The following Papers were then read:


It is probable, that in such a numerous and highly respectable meeting, and more especially assembled as it is, in this Cathedral City, there may be some who, on purely religious grounds, would hesitate to believe that the primæval condition of man could have been that of an ignorant savage. I will, therefore, beg leave to remind those of my hearers who may be thus influenced by conscientious scruples, that we are told by their highest of all authorities, that there was a time before Zillah, the wife of Lamech, had borne to him "Tubal Cain, the instructor of every artificer in brass and iron." In that dismal time, the primitive arts must have been rude and simple in the extreme, and human invention little more than the uninstructed efforts of human instinct. Through this rude and savage state all nations appear to have passed. For we find from their antiquarian remains, that the Chaldeans, Hindoos, Chinese, Egyptians, Assyrians, Persians, Greeks, and Romans, had what archæologists call a "stone period." A time, in fact, when they used flint flakes, stone hatchets or celts, bone and horn implements, and personal ornaments of shells, teeth, or pebbles. The Cromleach, or simple tomb of unhewn stone, is found of a similar form and construction, on the banks of the Ganges, the Euphrates, the Yellow River, the Nile, and the Danube, as it is seen on the banks of the Seine, the Thames, and the Shannon; and the relics of human art, which are discovered from time to
time in these earliest receptacles of the dead, appear to be so nearly alike in all countries, as to exhibit an identity of barbarism in man's primæval condition all over the world. The close of this dark period seems to have been everywhere contemporaneous with the introduction of the knowledge of the metallic arts. Indeed, some of what are called the aboriginal races of the human family, are even yet existing in this state of primitive ignorance. I had occasion, not long ago, at one of the Soirées of the Philosophical Society of Leeds, to shew a curious illustration of this fact, in the close similarity, amounting nearly to identity, of two stone hatchets, one found in a cave near Settle, in this county, and the other, a modern importation, from the Island of Tahiti. I brought this matter under the notice of the British Association at Aberdeen, and it gave rise to an interesting discussion. The Esquimaux, South Sea Islanders, Caribs, and many savage nations besides, make their rude weapons of wood, shell, bone, or flint, like our own progenitors; and examples of these singular coincidences might be multiplied to any extent.

Let us then consider the earliest remains of man's rude weapons in these islands, the stone hatchets, or celts. We find these of such various forms, that an attempt has been made by that distinguished Danish antiquary, Worsae, to give them (from this point of view), a chronological classification. It is not my intention, on this occasion, to discuss this curious question, but I have no doubt that an interesting classification might be made in that way, by which a certain progress in art could be traced even through this remote era. Amongst primitive people, the transition from the tool to the weapon was very natural, in fact, the same implement served both purposes. The stone hammer could have been used as a war mace, and the stone hatchet as a battle axe. The flint arrow-heads are as various, and apparently progressive in art as the celts.
The method of making these flint weapons was for a long time a mechanical puzzle. Mr. Catlin, the celebrated American traveller, gave me a wonderful account of his visit to the workshop of an Indian, who made arrow-heads, in the rocky mountains. It was quite a romantic story. He told me that the secret of the manufacture was concealed with the most religious care, and that the door of the wigwam in which this trade was carried on, was vigilantly guarded by an armed sentry. He told me also, that this mysterious profession was held in the highest estimation, and hereditary, and that these cunning workmen were looked upon as priests. Sir William Wylde, in writing upon this subject, says, “The trade of the gun-flint-maker gives but a faint idea of the process by which such specimens of exquisite workmanship could have been fashioned.”

However, Sir Edward Belcher, in his last voyage to the arctic regions, not only saw the whole process of making flint arrow-heads, but easily acquired the art himself, and shewed it to us all, at the meeting of the British Association at Oxford. The simple tool employed for this purpose, is nothing more than a small bone, about three inches long, with a little piece of horn, or chert, fastened into it, near the end. With this rude instrument resting upon a wooden block, or bench, the flint-flake was readily converted into an arrow or spear-head, by nipping little chips off it. If Mr. Catlin or Sir William Wylde could have seen the beautiful series of flint arrow-heads which I have the pleasure to exhibit on this occasion, and which have been all made at Bridlington, in your own county, by the celebrated “Flint Jack,” their speculations as to their mysterious fabrication would have been brought to a ludicrous conclusion.

In addition to these stone and flint weapons, and tools, we find associated with them sling stones of various sizes and forms; necklaces of perforated stones, shells, or small pieces
of amber. Little bits of bone, and teeth, are also found strung together for the same purpose. Pins, and skewers of wood or bone, to tie up the hair, and fasten the dress with, are likewise often found with such articles. The stone implements used for domestic purposes are of the simplest kind, especially those for crushing and triturating the kernels of nuts, and subsequently (but after a long interval) for grinding the corn. Of the latter, we have several good specimens in the museum of the Leeds Philosophical Society, one of which was found by myself, built into the garden wall of a farmhouse, near Cookridge Hall. There is no doubt but that weapons, and implements of all sorts, were made of wood at the same time, and even before this stone period. But from the perishable material of which they were composed, few could be accidentally preserved till now. However, some are occasionally turned up in the peat, where they appear to have been deposited as vessels containing butter or fat. The peat moss seems to have been used as a cellar or larder, before the discovery of the curative property of salt, or even the knowledge of the existence of that abundant mineral in this country. For the Greek historians tell us, that salt was one of the imported articles, brought by the ancient merchants, and used by them as barter for our native metallic products. Butter, cheese, and tallow, are frequently found sunk deep in the Irish bogs, sometimes in large masses, converted into a sort of stearine, although generally every particle of the wooden vessel which contained this substance had utterly disappeared. Mr. Wilson, in his "Pre-historic annals of Scotland," does not seem to have been aware of this curious fact, for he writes, at page 31, "Mr. Joseph Train mentions having seen a ball of fat, or bannock of tallow, weighing twenty-seven pounds, found in the peat-moss, and which, no doubt, was a mass of adipocere, indicating the spot where some large animal had perished in the moss." This is about the most
absurd explanation that ever was offered, for this very common find of a mass of stearine preserved in the peat. Only fancy, a Urus, or Bos primigenius, floundering in a quagmire, and sinking down to suffocation, and after the lapse of countless ages, being converted—hide, horns, bones, and flesh—into twenty-seven pounds of adipocere! and this most wonderful chemical change to have been produced in a peat-bog, the most antiseptic substance in nature.

Rude boats or canoes, scooped from the solid trunks of trees, are often found in these peats, gravel, or ancient water-beds. Sometimes their short and clumsy paddles are found buried with them, and in rare instances, a rope or cable made of moss or heather, attached to a stone close by, clearly shews us the primitive means of anchorage, for these first attempts at naval architecture and navigation. A very perfect specimen of one of these primæval boats has been lately found in the valley of the Aire, and presented, through me, by Mr. Hartley (the owner of the land in which it was discovered) to the Leeds Museum. However, as boats of very simple construction have been improvised, especially in remote and inaccessible districts, and used long after the Roman occupation of this island, they cannot, as a class, be fairly called pre-historic.

In 1843, the Rev. Thos. Foster presented to the Royal Irish Academy, an ancient wooden table and dish, and communicated the following notice of them:—"The wooden table and dish to which this notice relates, were dug up in a peat-bog, near the road leading from Donaghy, in the County Tyrone. They were found about ten feet beneath the surface. With the dish was a large heap of hazle nuts. Each article was scooped out of a solid piece of wood, apparently fir. The table is of an oblong shape, with the ends curved inwards towards the centre. The four short legs, about four and a half inches high, are in the shape of truncated cones, and
about four inches thick. They are connected at their bases, except on one side, by a low rim about an inch high; in the longest side of which are two holes, capable of admitting a cord or thong. The dish was a long oval, four or five inches deep. In the edge of one side are two holes, answering exactly to the holes in the table. From these particulars, it may be inferred that the table was used by persons who squatted on the ground, and that the dish, when not in use, was attached to the table, so that both could be carried away, slung over the back. The workmanship of these primitive utensils is rude in the extreme, and indicates a low degree of civilisation in the people who used them.”

Now, what was the probable condition of the poor owners who had evidently lost these utensils? They had been, most likely at the time, squatting over their little autumnal gathering of hazle nuts, the provident horde for their precarious winter’s subsistence. Possibly they might have been indulging in hilarious enjoyment, at this primæval harvest home, when their happy laughter was suddenly interrupted by the bounding rush of some ferocious carnivorous beast, attracted to the place by their incautious merriment. How changed is the aspect of the country where such a horrible scene must have been of frequent occurrence. The gigantic forest trees have grown and fallen, and grown again. The hazle thicket, with its bountiful crop of winter fruit, has withered, decayed, and grown over and over again, upon that interesting spot, until after the long lapse of unrecorded centuries, the accumulation of dead vegetable matter, even by the pressure of its own weight, has been formed into a dense mass of peat several yards in depth.

I shall now pass on to the most interesting phase of our pre-historic condition; the period intervening between the introduction of the metallic arts and the Roman invasion. Although we are frequently told that the Britons, at the time
of the Roman invasion, were in the lowest state of barbarism, in fact, little better than painted savages, my own belief, notwithstanding, is, that the Britons, even in these remote times, had made greater progress in civilisation than is generally supposed. What historians tell us of the rapidity of their military evolutions, the destructive effects of their war-cars, armed with scythes, and the extraordinary agility of this novel description of cavalry, shew us clearly an advance in constructive art and military discipline, little if at all inferior to the great conquerors of the world.

It is quite impossible, from our present knowledge, to say how, or when, the metallurgic arts were first introduced into these islands. But it is evident that they must have made a great revolution in the condition of the people, and a great advance towards civilisation. It is probable that gold and copper had been known, and partially used here, long before the importation of foreign art in their conversion into manufactured articles. Gold, though usually found in small quantities, is more generally diffused perhaps than any of the evident metals. The stream-gold, which is generally first discovered in every auriferous region, is always found glistening on the surface. The most manifest, as it is the most beautiful of all the metals, and probably the most abundant in the first instance. It is not unreasonable to suppose, that in these metalliferous Islands gold may have been readily converted into personal ornaments, even before the importation of the foreign art of smelting it. We must, therefore, look upon rudely formed personal ornaments of gold, as amongst the most ancient metallic relics in these islands. Some of the plates and rough bars of gold, which from their rudeness must have been about the earliest specimens applied to this purpose, appear to have been made simply by a stone hammer. From the great quantity of ancient golden articles found in these islands—and especially in Ireland—
this precious metal must have been far more abundant in those remote times than it has been within the period of authentic history. According to the Irish annals, gold mines were first worked in that county, in the reign of Tigernach, the 26th King of Ireland. He caused a person of the name of Theodore, in the county of Wicklow, to make pins of gold to fasten the garments of men and women about the neck, a beautiful and effective substitute for the bone and wooden skewer previously used for that purpose. He is supposed, on the most received chronological computation, to have died about the year 784 before Christ. Minemon, who lived a century later, is said to have been the first Irish King who decorated the necks of his nobles with gold collars, or torques, and even with armlets and bracelets of gold. Although these annals were at one time inconsiderately assumed to be of doubtful authority, they have been latterly accepted with more confidence, on account of the frequent discoveries of external corroborative evidence supporting them, especially in foreign countries. At all events, it is a curious coincidence, that we find pins, brooches, and collars, or torques, amongst the most ancient articles fabricated from gold and silver in these islands. I am sorry that I cannot shew you any of those relics; I fear they are too costly to be presented to our museum, at Leeds; and we are, as yet, too poor to purchase them. It cannot be expected that I should, on this occasion, enter into a detailed notice of the numerous and various ancient golden articles found in these islands. However, there is one of so much interest, and the history of which is so curious, that I cannot overlook it here.

It appears that a mound had stood for ages in the corner of a field, at a place called Mould, in Flintshire. This barrow was called “The Hill of the Fairies,” and it was always looked upon as an object of superstitious fear by the peasantry of the neighbourhood, who took good care to avoid
its hallowed precincts after night. It happened, notwithstanding, that an old woman was obliged to pass too close to it one evening after dusk, in the autumn of 1833. This old lady positively declared that she then saw, slowly moving across the barrow, a spectral figure clothed in a coat of gold, which shone like the sun. This strange story made such a commotion in the neighbourhood, that the owner of the land determined on removing the mound altogether. At one part of the mound he found rude urns of unbaked pottery, containing burnt bones. But on excavating to the bottom, what was his astonishment, when he came upon a human skeleton, wrapped round the chest with a corslet of the purest gold, embossed with an ornamentation of superior design and workmanship. I am sorry to say that this precious relic was valued only for its intrinsic worth, for it was at once broken up and sold. It has, however, been since recovered piece-meal, and gradually put together, so that you all can see it now, nearly complete, in the British Museum.

Another obvious use to which the precious metals were early and naturally applied, was their conversion into money. Of such coinage the gold ring money of Ireland is probably the most ancient, as it is the most curious. It appears to be similar to what is supposed to have been the Phœnician coinage, and identical with what is used by their descendants at the present day in the neighbouring parts of Africa. It was for a long time supposed that there was no metallic coinage in Great Britain, before its introduction by the Romans, and that the rude silver coins of Cunobeline were made in imitation of Roman money, if not actually fabricated by Roman workmen. But Mr. Evans has satisfactorily shewn, and it is now generally admitted, that the concave coin formerly called "dish money," and other types, were in use in this country and the Channel Islands long before the Roman occupation; indeed, in times too remote for con-
jectual date, as some of them resemble the most ancient coins of the Mediterranean. When we consider that copper is usually found in a state requiring little smelting, so that it could be readily formed into weapons, and tools, to replace those of stone, we must conclude that it preceded the use of iron in England, if not in every country. Iron on the contrary, seldom, in its mineral state, bears any resemblance to a metal, and it is smelted slowly, and with difficulty, under a great heat.

The weapons and tools of the Assyrians, as seen in the Nineveh paintings, seem to be made of some yellow metal. The Egyptian paintings also shew the sculptors and stone cutters working with yellow tools; while a variety of bronze weapons found in their sepulchres, attest their early use of that compound metal. We know that bronze cannot be made without tin or zinc; and that tin is invariably the alloy in ancient bronze. Where, then, did the Assyrians and Egyptians get their tin for this purpose? There is every reason to suppose that it came from Cornwall, through France and Spain, to the Mediterranean and Red Sea; and that this earliest commerce with England was carried on principally by Phœnician merchants. Herodotus, as you all know, calls these islands the “Cassiterides,” or Tin Islands; and that distinguished mineralogist, Berzelius, asserts that from the isolated geographical distribution of this metal, England must have been the only source from whence the most anciently civilised nations of the world could have procured this necessary material for the fabrication of their bronze tools and weapons. How difficult, then, must it be to make even an approximate calculation, as to the extremely remote period when bronze superseded stone in these islands. Indeed, it seems to me to be very doubtful whether the metallic arts were not introduced into the British Islands, even before the Romans themselves became acquainted with them. Coins of the
Ptolemys, and other Egyptian relics, have been dug up from time to time in Cornwall. In 1850, two bronze bulls were discovered in making a deep cutting, in the town of Penryn. They are evidently representations of the Egyptian God Apis. Even so lately as 1858, a bifrontal bust of the God Isis, was turned up in making an excavation in the town of Exeter. It is extraordinary, that although Cornwall and the Scilly Islands, as we are assured, had been resorted to from very remote times by the Phœnician merchants, chiefly for tin and furs, in exchange, as Strabo tells us, for pottery, metal implements, and salt, that they should have left no trace of themselves or their language in this island. In Ireland, on the contrary, they are supposed to have left us their gold ring money, and a great variety of articles in gold and bronze. It is also a curious coincidence, that the mining districts of England and Wales, after having been vacated by the Phœnicians, should have been subsequently occupied (as Mr. Thomas Wright has shewn), by an immigration from northern Gaul, who introduced the Armoric language of the Bretons into these localities, where it is at this day the vernacular of the lower class and the peasantry. The Druid religion appears to have been towards its close confined to this people; and when it was driven out of northern Gaul, its last stronghold was in Wales, and the neighbouring island of Anglesey. But this is a garrulous digression, which I have no right to inflict upon you, especially after enduring such a dull paper on a dry subject, with so much considerate indulgence. For this great kindness, I beg you, therefore, to accept my grateful acknowledgments.

In a discussion which followed the reading of this Paper, Mr. W. Harrison, of Ripon, stated that a fine specimen of gold ring money had been found in the centre of a cairn of stones, in 1818, in a field on the Lindrick farm, close by
Studley Park. It was very heavy, and supposed to be worth about £32. The late Mr. Robert Harrison, of Lindrick, gave it to the late Mrs. Lawrence, and Lord de Grey exhibited it at a meeting of the Society of Antiquaries; but where it was now the present noble owner of Studley was not aware. Two very beautiful gold armlets had also been found in or near Swinton Park, but, sad to say, they had been stolen from the Hall. Their appearance, however, was preserved in an engraving, which will be found in Mr. Fisher's forthcoming work on Mashamshire.

The Chairman next called upon the Rev. J. C. Atkinson, of Danby in Cleveland, to read the second Paper—

ON CERTAIN RESULTS FROM BARROW DIGGINGS IN CLEVELAND.

The investigations, consequent on which are the results and inferences stated below, have all been made in one definite portion of the district usually known as Cleveland; the definite portion in question being limited to the moorland part of the several parishes of Danby, Guisborough, Skelton, and Westerdale,—an area comprising probably 35,000 to 40,000 acres. These investigations are by no means as yet complete, either as regards the existing traces of ancient occupation, or those of ancient interment. Perhaps all that can be said of them is that what has been done has been done carefully, and that at least something in the way of results has been obtained.

Before proceeding to describe such of these results as furnish the special subject-matter of this paper, it may not be inexpedient to notice, as briefly as possible, the more striking geographical features of the district which has furnished the objects of investigation. To this end, I must ask my readers to conceive a deep valley of no great width, whose general direction is from east to west, and which at