OPENING ADDRESS OF THE ANTIQUARIAN SECTION AT THE SCARBOROUGH MEETING.

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The function of the Royal Archæological Institute of Great Britain and Ireland is to promote the study of the inhabitants of these islands in old times in the widest sense. In the historical section of its labours it devotes itself more particularly to ancient documentary evidence, and pieces together isolated fragments into one narrative, more or less complete, of long-forgotten events, or of manners and customs and modes of life, of which some have no place in the present phase of our civilisation. Here it has to do with dates, and refers everything

to its proper place in chronology.

In the section devoted to architecture it deals with the evolution of buildings, and by the scientific treatment of ancient habitations, tombs, and places of worship shows how completely the various forms of building represent the history of the time to which they belong. The Runic crosses, for example, at Ilkley and elsewhere, with their beautiful combination of the Neo-Celtic scrollwork and knotted-rope pattern, are living witnesses of the place of early Irish Christianity in the great kingdom of Northumbria, and confirm the truth of the historical record of the introduction of Christianity into this region through the Celtic missionaries. If, too, we examine them more minutely, we see proof on the one hand of a survival of the flamboyant designs, partly Mycenæan and partly classical, and on the other of the introduction of the knotted-rope pattern clearly traceable to the influence of Byzantium on the Low Germanic conquerors of the Empire of Rome—Gothic, Burgundian, and, it may be added, English.

We rise from the study of the cathedrals, abbeys, and parish churches with a profound impression of the extent to which the foreign influence was felt in this

¹ Read July 17th, 1895.

country from the days of the landing of St. Augustine, and of the complete mastery of the centralised ecclesiastical system of Rome over what may be termed the insular Celtic Christianity derived from the east. The ill-disciplined, badly organised, Celtic Church in Britain was as incapable of holding its own against the Roman form of Christianity as the ancient Britons were incapable of withstanding the attack of the Roman Legions. We may note further that the extreme rarity or absence of buildings belonging to the Celtic Christian period in England shows how complete was the victory of the Roman ecclesiastical system over that which went before. The ecclesiastical conquest of Britain by the power seated in Rome was further-reaching and more complete than the conquest by the Roman arms. To it we owe not merely the unity of the Church in the British Isles, but the welding together of the warring kingdoms of the Heptarchy of Wales, Scotland, and Ireland into one great British power. I give these illustrations of the important place occupied by Architecture in relation to History. It was through her portals that Freeman, a name not unknown in this Institute, approached the study which made him famous as the founder of a new historical school in Britain. To him architecture was one of the many aspects of history embodied in stone or brick, or other material.

I pass now to the consideration of the work of the Institute so far as relates to that section over which I have the honour to preside. The study of antiquities, so long a mere dilettante study apart from all others, has now become an exact science, and employs the same method of rigid induction as any of her sisters. In the development of this new science the names of Evans, Franks, Pitt-Rivers, and Greenwell stand among the foremost of our countrymen. It embraces the study of mankind and his advance in culture from the time of man's appearance on the earth to the present day. No fact bearing upon man is too great or too small for its net. On the one hand, it lays under contribution all that geology has to offer as to the conditions under which primæval man lived on the earth. On the other, it interprets the objects with which it deals by a comparison with similar

objects in use by peoples living in various parts of the globe. Its function may be summed up in a few words. It collects the materials for history before history, as revealed by the written records, began. Like history it

tells a story of continuity and evolution.

In dealing with this subject I propose to take stock of our present knowledge as to primæval man before history began; and, secondly, to discuss certain special archæological conclusions which may be based upon the antiquities of the district in Yorkshire in which we meet, so far as other demands upon my time and the adverse conditions of this meeting have allowed. The close atmosphere of a contested election is not favourable for the development of those qualities which ought to characterise a Presidential Address.

Palæolithic Man.

The question of the antiquity of man as so eagerly discussed in the sixties, has now passed into the region of well-ascertained fact. The Palæolithic implements associated with the remains of the extinct mammalia, such as the mammoth and the woolly rhinoceros, in the caves and river deposits, prove that man found his way into Britain when our land formed part of the continent, and when the winters were sufficiently severe to encourage the migration of reindeer and other arctic animals, while the summers were sufficiently warm to allow of the hippopotamus wandering as far north as Kirkdale and Leeds. This happened in the Pleistocene Period of the geologists, a period so remote that it is idle to attempt to measure it by the historical unit of years. rather to be measured by geographical revolution and climatal change, and by the progress of man in civilisation in the interval which separates the geological from the historical record. It is an antiquity not to be measured in my opinion by any method of chronological analysis.

Preglacial Man in Yorkshire.

The relation of Palæolithic man to the Glacial phase of the Pleistocene Period is clearly shown by the distribution of his implements in Yorkshire and in the South of England. They have been discovered in abundance in the caves of Cresswell Crags on the southern borders of the county, and are met with in both caves and river deposits south of a line connecting the Bristol Channel with Peterborough. Why are they absent from the postglacial river deposits to the north-west of that line? It is simply because the advance of the pale olithic hunter over Yorkshire was barred either by the masses of ice which have left their traces in the ice-worn hills of this district, or by the waters of the sea which covered Northern and Middle Britain during a submergence, of not less than 1,200 The palæolithic implements in the caves, in the districts covered more or less by the glacial drift, shows that man was living in Yorkshire in preglacial times, while the absence of implements in the postglacial strata can only be explained by the existence of one or the other of the above-mentioned barriers. In the South of England, where there was no great development of ice and no great submergence, and on the plains of France, where there was neither the one nor the other, man lived before, during, and after the Glacial phase.

The Physique of Palæolithic Man.

It cannot be said that any great addition has been made to our knowledge of the physique of palæolithic man during the last twenty years. The recent discovery in the cave of Spy of fragmentary human remains proves that the man to whom they belonged was about 5 feet 3 inches high in stature, and possessed an extraordinary long head, identical in type with that of the Neanderthal skull considered by Professor Huxley to be sufficiently large to have contained the brains of a potential philosopher. The other alleged cases of palæolithic interments, accepted by most of my French colleagues, are in my opinion open to the gravest doubt. The Canstadt skull, for example, on which the most ancient type of mankind is founded, turns out to be a skull of uncertain origin found in the Museum at Darmstadt in 1835, without

¹ The supposed discovery of a bone of preglacial man in the Victoria cave is founded on a mistake. The fibula

locality, and assumed to belong to the fossil remains found at Canstadt in the year 1700. The human skeletons in the reindeer caves of the Dordogne, occur in strata which are later than the palæolithic age, while those of the caves of Mentone, in the South of France, and of the Trou du Frontal in Belgium, belong to interments of well-ascertained neolithic age. The skulls and bones of palæolithic man, which are beyond dispute, are too fragmentary to allow of their being identified with any existing race. They are, however, sufficient to prove that when he first appeared in North Western Europe he was a man and not a missing link. The garden of Eden in which he was evolved from a low ancestry is to be looked for in some part of the world other than Europe, and up to the present time unknown. The higher antiquity of man based upon discoveries in Auvergne and in Italy, and the Americas, in Pleiocene and Meiocene strata, has not as yet been established. In a question such as this, where every one is eager to find traces of the human race as far back as possible in the geological record, the evidence must be closely scrutinised on the spot, and everything which cannot be clearly and satisfactorily proved must be relegated to a suspense account. We must wait for the higher knowledge that will certainly come in the natural course of time.

The Neolithic Age.

The relation of the Neolithic to the Palæolithic age, keenly discussed during the last ten years, has not yet passed into the region of undisputed fact. For my part I am unable to recognise any trace of continuity between them in this country or in Europe, or in any other part of the world with which I am acquainted. To me as a geologist they are separated from each other by a profound change in geography, in climate, and in animal life in Western Europe. The palæolithic hunter followed the wild animals in their seasonal migrations over the prairies now sunk beneath the waters of the German Ocean, and the English Channel, to the British Isles.

¹ This is fully discussed in Journ. Anthrop. Inst. 1894. pp. 242-254.

continental summer he lived in Britain upon the stags, and bison, and horses, or a chance lion, cave-bear, or hippopotamus. In the cold continental winter he varied his bill of fare with reindeer, or a chance musk-sheep, grizzly bear, mammoth or woolly rhinoceros. The neolithic hunter, in his advance westward from the continent, found the German Ocean already joined to the English Chan-nel by the "silver streak," and had to make his way to our island in a coracle made of skin stretched over a frame, or in a boat fashioned out of the trunk of a tree. The winters were milder, and the summer heat was tempered by the breezes of the sea-girt isle. animals, too, were those which could stand these changes in climate and geography, without any of the extinct beasts, such as the mammoth, or the northern beasts such as the musk-sheep, or of the southern beasts such as the lion.

If, however, the paleolithic and neolithic inhabitants of these islands are separated by these great changes which from our experience we may take to have been slowly brought about in untold ages, still more are they separated by their habits, manners, mode of life, and general archæological condition. The palæolithic men were nomad hunters ignorant of all arts except sewing, implement making, and the use of fire. It is strange that in the midst of this savage life, one section of them, the Cavemen, should have left behind figures of the animals on which they lived, scratched on bone, antler, and stone, with remarkable spirit—as for example in the caves at Cresswell—and handles carved in the shape of animals, such as kneeling reindeer and standing mammoths in the caves of France. The arts of drawing and sculpture were with them developed to a high degree.

The neolithic men were not only hunters, but farmers, and herdsmen, growing wheat and flax, and keeping herds of short-horned oxen (Bos longifrons) and of swine, and flocks of sheep and goats, and a breed of large dogs. To them we owe the domestic horse, so dear to all true natives of Yorkshire. They were spinners and weavers, and miners of flint for the manufacture of implements which they turned to use, in the clear-

ing away of the forest, and the development of carpentry. They lived in fixed habitations, generally circular huts half sunk in the ground. In spite, however, of this immeasurably higher culture, they were singularly devoid of the art of reproducing natural forms which their Palæolithic predecessors carried to so high a pitch in England, France, and Switzerland.

It is obvious, therefore, that the comparison of the palæolithic with the neolithic remains results in a striking contrast, and shows no trace of continuity. On the other hand, continuity is argued, from the discovery of rudely chipped implements ("Eo-lithic, Meso-lithic") like the palæolithic in Kent and Sussex, and from the identity of physique in certain human skeletons, found in caves, with neolithic skeletons. The first plea finds its answer in the fact that in making neolithic implements vast numbers were broken and thrown away (as at Cissbury and Grimes Graves) while they were being chipped out of the flint blocks, and the second in the fact that the skeletons in the caves are neolithic, and not palæolithic in age.

While, however, there is no proof of contact between the palæolithic and neolithic dwellers in Europe, all who believe in the descent of man from one stock must hold that in some quarter of the world the palæolithic hunter gradually became educated into the neolithic

farmer.

The theory that the neolithic inhabitants of the British Isles are represented by the Basques and small dark Iberic population of Europe generally has stood the test of twenty-five years' criticism, and still holds the field. From the side of philology it is supported by the fact pointed out by Inchauspe that the Basque word aitz for stone is the root from which the present names of pick, knife, and scissors made of iron are derived. This of itself shows that the ancestors of the Basques were formerly in the neolithic stage of culture. The name Ireland, according to Rhys, is derived from Iber-land (Hibernia), the land of the Iberians, or sons of Iber. The evidence seems to be clear: 1. That the Iberians were the original inhabitants of France and Spain in the neolithic age, and the only inhabitants of the British Isles: 2. That they were driven out of the south-eastern parts of France and Spain by the Celts in the neolithic age: 3. That they are now amply represented by the small dark peoples in the Iberian Peninsula, and in the island which bears their name, and in various other places in Western Europe, where they constitute, as Broca happily phrases it—"ethnological islands." The small, dark, long-headed Yorkshiremen form one of these islands.

The Bronze Age.

Our knowledge of the Bronze Age in Europe has not been greatly enlarged by recent discovery, although many details have come to light which render it more exact. The many skeletons which have been met with in almost every part of the British Isles prove that the use of bronze was introduced by the tall, broad-headed Goidelic ancestors of the Irish Celts, and the Gael of Scotland. They were Aryan invaders of a pre-Aryan and non-Aryan race. In this connection we may note that cremation was first practised in Britain in the age of Bronze.

The Prehistoric Iron Age.

Many and important additions have on the other hand been made to our knowledge of the Prehistoric Iron Age, the Neo-Celtic period of Franks. We now realise-thanks mainly to the two Evanses, father and son—how closely the inhabitants of Britain at that time were connected by commerce with the civilised peoples of Greece and Italy. The Mycenæan art penetrated into the remote region of Ireland, and has left its mark in the designs of the pottery made in this country, as, for example, in the Lake Village of Glastonbury. When Pytheas—the great Massilian Greek explorer—sailed the British seas about 315 B.C., the Prehistoric Iron Age was in full swing, as is abundantly proved by the fragments of his narrative embedded in the works of late writers. It cannot be said to have ended until our land was brought into direct touch with history by the conquest by the Romans.

We must also note that the Brythonic section of the Celtic peoples, including the Belgic tribes of Cæsar, found their way into the island which bears their name in the

Prehistoric Iron Age.

In this scant outline I have dealt with the arrival of Man in these islands, and with some of the more important points relating to his ethnology, and the development of his civilisation. From the Roman Conquest onwards the narrative strictly belongs to the section of History and of Architecture.

Prehistoric Archæology of the District of Scarborough.

I shall now address myself more particularly to the prehistoric archæology of the neighbourhood of Scarborough, which has yielded such an abundant harvest to many explorers during the last 100 years, and more particularly to Stillingfleet, Greenwell, Mortimer, Pitt-

Rivers, and Boynton.

The physical characters of the district are very remarkable. To its north and west lie the lofty oolitic heathercovered moors of Cleveland, deeply cut into well wooded ravines and valleys, leading southwards into the great alluvial plain of the Vale of Pickering which extends eastwards almost as far as the line of cliffs between Scarborough and Speeton. To the south of this rise the lofty and precipitous range of the chalk wolds sweeping from Settrington eastwards to Speeton, and gradually descending southwards to the Humber. It also descends to the south-east along a line from Bridlington to Driffield and Beverley and to Hessle, to the marshes, and ancient meres of Holderness. It also is divided by a central valley into two parts, ranging from Bridlington on the coast past Rudstone and Wharram-le-Street to Grimston and Settrington. The district thus consists of two main uplands, the northern gradually passing into the bare moorland, and the southern consisting of chalk, dry and with but few trees, and therefore peculiarly favourable for ancient settlement, while the valleys were, as Pitt-Rivers points out, morass and forest, for the most part trackless. It is on these higher grounds that we meet with innumerable traces of man in this district, in the implements and weapons, in the ancient dwelling places and burial mounds, and last though not least in the series of earthworks which guard the uplands from attack. It is obvious from the vast numbers of implements collected by Mortimer and to be seen in his museum at Driffield (well worthy of a visit by this Institute), and by Greenwell, and others, and from the examination of the ground that this area was one of long-continued settlement in the

Neolithic, Bronze, and Prehistoric Iron Ages.

The axes and other characteristic implements of stone found in the surface soil of this district and in burial mounds such as Howe Hill, Diggleby, prove that it was inhabited in the Neolithic Age. They are, however, few in number, and imply a sparse population who interred their dead in a crouching posture. In the Bronze Age the population was very considerable, as is proved by the large numbers of tumuli, most of which contain stone implements known to have been in use at that time from their association with bronze implements elsewhere. burned their dead as a rule, although the practice of interment was still carried on. Were it not for this we should have no materials for identifying the men of the Bronze Age with a living race. The Neolithic remains belong to the small long-headed Iberic race of men, the oldest living stock in Europe, to whom the living small dark Yorkshiremen and women owe not only their dark hair and eyes and long heads, but the taste for horseflesh which, as every one knows, is one of the attributes of the dwellers in this county. The interments of the Bronze Age add the second element to the ethnology of the county, the tall, fair-haired, round-headed Goidel, high cheek-boned, and with large mouth and aquiline nose, such as may be studied in the Gristhorpe skeleton in the Scarborough Museum. These big, round-headed invaders did not drive away the smaller people, but absorbed them into their mass. They took possession of the wolds, and probably enslaved the former possessors of the soil. They are still represented in Yorkshire.

The question as to the direction from which this invasion took place finds its answer in the results of the work of Pitt-Rivers on the complicated system of earthworks which occupies the higher parts of the wolds. He has proved, to my mind without doubt, that the invasion took place from Flamborough Head, and that the invaders arriving by sea first protected themselves by the making of the great rampart and fosse running from

cliff to cliff, called the Danes Dyke from its subsequent

use by the Danes.

Then as the advance was continued inland the line of Argam Dyke formed the next defence, and finally, as they mastered the rest of the wolds, they made other dykes and fosses so as to command the approaches on every side to the chalk plateau from the low forest-clad and marshy districts, where the unsubdued natives had found a refuge.

A second line of attack is traceable on the north side of the marshland of the Derwent starting from Scarborough Castle as a base, the ramps and fosses, the moordykes, Scammeridge Dykes and Givendale Dyke form part of a series also pointing westwards as the land between Scarborough and Ellerbourn, and south of Troutbeck.

slowly passed under the dominion of the Goidel.

The Brythonic branch, too, of the great Celtic race is amply represented in this district in the Prehistoric Iron Age by various discoveries, among which are those made by Stillingfleet in 1816-17, at Arras near Market Weighton, and by Greenwell some sixty years afterwards. In one barrow we see the warrior laid to his rest on a wooden shield with an iron rim and a bronze boss, in his chariot with his two horses and their harness. In another a lady of rank lay with her legs gathered up, and with her ornaments. A necklace of glass beads was around her neck, and upon her breast lav a pendant set with ivory to match the bronze brooch which fastened her dress. She wore on her wrists bronze bracelets adorned with enamel, and on her finger a gold ring. These give a vivid picture of the burial customs of the time on the Yorkshire wolds. The chiefs were sent off on their last long journey, armed and in their chariots drawn by two horses, and the women of rank were buried with ornaments which would render them conspicuous in the unknown world of spirits.

Such as these were the chiefs of the dwellers on the Yorkshire wolds at the time when the Greek vessels first visited the then unknown region of the German Ocean, and such were the people who looked down from Flamborough upon the strange sails of Pytheas when he coasted from Kent northwards to the Orkneys in his memorable

expedition to the Amber coast in the year 315 B.C.

Here I may fitly end my address, all too short alas! for my subject, and all too long for my audience. The subject itself is further away from human interest than those of the other sections of this Association, and, unfortunately, will not be illustrated by a visit to any of the memorials with which it deals. It will, however, call attention to the prehistoric history—if I may indulge in a paradox—of this part of Yorkshire which awaits the future explorer.