say confidently how much of the slope, seen from the north, is natural ; but, upon a general consideration of the features, I am disposed to think that the original level of the ground was about the top of the Passage, to be presently described. This, though not general, is to be paralleled in Danish interments. Thus, speaking of the great sepulchre of Mammen, M. Worsaae says : " Il est en effet hors de doute que le fond du sépulchre était à 1·55 m. au-dessous du sol environnant, au lieu d'être au niveau du sol, comme c'est l'ordinaire pour les tertres du Danemark." [4] The ridge runs about thirty-five yards eastward, and still exhibits marks of old foundations. In fact the tradition alluded to by the author of 'Louthiana' survives among the peasantry, one of whom informed me that " in auld ancient history 'twas a Parliament House."

This old man, McCullagh by name, had himself taken part in an attempt to discover treasure in the mound some thirty or forty years ago ; and his testimony is important,

[4] Mémoires de la Société Royale des Antiquaires du Nord, p. 230, 1869.

—that it had never been opened before; that the passage was filled up with rough gravel containing quantities of bones, which he and his companions threw out, and that they never found any chamber. "It was the same width all the way." Unfortunately it cannot be determined whether these were human bones. This party seems to have reached the end, and doubtless left behind them a farthing candle, which we found; but on going early one morning to their work, full of eagerness to realise their discoveries, they found that something had given way,—the end had fallen down; and they desisted. In fact, there has been ever since a cavity, the contents of which I estimated at from three to four cubic yards, at the summit of the mound. Although very accurately described as a Druimm, *dorsum*, this spot cannot itself be a "ridge of battle," being of much too limited extent, nor is there any feature of the ground in the immediate neighbourhood which would at present suggest the word. I conceive, therefore, that the term may be equivalent to Ridge of the Slain, and that very possibly the further researches that my noble relative, Lord Rathdonnell, intends to make when the season is more favourable, may bring to light other burial places under the ridge,—in fact, that it may prove to be a sort of long barrow; but this is only conjecture.[5]

My brother, the Rev. A. C. Lefroy, interested, like myself, in the neighbourhood, some ten years ago made a second attempt, found the passage as before, and entered it, but was deterred by the same difficulty at the north end, and gave it up.

The present operations were commenced on the 18th October, 1870, by sinking down in the face of the mound, to where the south end of the passage was known to run

[5] The adjoining demesne of Lord Rathdonnell, Drumcar, furnishes one of the innumerable instances of the great antiquity of local names in Ireland. It is Druimm-Caradh, the ridge of the weir, from a salmon weir formerly on the little river Nith, now called the Dee, which flows through the grounds, and it is mentioned under that name in the Annals of Four Masters, as early as A.D. 811. It was the site of a religious house burnt in 910. "Very striking," says J. M. Kemble, "is the way in which the names originally given to little hills and brooks yet survive: often unknown to the owners of estates themselves, but sacred in the memory of the surrounding peasantry or of the labourer that tills the soil. I have more than once walked, ridden, or rowed, as land and stream required, round the bounds of Anglo-Saxon estates, and have learnt with astonishment that the names recorded in my charter were those still used by the woodcutter or the shepherd of the neighbourhood." (Horæ Ferales.) Nowhere is this remark more true than in Ireland.

out. It was found, without any difficulty, about 12 feet below the starting point, and was soon cleared of the natural *talus* of soil which filled it. We found it to be 3 feet 3 inches wide, and 5 feet high, in the centre, but contracted in width at the top by a single course of stones running about 8 inches in thickness, which projected forward 15 or 16 inches

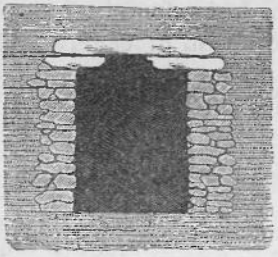


Fig. 1.

on either side, and gave support to the roofing stones. Of these there were eight, occupying, with small intervals, a distance or width of 15 feet 6 inches (fig. 3, given with the sections, *infra*). It was apparent, in the spaces between them, that there is a second layer of large stones above them, breaking joint. Finding the same difficulty as our predecessors had done at the north end, where the gravel forced in from the top filled, at the natural slope, a considerable space, we suspended operations below, and commenced sinking down from the top. This resulted in finding on the 29th October the top stone of the north end of the passage, at a depth of sixteen feet. At this stage my engagements obliged me to leave Drumcar; but Mr. T. A. Hulme, a gentleman staying in the neighbourhood, entered most zealously into the inquiry, and undertook to direct the further operations. They have resulted in the singular discovery, which, however, is, I think, beyond a doubt, that this Tumulus never had a sepulchral chamber, and that the passage stops short of the central axis of the mound. The builders apparently constructed two parallel walls, five feet high, and three feet three inches apart; closed at both ends, they covered it over with large flat stones, some of them $2\frac{1}{2}$ feet to 3 feet wide, and 5 feet long, leaving, however, a space of 6 feet 6 inches at the south end open; at the south extremity of this we found a little charcoal, mixed

with unctuous clay, more, perhaps, here than anywhere else. This substance was met with in spots throughout

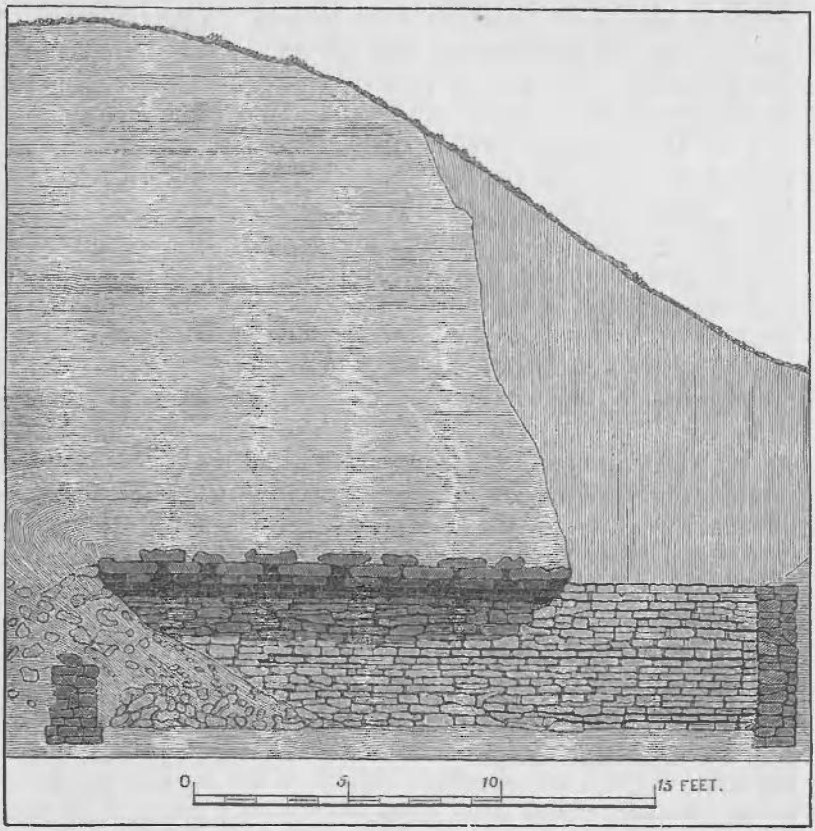


Fig. 2. Section from north to south through the Greenmount Tumulus and Long Chamber, showing the terminal walls, and the way it appears to have caved in when first cleared out 1830—1840.

the excavations, but nowhere in quantity; it was mixed here with teeth of oxen and swine. The charcoal was in a fragmentary state, and appeared to be wood charcoal. I saw no appearance of burnt bones. The spot where the walls closed, being six feet behind the entrance, as already remarked, I think had not been disturbed or reached before.

Mr. Hulme reported his proceedings in a communication, from which I make the following extract:—

"The side of the passage gave way, after you left, to some extent, so that it seemed highly dangerous to remove the

loose stones which filled up the north end. We, therefore, commenced carefully to secure the stones which formed the roof of the passage, with wooden supports, and the side walls at the north end with stout battens. That this precaution was not unnecessary, was shown by this,—that the wedges which were put in loosely one evening, were found quite tight in the morning, and bent. We came upon the end of the passage directly under the last of the eight roofing stones. The passage had been built up with loose (dry) stones, in the shape of the flag stone at the end. The stones at the top had given way and fallen into the passage, but the foundation, and about two feet of wall, were perfect, and unmistakably a continuation of the side walls, on the west almost at right angles, and rounded on the east. The wall is 3 feet 4 inches across, and 5 feet 10 inches from foundation to the roofing stone No. 8. It is 23 feet from the foundation to the top of the tumulus. We explored carefully on both sides of the end wall, but found nothing of consequence. Distinct traces of fire were found all the way down to the north-west corner of the passage. We found foundations of a building in one of the small ridges on the west; the other ridges, I apprehend, are similar."

In answer to further inquiry respecting the traces of fire, Mr. Hulme wrote:—"The burnt earth, soot flakes, bones, and burnt stones extended in a circle of about a foot in diameter, from the middle of the north side of the opening from the top, in a sloping direction to the north-west end of the passage, where there must have been, I think, a place for burning the bodies, the circular patch being the remains of a chimney. The earth is red, and, as Hearne (the labourer) says, 'like snuff.' We found flakes of soot, charcoal, and burnt stones. The burnt earth may yet be seen at the top of the opening." These evidences of the practice of cremation are highly important, and, I believe, quite new.

It was in sinking down from the top, and at nine or ten feet below it, that the workmen, on the 27th October, threw out the small bronze plate now engraved. It was not found in the passage, or at the level of the chamber (supposing there to have been one), but six or seven feet above it, and incorporated with the materials of the mound, as were

numerous bones and teeth of ox, horse, sheep, goat, and swine ; I cannot doubt, therefore, that when the mound was formed, it was lying on the surface, and was swept in unintentionally. A few days later a bronze axe (fig. 6, *infra*) was found at the surface ; it is of the type of Sir W. Wilde's fig. 247, *bipennis*, sharpened at both ends, and perfectly devoid of ornament : weapons of this type can hardly be called celts (from *celtis*, chisel), for they bear no resemblance to that implement, and are more correctly described as axes. They appear to be peculiarly Irish, for the Museum of the Royal Irish Academy contained in 1860 one hundred and thirty-two of them ; and the collection of the late Mr. Bell of Dungarvan, recently acquired by the Museum of the Royal Society of Scottish Antiquaries, contained 40 or 50, whereas they very rarely occur on the continent, and but one is figured in the 'Nordiske Oldsager.' Although generally regarded as the oldest type of celt,[6] partly because of their simplicity and occasional resemblance of form to stone weapons, and partly because in this class only we find weapons of unalloyed copper ; there appears to me some reason to question this classification. A complete series of palstafs could be formed, passing by the gradual suppression of the side wings, the elongation of the body, and the broadening of the edge, into this type of axe, and this seems a natural progression, where the metal continued long in use, as, from its remote and insular position, almost cut off from Roman civilization, was probably the case in Ireland; but the converse change, *diminuendo*, into the narrow, and, as a weapon, inefficient palstaf, appears highly unlikely to have occurred anywhere unless attended by a physical decline, of which we have no proof, in the race wielding them. In the present case a boy playing on the spot one Sunday morning, ten days after the discovery of the inscription, saw something which attracted his attention, in or under a sod, and kicking it out, it proved to be this axe. The evidence as to the place it came from is not quite satisfactory, owing to the difficulty in arriving at facts in such a case ; it had either been drawn up in the bucket from the bottom, towards dusk the previous working day, and escaped notice, or it had been included in one of the thick sods cut from the surface

[6] See Kemble in Horæ Ferales, and Wilde in Cat. p. 361.

at the commencement. As Mr. Hulme was present and saw the contents of every bucket sifted, the former supposition may be confidently excluded. In either case it appears, like the Scandinavian bronze plate, to have been incorporated with the mound, and to date, *as to its interment*, from the same period. The question of its antiquity will be examined below.

The only other object found, besides a considerable quantity of bones and teeth of animals, was a bone harp peg (fig. 3), resembling one engraved by Sir W. Wilde (Cat., p. 340) from the Stokes-town crannoge.

Fig. 3.

I am indebted to Mr. Franks for pointing out to me the real nature of this interesting relic, which still bears the marks of the friction of the harp string. Some visitor had also dropped on the surface an apothecary's two-dram weight, the cabalistic character on which served for a moment's amusement.

The bronze object, to be now described, is a narrow plate, 3·8 inches long, nearly 0·6 inch wide towards the ends, but narrowing to 0·5 inch in the middle, and nearly 0·5 thick; it weighs nearly half an ounce. One end has been countersunk, for rivetting to something, and there are two rivets in it, besides a third hole, looking like a repair. The workmen described it as having some mouldy substance attached, which they threw away, doubtless the remains of a strap. The face is covered with a somewhat peculiar ornamentation of seven loops, deeply incised, with interlaced ends, as will be best understood from the wood-cut (fig. 5, *infra*), and has been inlaid with silver, mechanically attached by beating in. The same description of work is presented by many Scandinavian ornaments, and was presented by a spear-head of the third or fourth century, found near Muncheberg in 1865, which bore a Runic inscription, interpreted by Professor Stephens: UÆNING Æ "Uning owns me." The workmanship of this, it is said, exhibited the peculiarity that "the letters and some curious symbolic figures are formed by a species

of niello or inlaid work, by silver bar rods driven into grooves previously cut for them."[7] Unlike that object, it exhibits no trace of the action of fire; it has, however, lain in contact with some object of iron, the oxide of which adheres to it in spots on the back. A lump of oxide of iron, possibly the remains of an axe, but of which the form could not be distinguished, and some smaller traces of the same substance, were met with in the excavations. The ornamentation, which bears a certain family resemblance to the so-called chain-cable work on the crosses erected by GAUT, the Norwegian, in the Isle of Man,[8] is in a ribbon of three parallel cuts or channels, about 0·02 inch wide, and nearly as deep, varied only by a chevron-like deviation from the curve on each outside line. Five spots retain the silver to an aggregate length of 0·8 inch, and there are plain traces of gilding visible on inspection under the microscope. The cuts on either side of the silver line have been filled in with a paste; from its presence in two places where the silver should be, this may possibly be only a repair. On this point Professor Abel writes:—"There is no doubt as to the existence of enamel in the channels, but it is only white enamel which contains, in the interior of the mass, bronze veins and patches, due, I consider, to sub-oxide of copper, and probably formed from the metal itself during the fusion of the enamel. Whenever the enamel is fractured or worn away, these brown veins and patches are shown. The bluish and green colorations exist only where the enamel has been entirely removed, and are most likely due to carbonate of copper,—the natural result of the exposed, partially oxidised, surfaces. Gold beaten in was distinctly visible on several parts of the bronze, on my microscopic examination of it."

Whether, therefore, the ground of the pattern were gilded or only bronze, we have the graceful relief of bright silver and white enamel bands to form the pattern, now lifeless and colourless, exhibited on the face of this ornament.

With regard to its original purpose, I think that little hesitation would be felt in describing it as part of a sword-handle or a belt-fitting, but for the presence of Runes on the reverse side, where they would have been concealed. This

[7] See Journal of the Brit. Archæol. Assoc., 1867, p. 385, and Stephens, p. 880.

[8] See Runic and other Monumental Remains of the Isle of Man, by the Rev. J. C. Cumming, 1847, and Stephens.

is not conclusive evidence against such a use, for in the celebrated Nydam Mossfind of 1863[9] many of the arrows were found marked with Runic characters, where the feathers would have been bound over them; the inscription is intended for identification, or possibly only for a charm, and is in characters so fine that very good eyes only could read them unassisted; it may have been so attached as to be detachable. There is no precisely similar example given among the illustrations of the Danish Bronze age in Worsaae's 'Nordiske Oldsager' (edit. 1859), and none in the less numerous illustrations of the Iron age; but the "open-worked plate, decorated with gold or niello" (Wilde, p. 453), was a familiar Danish form of sword-handle; and we read of sword-handles inlaid with silver in the Irish annals of a late date: "The sword of Murchadh at that time (the battle of Clontarf) was inlaid with ornament, and the inlaying that was in it melted with the excessive heat of the striking, and the burning sword left his hand, tearing the fork of his fist" (Wars of G. G., p. 197). This hyperbolic description Dr. Todd paraphrases by saying: "Murchadh's sword having become red-hot, the hilt or handle, inlaid with silver, melted, and so wounded his hand that he was forced to cast the sword away" (clxxxv.). The inlaying, whether with silver or a softer metal, is the point. An object almost precisely similar, wanting only the richness of decoration, was found near Maglekilde in Seeland in 1866, and is described by Professor Stephens, whose engraving we here copy, as a small bronze slip to hang at the belt, perhaps an amulet.

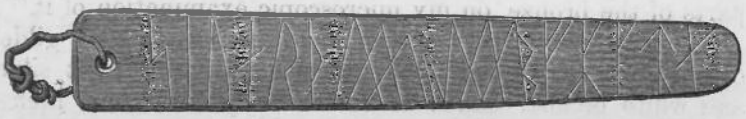


Fig. 4.

This inscription, so far as decipherable, is simply the owner's name, SIUARTh, followed by some unintelligible cha-

[9] See Engelhardt's "Denmark in the Early Iron Age," and Professor Stephens, "arrows were in plenty, both of fir and ash; curiously enough, under the corded end, most of these weapons bear certain marks, three parallel strokes or zigzags between two strokes, or a scoring, something like a Runic L." Gentleman's Mag. May, 1863, p. 683.

racters. The name OLUFR, and other equally mystical markings, occur on the other side (Stephens, p. 864).

These markings seem to give support to an opinion expressed by Mr. Albert Way, that, after all, the value of a Runic inscription in very early times, at least in some cases, resided chiefly in certain magical virtues attributed to it, not in its sense or meaning. The singularly empty character of many Runic texts, being almost unaccountable if they are regarded as inscriptions proper. (ROUN = secret writing, magical character, charm.)

The reverse of our plate appears to be smooth, save for slight corrosion; it was only on applying a little white powder to clean it, that the Runic character ᚼ (H), which happens to be nearly central, caught the eye, and closer observation detected a line of twenty-four runes, very faintly inscribed, extending the whole length. "Not a single Danish inscription," said Dr. Petrie in 1845, "has ever been found in Ireland" (Round Towers, p. 222). "No Runic stones or Runic coins have ever been found in Normandy or Ireland," writes Professor Stephens twenty years later, "although this latter country had coins struck by Scandinavian princes earlier than Scandinavia itself." The ground being now broken, it is not too much to expect that many future discoveries of a similar character are in store for the students of national antiquities with whom Ireland abounds.

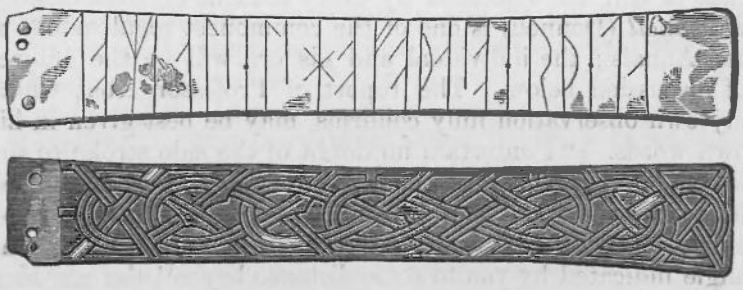


Fig. 5.

We have here twelve characters out of the nineteen which compose the later Scandinavian *Futhorc*, of which one is repeated four times, two three times, and three twice, giving great certainty as to their reading; they are of remarkable

distinctness and elegance, and present some peculiarities, which, if not to be described as rare, are exceptional, and narrow the field for comparison. The reading is in Roman letters.

DOMNALSELSHOFOThASOERThETA.

The penultimate T is the same character as the initial D, those two letters having but one runic equivalent. In every copy circulated to runic scholars on the first discovery of this relic, the fourth rune was written ᛁ (I), and the three other runes now read E were also read I. It was Mr. Franks who, by calling attention to the regular recurrence of a central dot in each I, making it E, led to this latter correction. These dots are scarcely distinguishable in character from numerous other minute holes caused by corrosion in the bronze. With regard to the I for N, it was so read by every one, including the engraver in his first proofs. A query, however, of the Rev. Daniel H. Haigh (6 Dec.), "Can the first word be ᛐ ᚭ ᛘ ᚿ ᛆ ᛚ ? a faint side stroke might easily be overlooked," induced me to scrutinize it more narrowly, and I also borrowed for the purpose the practised eyes of my friend Professor Abel. The result is the certain establishment of the side stroke, exactly coinciding at its junction with the stem, with the spot of rust which the engraver has shown, but traceable, under sufficient magnifying power, beyond it. The rectification removes so many difficulties that it will be welcomed by every student of Irish history. *Domhnall* (Donnell) is one of the commonest regal names in the Annals; the individual and his era will be the subject of discussion below. The report of Professor Abel, which my own observation fully confirms, may be best given in his own words. "I entertain no doubt of the side stroke to the letter ᚿ. The portion nearest the vertical line is obliterated by corrosion of the metal, but a great part of the incision exists, beyond any doubt in my mind, extending at the angle indicated by you to some distance beyond the corroded surface." It is indeed possible, when its existence is known, to recognize it on a photograph, and the space between this letter and the following ᛆ requires the side stroke to explain it. The peculiarity to which, under correction of Runic scholars, I have ventured to allude, is the *concurrent* employment of the sign ᛆ for A, ᚭ for O, ᚿ for N, ᛁ for S, and

ᛏ for T, each of these letters having other and more usual forms, viz., ᛏ, ᚦ, ᚦ, ᛋ and ᛏ respectively. They agree exactly with the characters on the slabs numbered by Mr. Farrer 6 and 7, at Maeshowe in Orkney. Mr. Haigh has also favored me with an inscription of the eleventh century from Fenni Foss, Norway, which employs them all; but the Maeshowe Futhorc is the only one of 16 alphabets and Futhorcs collected by Professor Stephens [1] which exactly coincides. The inscription, for example, on the Hunterston Runic brooch found in 1830, near Largs, fails in one point, the side strokes of the O are to the right.[2] The same is the case in the alphabet inscribed, apparently by an after hand, on a fly leaf of the famous Anglo-Saxon MS. called the *Ormulum*, in the Bodleian Library at Oxford. The same is the case in the inscriptions on the earlier Runic crosses in the Isle of Man, the date of which is about the commencement or certainly the first half of the tenth century,[3] and which in other respects so closely resemble the Greenmount Runes. Examples of diversity might be multiplied to almost any extent. Mr. Haigh has furnished me with two inscriptions, one from Landeryd, Sweden, the other from Vasby, Sweden, both strictly contemporaneous with the one at Fenni Foss, but employing several characters differently; and a good example of English historical interest is afforded by the inscription to a certain SYTRIK who has been identified by Professor Rafn with the Danish chieftain SYDROC or SIDRIC (remark the interchange of T and D), who was slain in a battle near Reading towards the end of the ninth century. In this four letters out of our ten have a different form, namely, O, T, S, and M; the N occurs in this inscription in both forms. See Inscrip. Runiques de Slesvig Mérid. par C. C. Rafn, 1861. The inscription found in 1852 in St. Paul's churchyard [4] has the same O, but a different A, S, and T. I conceive that the evidence of the writing points therefore to

[1] Old Northern Runic Monuments, 1866., p. 99, *et seq.*

[2] See Frontispiece to Dr. D. Wilson's Prehistoric Antiquities of Scotland, and Stephens, p. 591.

[3] The Norwegian occupation of this Island dates from A.D. 888. Dr. Cumming remarks, "Although Professor Munch has conjectured some of the Runic crosses to be of the ninth century, I hardly feel disposed to allow them an earlier date than the middle of the tenth century, or about the reign of Guttred, the founder of Castle Rushen, at which time we find from the Chronicles of Rushen, Rolwer, or Rolf (an evident Norwegian), Bishop of the Isle." Cumming, p. 4, and see Munch's Chronicon Manniæ.

[4] Figured in Archæol. Journ. vol. x. p. 82.

some probable connection with the authors of the Maeshowe inscriptions.

There is no substantial difference between the interpretations of the inscription arrived at independently by different Runic scholars. In all of them the first word is the proper name of the owner, the last a demonstrative pronoun following the noun, the verb is the same, and there remains but one word which is slightly differently read. Professor Stephens of Copenhagen, to whose unfailing kindness and patient attention I beg here to acknowledge the greatest obligation, remarks :—

"From the style of the whole piece I judge this lave to date from about the ninth century.

"The staves are sharply and elegantly cut, and belong to the usual Scandinavian or later alphabet, not to the Old Northern or later English staverow.

"As so often happens in such old ristings, there are no dividing marks between the words, which consequently may be differently interpreted as they are differently divided; but I conceive the whole to be in good Scandinavian, and to offer no difficulty whatever, only we must remember that the later alphabet had laid aside the old rune for W (now usually pronounced V in Scandinavian, but not in old times), viz. ᚹ, and therefore used instead commonly the stave for U, sometimes the stave for F, sometimes the stave for O; here the stave for O is employed."

"Also we must bear in mind the common runic usage: to save space and work, not to cut a letter twice when it ends one word and begins another; thus here, SOERThETA is certainly SOERTh ThETA. The 24 runes then I would now divide and translate as follows :—

DOMNAL SELS-HOFOTh A SOERTh ThETA.

"It is curious that the writer should have used the strung letter for E, but not the strung letter for D.

"A, Old English AH, third pers. sing. present of the verb AGA(N) to owe, own.

"SOERTh for SWERTh, sword, a form which this word has also in Old English.

"ThETA, acc. sing. neuter, is the old North English ThÆT, the old South English ThIS. We have many pieces, both Runic and non-Runic, bearing the formula

"N. N. OWNS THIS."

Mr. Gudbrand Vigfusson, before the discovery that the fourth rune is ᚦ and not ᛁ, pointed out the probable identity of DOMIAL, as then read, with the DUFNIALL of the sagas, a well-known Scandinavian form of the Irish name DOMHNAL. The Orkneyinga Saga, he informs me, mentions a captain of this name, a kinsman of the Earl of Orkney, who slew him about A.D. 1090, and observes that many Norsemen in the second and third generations, after the settlement in the west, assumed Gaelic names from intermarriage. We have abundant proof of similar connections in the Irish annals. Brian Borumha and his contemporary Malachy (Maelseachlainn) who succeeded Domhnall, son of Muircertach Mc-Neill, as king of the northern part of Ireland, were both nearly related to the Danish royal families, although the latter inflicted on the Danes one of their greatest defeats at the battle of Tara, A.D. 979 : and we are told at an earlier period that "the Lochlanns, then Pagans, had many a Gadelian foster son." Bk. of Rights, p. 41, A.D. 909. The Irish name, therefore, does not necessarily involve Irish ownership. Mr. Vigfusson first suggested the reading SEALS HEAD, but his opinion is that the inscription is not older than the eleventh century, based principally on the employment of the form HOFOTh instead of HAFOTh: besides, he remarks, "were it very old we should have a diphthong HAUFOTh." The nickname SELS-EISTA (seal's testicle) is found in the Sagas, and others not unlike it, as karls-hofud, *carles-head ;* arn-hofdi, *eagle-head ;* svins-hofdi, *swines-head.*

Dr. Edward Charlton, who at first regarded the second word SELSHOF as a proper name of place, now concurs also in the reading

DOMNAL SEALSHEAD OWNS SWORD THIS.

He remarks, "I believe that many of the Norsemen settled in Ireland may have retained the old Runic writing, and, besides, DOMHNAL may have had this engraved on his sword ornament when on a visit to the western isles or to the Isle of Man, where runes of a very pure character were employed to a tolerably late period."

The Rev. Daniel H. Haigh, to whose valuable suggestion we owe the correct reading of the name, reads the line,

DOMNAL SELS-HOFOTh A SOER ThETA.
DOMNAL SEALSHEAD OWNS THIS TRAPPING.

He observes, SOER seems to correspond to our O. E. SEARO, "ornament," "equipment," "weapon." ThETA is common Norse for "this."

Thus on all hands we have the owner's name, and so, as on the magic sword of Beowulph, "*was on the surface of the bright gold with runic letters rightly marked, set and said, for whom first was wrought the sword, the costliest of irons, with twisted hilt, and variegated like a snake.*" (J. M. Kemble: *wreothenhylt and wyrm-fah*, hilt-wreathed and snake-rich, *line* 3394, E. Thorpe.)[5]

"Determiner l'age des inscriptions runiques," says Professor C. C. Rafn, "est le plus souvent un problem dont la solution présente de grandes difficultés, attendu qu'il n'y a que très peu ou l'on nomme des personnes qui nous sont connus par l'histoire." Domhnall is as common a name in Irish history as Amlaf or Sitric among the Northmen. There are more than thirty chiefs of this name mentioned in the ninth and tenth centuries, chiefly in the latter; some of them are clerics; of many of them nothing but their decease is recorded. The circumstances of this discovery do not warrant any confidence that the tumulus was erected over the remains of the owner of our ornament, or even that he lost his life on the Ridge of Battles: they only require his contemporary existence. Nor is it very probable that he was an Irish patriot: the adoption of the runic character and the Scandinavian language, no less than the Scandinavian cognomen "Sealshead," appear to me to preclude such a supposition. On the other hand, not only were the Norwegians and Danes in the constant practice of carrying off Irish captives of both sexes, some of whose names are to be found in the sagas, but we also know that in the middle of the ninth century "many Irish forsook their Christian baptism and joined the Lochlanns, and they plundered Ard-Macha (Armagh) and carried away all its riches"; but

[5] This poem is attributed by Kemble to the fifth century. Beowulph, I. p. xix.

some of them, it is added, "did penance, and came to make satisfaction." On some occasions we have the Irish invoking the aid of the Danes against the Lochlanns (Norwegians), as in A.D. 852, when the men of Munster sent messages to Cearbhall, son of Dunlaing, to request that he would come, bringing the Danes with him, and which resulted in a great defeat of the Lochlanns in co. Tipperary. There is one historical Domhnall, No. 8 of the subjoined selection, who answers the condition of being an ally of the Danes; but in my opinion the tumulus is of earlier date than his time. He died peaceably, A.D. 976.

We have then among the Domhnalls of the ninth or tenth century:

A. D.

1.—832. Domhnall, son of Ui Cennfaedladh, king of Ui Cairbre, gives battle to the Danes. Bk. of Leinster.

2.—910. D., son of Gairbhith, lord of Conaille (Louth), slain in Upper Kells, Meath, in battle with Flann, son of Maeillcehlainn.

3.—917. D., son of Donnchadh, slain by the Danes in Munster (wars of G. G.).

4.—919. D., son of Flann, son of Maelsachlainn Rigdamna of Teamhair (Tara) defeated the fleet of Mumhar (Munster), on Loch Derg, A.D. 910, and was slain by his brother, Donnchadh, at Bruighean da choga (Bryanmore, West Meath, Joyce, 279), A.D. 921.

5.—923. D., son of Cathal, heir apparent of Connaught, slain by his brother Tadhg.

6.—951. D., son of Donnchadh, kills Aedh, the Rigdamna of Teamhair, son of Maelmonaidh.

7.—968. Domhnall, king of Ireland, plunders Mainister Buithe with great butchery; 300 foreigners burnt by him in one house. Another D. (No. 9) burns Lann Leire.

8.—978. Domhnall, son of Congalach, king of Cnoghbha (Knowth, Meath), and Amhlaeibh (a Northman by his name), defeat Domhnall, son of Muircertach, at Cill Mona (Kilmorne, Meath).

9.— 980. D., son of Muircertach, king of Teamhair, died in penitence. He made an expedition to Loch

Erne, A.D. 955; another to Dal Araibhe, in Down and Antrim, 959; transported vessels from the Blackwater to Loch Aininn (Ennell, West Meath), 962; burned the refectory of Lann Leire in 970 (968, 4-M.); expelled from the sovereignty of Meath, but invaded Meath again, 971; burned and plundered Cluain Eraird (Clonard, Meath), Fobhar, Disart, Tole (Fore and Dysart in West Meath), and Llann Ela (Lynally, K. co.), 972; plundered shrine of Columcille (Kells), 976.

10.—990. D., son of Lorcan, killed at Carn Fordroma, the "Cairn or Sepulchral heap of the long ridge," a battle fought by Maelseachlainn with the people of Thomond, and therefore not to be confused with our Ridge of Battles.

I see no good reason for supposing any of these individuals to have been the DOMNAL of the inscription. It may be presumed, from the richness of the ornament, that he was a person of rank and consideration, but I believe that he was, as M. Vigfusson has suggested, a Norwegian with an Irish name.

Professor Stephens refers the inscription, on internal evidence, to the ninth century; Mr. Vigfusson, on philological grounds, to the eleventh; and its correspondence of type with those of Maeshowe would point to a still later date, if the theory of Professor Munch be adopted, that the JORSALA FARAR (Jerusalem pilgrims), recorded to have broken into the Ork hill in No. 20 of that collection, really cut most of the other inscriptions, and were the companions of Earl Ragnal in his expedition to the Holy Land in A.D. 1152. This, however, is an opinion not shared by several of those who have best studied the subject. Professor Stephens assigns the Maeshowe Futhorc, No. $6\frac{1}{2}$ in his series (but with a query) to the ninth century. Mr. Farrer, the discoverer, says, "Many of them are, no doubt, to be attributed to the Crusaders, but there are probably others of far earlier date than the twelfth century;" in fact the theory that they are all nearly of one date, and *that* a date later than the forcible opening of the mound by the Crusaders, rests upon assumptions which do not bear the character of proof.

Professor Munch, indeed, in a letter quoted by Mr. Stuart,[6] says: "Runes of this kind are *never* older than 1100 at the furthest," and to his opinion great weight is justly due. It is not, however, the opinion of Professor Stephens; on the contrary, in speaking of the similar characters on the Largs brooch, he says: "Earlier than the seventh year-hundred these runes cannot be, for they are all Scandinavian; later than about the tenth they cannot be, for the ᛏ (here = D) is not strung into D" (Old Northern R. M., p. 591). Inferences from the position of the carvings, and the difficulty of cutting them, unless the place were open at the top, appear to me, to say the least, precarious. The chamber at Maeshowe, which is only fifteen feet square, exclusive of the sleeping recesses, must have been warmed, and to some extent lighted, by lamps probably, like the Greenland habitations of the present day; for it is impossible to imagine people remaining long in pitch darkness, or the Fair Widow INGEBIORGH, however "stooping" (see No. 8, Farrer), to have been led to such a place; and the height of some of the inscriptions from the floor, which is as much as eleven feet, however difficult on other grounds to account for, would present no difficulty to Vikings. People who could build and navigate ships must have been familiar with a ladder. On all these grounds I conceive that we are not bound to accept the twelfth century for the date of all the Maeshowe inscriptions, conceding it to No. 20.

One thing is, however, beyond dispute,—the Greenmount Runes are not "Old Northern." The bronze cannot have belonged to any Saxon invader of Ireland in the seventh century. They are "Scandinavian," and it belonged to the Norwegian or Danish invaders of the ninth or tenth. Earlier it cannot be than the year A.D. 795, when the first mention of the Gentiles or pagan Danes (Norwegians) occurs in the Annals of Ulster; nor later than the battle of Clontarf, A.D. 1013, when the Danes throughout Ireland embraced Christianity, as the Danes of Dublin had done, according to Sir J. Ware, so early as A.D. 948. The Irish, according to this great authority, erected Tumuli before they embraced the Christian religion, "nor were anciently the funerals of the *Ostmen* unlike, *while they remained Heathens*."[7] Mr. Stuart

[6] Notice of excavations, &c., at Maeshowe, by J. Stuart, Secr. S. A. Scot. Proc. Soc. of Antiq. of Scot., vol. v. 1865.

[7] Ware, ii. p. 145.

has quoted from one of the Capitularies of Charlemagne, A.D. 785, a prohibition for the bodies of the Christianised Saxons to be carried "ad tumulos paganorum." [8] Professor Munch repudiates somewhat indignantly the notion that the cairns, cromlechs, and other sepulchral monuments of pagan times near Largo can have any connection with the expedition of Hacon (A.D. 1263),[9] because his countrymen were then Christians, and interred as such. In short, it is needless to multiply authorities for what is so generally recognised, and we must seek between the beginning of the ninth and the middle or end of the tenth century for some event capable of accounting for the erection of a heathen tumulus, the burning of bodies, and the celebration of a heathen funeral feast in the territory of the Cianachta. I select from the Annals three such events.

The first presents itself in the year A.D. 836, when a battle was gained by the Foreigners at Inbhear-na-mbarc over all the Ui Neill from Sinainn (Shannon) to the sea, and Saxolbh, chief of the Foreigners, was slain by the Cianachta. In the old translation of the annals of Ulster we read: "A battle given by the Gentiles at Inver-na-mark by the Nury, upon O'Nells, from Sinan to sea, where such a havoc was made of the O'Nells, that few but their chief kings escaped." I am aware that Dr. O'Donovan disputes the addition, *by the Nury*, and considers the place of this defeat to have been Rath Inbhier near Bray; but it is a coincidence not to be entirely passed over that Annagassan, which in primitive geography might be described as *by the Nury*, answers remarkably to the conditions of an Inlet of the Barques. It is about half a day's sail, or twenty miles, from the head of Carlingford Lough, and O'Donovan himself, in another place, concedes the proximity. Referring to a great battle of two chiefs of the Lochlanns (A.D. 851) against the Danes at Snamh Aighnech (which is Carlingford Lough), he remarks, "near which, at a place called Linn Duachaill, the Norwegians had a strong fortress." Linn Duachaill, as we shall presently see, is Annagassan. Here two small rivers, the Nith, now called the Dee, and the Glyde, unite their waters at one mouth, flowing, the one from the north-west, the other from the south-west, and affording at certain

[8] Proc. Soc. A. of S., vol. v; and see references in Horæ Ferales, p. 97, to earlier prohibitions of burning the dead.

[9] Chron. Manniæ, p. 110.

seasons access for large boats to some miles of country. The character of either river has been a good deal altered by artificial treatment, and it is evident that they once, and perhaps as recently as a thousand years ago, were streams of much greater volume. Mr. R. Manning, of the Board of Works, Dublin, informs me that, twenty-five years ago, the river Dee was twenty-six feet wide and six feet deep at one mile above its junction with the Glyde; while the latter, at the same distance above its junction with the Dee, was fifty feet wide and seven feet deep; this was partly the effect of shoals at the mouth, since removed. They would, at that time, have been navigable for boats drawing two feet water, for a distance of three or four miles inland. A shoal in the river Glyde, one mile above the Dee, proved to be almost entirely composed of bones of animals, chiefly, to the best of Mr. Manning's recollection, those of sheep and oxen; they were so numerous as to sell for 20*l.* or 30*l.*,—probably the result of some flood. The only other discoveries were a brass pot, perhaps like that presented to St. Patrick by Daire,—"*æneus mirabilis transmarinus*," an imported article, which was accompanied by a perforated strainer and ladle: a peggin bound by brass hoops perforated in a pattern: and an enameled ornament or button, which was inside this vessel. These objects are believed to be at present in the museum of the Royal Irish Academy.

The next event is in the year A.D. 852, when the annals of Ulster and the Four Masters tell us that a fleet of the Black gentiles (the Danes) first came to Dublin, and plundered, after great slaughter, the Fortress erected by the White gentiles, the Finngall, or Norwegians, and there was soon after a great battle at Linn Duachaill, the place just referred to, in which the Danes were victorious; Dr. Todd, from whose translation of the ancient manuscript of the Wars of the Gaedhil and the Gaill[1] this is derived, adds in a note:—"Linn Duachaill was on the banks of the river called Casan Linné. This river is mentioned in the circuit of Ireland as a station south of Glen Riche, or the vale of Neury, and between it and Ath Gabhle or the Boyne. Part of the name of Casan Linne is preserved in the name Annagassan (Aonach g'Casan, Fair of Casan), a village at the

[1] The wars of the Gaedhil with the Gaill, or the invasions of Ireland by the Danes and other Norsemen, by Jas. Heathorn Todd, D.D., 1867, p. lxii.

tidal opening of the rivers Glyde and Dee. There is a townland called the Linns, in the parish of Gernonstown, which runs down along the sea to Annagassan bridge. The Casan Linné was probably the river now called the Glyde, and Linn Duachaill must have been at the united mouth of the Glyde and Dee (Nith). For this information," he adds, "the editor is indebted to Dr. Reeves."

Between the years A.D. 876 and 916, the same chronicle informs us, "There was some rest to the men of Erinn for a period of 40 years without ravage of the Foreigners." It was the period in which the Norwegians, under Harold Haarfager, having possessed themselves of the Isle of Man, were engaged in extending their conquests to the Sudreys and Orkneys; and although there are abundant evidences in the annals that the rest of the men of Erinn was of a qualified nature, it is probable that the coasts of Down, Louth, and Meath, may have enjoyed comparative repose.

In A.D. 921, the annals of the Four Masters again conduct us to this immediate neighbourhood. They record "the plundering of Feara-Arda and Lann Leire (see p. 284, *supra*), and Fearne Rois (near Drogheda) by the Foreigners," who probably landed at Annagassan. In the pathetic words of the chronicler, "until the sand of the sea, or the grass of the field, or the stars of heaven are counted, it will not be easy to recount, or to enumerate, or to relate, what the Gaedhil all, without distinction, suffered from them, whether men or women, boys or girls, laics or clerics, freemen or serfs, old or young: indignity, outrage, injury, and oppression. In a word, they killed the kings and the chieftains, the heirs to the crown and the royal princes of Erinn. They killed the brave and the valiant, and the stout knights, champions, and soldiers, and young lords, and the greater part of the heroes and warriors of the entire Gaedhil: many were the blooming, lively women, and the modest, mild, comely maidens, and the pleasant, noble, stately, blue-eyed young women; and the gentle, well brought up youths, and the intelligent, valiant champions, whom they carried off into oppression and bondage over the broad, green sea. Alas! many and frequent were the bright and brilliant eyes that were suffused with tears, and dimmed with grief and despair, at the separation of son from father, and daughter from

mother, and brother from brother, and relatives from their race and from their tribe."[2]

Under such circumstances it would be hazardous to connect the Ridge of Battle too positively with any one epoch; but I have found no records which fit the locality nearly so well as those here quoted; and if Professor Munch is correct in his belief that from A.D. 989 to A.D. 1080 the Island of Man, that perpetual source of piratical descents on the east coast of Ireland,[3] was an appendage to the Norwegian kingdom of Dublin, we may conclude that the coast of Louth was free from them during that long interval. The character of the runes, as I have attempted to show, as well as the ornamentation, suggest a connection with the race that settled in that island. Neither the relic nor the tumulus in which it was found can, I think, be of so late a date as A.D. 1080, and if earlier than A.D. 979 there appears to be no event with which they may be so well connected as the battle of Linn Duachaill in the year A.D. 852.

This event also but slightly preceded the first conquest of the Orkneys by Harold Haarfager, and as we read about the same time that the Danes in Ireland "left not a cave under ground that they did not explore,"[4] it is impossible to suppose that the conspicuous mound of Maeshowe escaped their cupidity. It is always regarded as the work of a race who long preceded the coming in of the Norse population,[5] and was probably then broken first open. We have examples of repeated forcible entry into mounds. The runes or slabs 6 and 7, which Mr. Stephens regards as among the most ancient of the carvings,[6] may have been cut not long after. As we have already seen, they are identical in every letter with those cut on the Greenmount bronze ornament, and must, as we conceive, have belonged to the same Scandinavian family and nearly the same epoch.

Reference has been already made to the bronze axe or celt, weighing nearly 20 oz., found on the same occasion, and we have ventured to hint that it may have been interred at the same time, and in use in the same age. Sir W. Wilde has remarked that even the adoption of metallic

[2] Wars of the G. G. § xxxvii.
[3] Chronicon Manniæ.
[4] Wars of the G. G. xxv., A.D. 866, p. 25.
[5] J. Stuart, Proc. Soc. of A. S. vol. v.
[6] Stephens, p. 757.

implements "was neither sudden nor universal, for so late as the ninth century stone weapons were still in use in Ire-

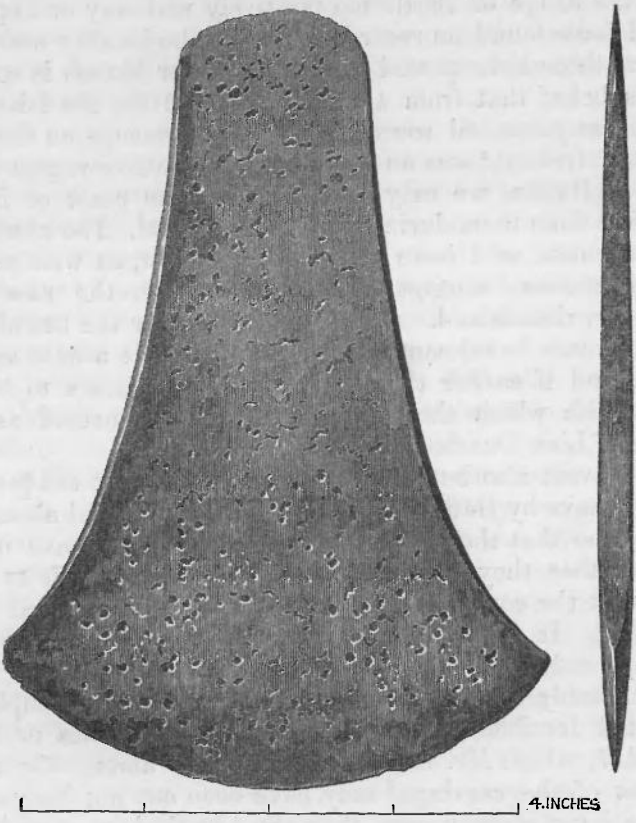


Fig. 6.

land, and stone implements were fabricated with metal, probably even with iron tools:"[7] and we may infer with him elsewhere that bronze swords very likely continued in use until the general employment of iron, and even long after.[8] A celtic tumulus was opened in 1848 at Anet near Berne, which yielded among other objects "une de ces haches ou coins en bronze communement appelés haches celtiques," which Dr. Todd regarded as of a date long subsequent to

[7] Catalogue, p. 350; but he is speaking only of sharp stones for throwing.
[8] *Id.* p. 440.

the introduction of Christianity into that country. That is, later, and probably much later, than the end of the sixth century.[9]

Unfortunately the Irish annals, while abounding in vivid poetic descriptions of battles, deal, for the most part, in general language with the equipments of the warriors. We are left to guess whether the "two thick-headed, wide socketted battle-spears, with their rings of gold about their necks," which Conn of the Hundred Battles wielded at the battle of Magh Leana,[1] were of bronze or iron; but we are informed that this hero of the second century employed the former metal for defensive armour. "He put his light strong leg armour, made of fine-spun thread of Finndruine, upon his legs," and this is explained by Mr. O'Curry to be "a kind of fine bronze used chiefly in ornamental works by the artists of ancient Erin."[2] There are also more direct passages which support the view that the employment of bronze may have descended in Ireland many centuries beyond the Christian era.

> "The stipend of the king of Drung, which is not small,
> From the king of Eira 'tis not contemptible,
> Three curved narrow swords,
> And three ships very beautiful."[3]

I believe that an ancient *curved narrow sword* of iron is unknown in any collection, but the description applies exactly to the ordinary bronze weapon, and it is perhaps in Drung (Kerry) that their use would linger the longest.

> "Whoever wishes for a speckled boss
> And a sword of sore inflicting wounds,
> And a green javelin for wounding wretches,
> Let him go early in the morning to Ath-Cliath."[4]

> "This day Bruide fights a battle for the land of his grandfather,
> Unless the Son of God will it otherwise, he will die in it.
> To-day the son of Oswy was killed in a battle with green swords."[5]

I do not venture to affirm that the ascribing to a weapon

[9] Proc. of R. Irish Academy, VII. p. 42.

[1] The battle of Magh Leana, transl. by Eugene O Curry, 1855, p. 113.

[2] O'Donovan, however, defines it as German silver, Three Fragments, p. 77, and is followed by Sir W. Wilde. The white metal of the exquisite Ardagh chalice found in 1869 would, according to this identification, be *Finndruine*, but it seems a metal ill adapted for any purpose of defence.

[3] Leabhan na g'Ceart or Book of Rights, O'Donovan, 1847, p. 85.

[4] Four Masters, A.D. 917.

[5] A.D. 704. Three Fragments, transl. by O'Donovan, 1860, p. 111.

the colour assumed by bronze when not kept bright, amounts to proof that such was the metal employed, but it favors such a view. The description is not applicable to iron weapons, and the epithet seems not very likely to have been applied to the shafts or mountings. We find it applied to a Danish spear in an age when we know that the Danes used iron exclusively. "Strong, broad, green, sharp, rough, dark spears, in the stout, bold, hard hands of free-booters" were plied at Clontarf;[6] but to this it may be answered that when an epithet has once acquired a fixed poetic use it is apt to be employed long after it has ceased to be literally correct. We still talk of our wooden walls and our hearts of oak in metaphors out of date; but when we read of red gold, purple mantles, red cloaks, blue cloaks (Bk. of Rights, *passim*), we understand the language literally, and probably any one reading of blue swords would at once associate the epithet with weapons of steel or iron, to which, in fact, it belongs. Thus we read of Donagh Mac Namara:—"His expert, keen pointed, blue colored, and neat engraved dart, ... his long blue-edged, bright steeled, sharp-pointed dagger;" and certain captives are exhorted "to shake and rattle the beautiful bright iron chains which are fastened to your well formed fetters of blue iron," for "there was a bright fetter of blue iron between every two of the heroes of the race of Conall and Eoghan at that time."[7]

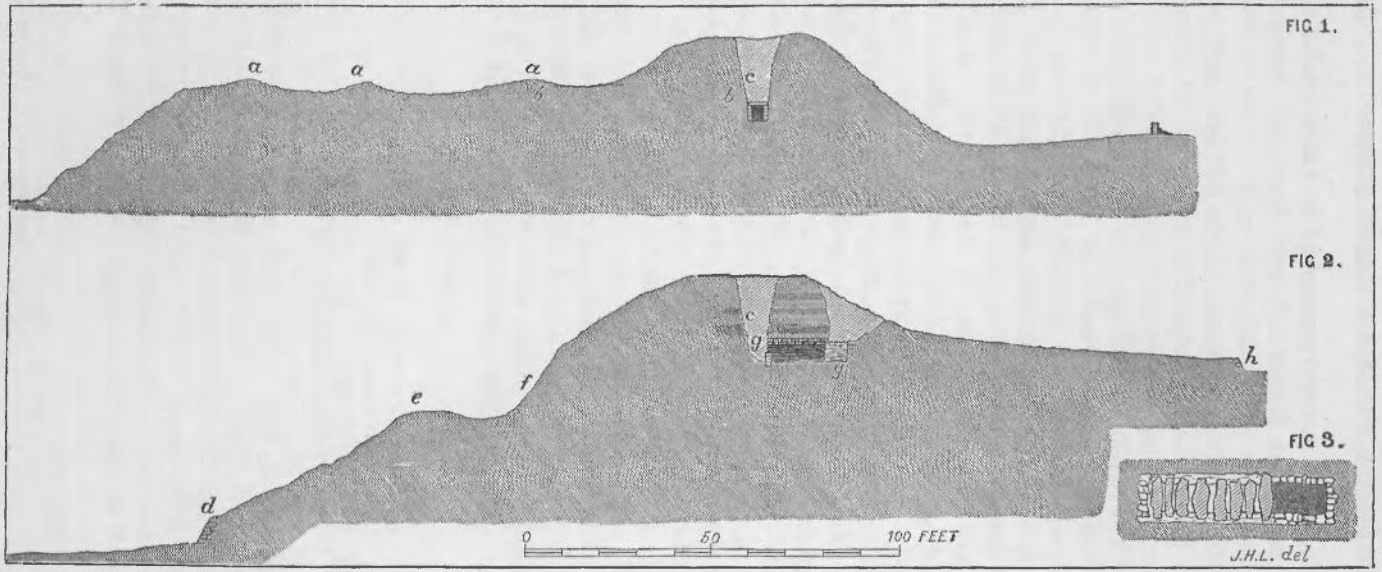
But we have this term applied to a sword, in a passage which applies the other to a spear.

"There is Domhnall in the battle
* * * *
Oh the size of the expert blue sword
Which is in his valiant right hand
And the size of his great shield beside it!
The size of his broad green spear."[8]

The term has, in fact, been used in bardic versions of events of so early a date that if they have any historical basis at all, we must suppose bronze weapons to have been in use in Ireland. Thus "there came not a man of Lohar's people without a broad green spear, nor without a dazzling shield, nor without a Liagh-lamha-Liach (a champion's hand

[6] Wars of the G. G., p. 159.
[7] Battle of Magh Rath, p. xiv. and 179, transl. by O'Donovan, 1842.
[8] A.D. 637. The Battle of Magh Rath, p. 197.

TUMULUS, KNOWN AS GREENMOUNT, CASTLE BELLINGHAM, IRELAND.



SECTIONS THROUGH THE GREENMOUNT TUMULUS.

Fig. 1.—Section E. to W.

a a a. Ridges, apparently traces of foundations.

b b. Sea sand found here in cutting sections.

c. Hereabouts the Runic plate.

Fig. 2.—Section N. to S.

d. Boundary of the position.

Fig. 2.—(*continued.*)

e. Slight remains of a vallum traceable towards the west end.

f. A hollow, apparently artificial; possibly another entrance.

g g. Teeth and bones of animals found.

h. Boundary on the south. A hollow road.

Fig. 3.—Plan of the chamber from above, showing the eight roofing stones (twice the scale).

stone), stowed away in the hollow cavity of his shield,"[9] to the battle of the Ford of Comar. This was in the first century B.C. The annals of the wars of the Gaedhil indeed are full of allusions to the superiority of the Danish weapons: even so late as the Norman conquest,

> "Unequal they engaged in the battle,
> The Foreigners and the Gaedhil of Teamhair,
> Fine linen shirts on the race of Conn,
> And the Foreigners one mass of iron."[1]

And the occurrence of "masses of iron" among the regal tributes in the Book of Rights, recalling one of the prizes in the Homeric games,[2] suggests that in both cases the metal had a character of rarity consistent with the contemporaneous employment of bronze, for a purpose for which it is almost equally suitable. As a matter of fact, very little iron is produced in Ireland to this day.[3] The battle-axe, singularly enough, is not mentioned as a weapon in the metrical account of the Battle of Magh Rath;[4] it cannot have been in very general use at that date; and the statement of Giraldus Cambrensis, who, on the other hand, does not mention the sword, that the Irish employed "broad axes excellently well steeled" in the twelfth century, does not preclude the supposition that some old bronze ones may have been seen on the battle-field so late as the ninth. I cannot, under any probable theory of accident, otherwise account for the presence of one in this tumulus, if the circumstances under which it was found have been correctly ascertained.

I will conclude these remarks by one or two statements called for by certain inaccurate reports, such as generally obtain currency on these occasions.

(*a.*) The bronze ornament was, by the workmen's account, attached to something in a very rotten and mouldy state, doubtless a strap of leather. The presence of the cavity at

[9] Quoted by Sir W. Wilde, Catalogue, p. 73.

[1] Miscellany of the Celtic Soc. p. 70.

[2] Iliad, bk. xxiii.; Book of Rights, pp. 97–105.

[3] There is an anecdote in the life of S. Columba (A.D. 624–704) as to the use of iron in his day, which may be quoted for its simplicity and a slight suspicion of the quality of the metal. The saint was besought by a brother to give his blessing to a weapon, "ad jugulandos tauros vel boves;" he does as requested, but warns the petitioner, "Ferrum quod benedixi confido in Domino mea quia nec homini nec pecori nocebit," accordingly the brother, 'Vallum egressus monasterii, bovem jugulare volens, tribus firmis vicibus, et forti impulsione conatus, nec tamen potuit etiam ejus transfigere pellem!' (p. 143.)

[4] See O'Donovan, note p. 192.

the top of the mound ensured a great percolation of water, and at the time of the excavations, which were during and after heavy rain, the soil below it was very wet. They threw the strap away, and it could not be found.

(*b.*) We discovered no sign of an interment, either at the level of the bronze, or at the level of the passage. Professor Corte, of Trinity College, Dublin, who has kindly examined about one-third of a bushel of bones and teeth, can find no human remains among them. These bones and teeth were scattered throughout the soil moved, which I calculated at about 52 cubic yards. They can hardly be said to have been much more abundant in one place than another. Professor Corte had fully half of what were thrown out.

(*c.*) The marrow-bones were all split, and many of them bore marks of the fire, but no marks of having been gnawed. A great proportion of them were of young and immature animals, such as would be preferred for food, and were probably consumed in larger proportion in early ages than is the modern practice, from the difficulty of feeding them in winter. For this suggestion I am indebted to Professor Rolleston. The fact is shown by many of the teeth in jaws found not having completely pierced the gums; they give the idea of a great funeral feast having been held on the spot, the relics of which were gathered up with the surface soil to form the mound.

(*d.*) The base of the mound in the centre, or at the north end of the passage, seemed to be composed almost wholly of sea sand; this was not observed at the south end. A cut was made in one of the transverse ridges across the end of the *Druim*, and this, too, disclosed, at a depth of not more than 2 or 3 feet, a pure dry sea sand containing minute fragments of shells and a little lime, probably arising from their decomposition. The inference seemed to be that the ridge itself was once a promontory washed by the sea, although it is now a mile and a half distant; but that such was the case so recently as the ninth century, is disproved by the allusions to the Port of Annagassan in the Annals, and by the present elevation of the ground: the base of the mound is above the 100 feet contour on the Ordnance Survey. It creates, however, a difficulty in determining how much of it is artificial, which cannot be solved until further excavations have been made.

(*e.*) The centre of the tumulus appeared to have the character of a true cairn. It was composed of a mass of portable round stones of moderate size, perhaps all under the quarter of a cubic foot. The section presented at the south end was a dry gravel for about 5 feet above the passage, then as much alluvial soil, then 2 feet of a coarse gravel, then bands of clay and gravel for 4 or 5 feet more. There was nothing particularly artificial in its appearance.

(*f.*) It has been suggested that this long passage, 5 feet high, and 3 feet 4 in. wide, leading apparently to nothing, and with nothing evidently sepulchral about it, may have been somehow constructed for shelter or concealment. Unless, however, further explorations should show a connection with undiscovered subterranean chambers of larger dimensions, I am persuaded that this theory is untenable. The space is too contracted; there is no trace of any access to it; and it is almost incredible that so much labour should have been expended on such a structure, at a date when the Round Towers and other architectural remains show the Irish to have been capable of building masonry structures above ground, in which they would have been much more secure against their enemies.