The Director read the following paper:

On HUMAN REMAINS *and* OTHER ARTICLES *from Iceland.* By Captain R. F. BURTON, H.B.M.'s Consul, Trieste.

I HAVE the pleasure to forward, for the inspection of the Anthropological Institute, a small collection of human remains and other articles from Iceland.

The site of the "find" will readily be found upon the four-sheet map of Gunnlaugsson and Olsen. Cast the eye eastward of the great southern stream "Markarfljót," march or forest flood —whose eastern delta-arm debouches nearly opposite to Vermannaeyjavr—Islands of the Westmen—that is to say, of the Irishmen. You will see on the left (east) of the stream the little valley of Thórsmörk, the grove of Thor, a good sturdy old god whose name still lives and thrives in Iceland. He was even preferred to Odin—"Hinn Almáttki A'ss," "that almighty A'ss"—by the people of Snowland; and in more modern days he was invoked when a doughty deed was about to be done, the deities of Christianity being preferred only when the more feminine qualities of mildness and mercy were to be displayed.

The valley in question is described by the "Oxonian in Iceland" as a "beautiful, green-wooded spot," near which the Markarfljót flows. About eight miles long, with precipitous sides, its site is bisected by a narrow but tolerably deep "boulder-river"—a bugbear, by the by, of Icelandic travel—and this must be repeatedly forded. The map shows a green patch, the shrubs may average six feet, whilst one monster, a mountain ash, attains the abnormal attitude of thirty to thirty-six feet. It is one of the tallest, if not *the* tallest in the island. The two "giant trees" of Akreyri, which every traveller is in duty bound to admire, do not exceed twenty-five feet.

Reaching, on July 16, 1872, Thingwalla (Dingwall or Thingwall), after a Cockney tour to Hekla and the Geysirs, I met a young Englishman, who was returning from a sketching expedition round the now rarely-visited south coast. From Hekla I might easily have made Thorsmörk in a day, but the depôt of bones was then unknown to me. Mr. W—— had travelled from the Eyvindarholt farm, west south-west of the site of the find, in some six hours of fast work, and complained much of the road. There are only two guides, and the half-dozen influents of the Markarfljót were judged dangerous. It is only fair, however, to state that he had read the "Oxonian in Iceland," and he was prepared to ford the terrible torrents, nearly three feet deep! in boots and "buff." After passing the sites of many fine farms, now destroyed by the ever-increasing ice, he entered the valley from Eyvindarholt by a rugged entrance, leaving the

bone heap about half way and to the right of his track. The remains lie under a cliff where much rocky matter, possibly moraine, has fallen. Above it is the ice-foot, projected by the great glaciers and *nevés*, Merk-Jökull and Godalands Jökull, which rise to the north-east and south-east of it, whilst the rest of the valley, where eternal winter has not overwhelmed the woods, is the usual Icelandic green—vivid and metallic. The heaps evidently consist of

> "The bones of men
> In some forgotten battle slain,
> Bleached by the drifting wind and rain."

Social tradition assigns them to the troublous times of "Burnt Njal," made known to England by that ripe Scandinavian scholar, Mr. G. W. Dasent. This must be expected in these parts of Iceland; several of the remains, however, are described as those of infants.

From Bjarni Finnbogusson, who as a "youth of great energy and pluck" had accompanied Mr. Shepherd, of north-western peninsula fame, and who, developed to a prodigious rascal, had undertaken Mr. W——, I took the cranial fragments marked A and B. Arrived at Reykjavik, he agreed for twenty-seven rix-dols. (say £3) to ride back and bring me as many skulls as could be found or dug up. After attempting in vain—he had taken earnest money—to throw me over in favour of another party of travellers, he set out on Saturday, July 20. He was not to return till the next Friday evening, but wishing to secure more victims, he came back on Thursday, too soon for any good results. Also, he charged me for doing nothing thirty-two rix-dols. instead of twenty-seven rix-dols., which extortionate demand was satisfied rather than run the risk of men saying that an Englishman had shirked payment. I have the pleasure, despite sundry certificates obtained from various innocents, his dupes, to give him the very worst of characters, and strongly to warn future travellers in Iceland against him. The guides at Reykjavik are not worse than the generality of their craft, *pace* Mr. Baring-Gould; some are better; but Mister Bjarni—he is generally called by his English employers Blarney and Barney—is a bad lot, who knows well how to *pelare la quaglia senza farla gridare.*

The following are the principal items herewith forwarded:—

Three fragments of thighbones.

One large hone. Three smaller.

One parcel of sundries.

One broken spindle (?). Steatite (?).

The hones, of which there is an interesting collection in the young museum of Reykjavik, are interesting. The old world

Icelanders, as Uno von Troil informs us, ever held it a "noble art to understand well howto sharpen the instruments of death." I add a pair of Iceland shoes, the "revelins" of our Scoto-Scandinavian islands, as they readily explain why the people are not mountaineers. Also a specimen of the normal pack-saddle, with pegs of reindeer horn, and the very appropriate "namdahs", peat slabs, the Menyanthes trifoliata being always preferred. It will warn travellers what to expect, and tourists will select their "impedimenta" accordingly.

The following paper was read by the author.

NOTES *on* HUMAN REMAINS *brought from Iceland by Captain Burton.* By C. CARTER BLAKE, Doct. Sci., M.A.I., Lecturer on Comparative Anatomy and Zoology at Westminster Hospital.

THE remains which Captain Burton has brought from Iceland are composed of fragmentary evidences of man, hog, ox, and horse.

I. MAN.

There are five races of man with whom any remains which may be found in Iceland may be compared with a view to their identification—the Norwegian, Skrælling or Esquimaux, Irish, Lappish, and Russian. I shall briefly pass over the chief characters of these races, and as the Norwegian is the race which forms the majority of the Icelandic population at the present time, I shall commence with it.

The late Dr. James Hunt, during his tour in Norway, collected an enormous amount of statistical facts with regard to the cranial measurements of the Norwegians, which were verbally communicated to the British Association for the Advancement of Science at Birmingham.

The publication of the memoir containing them was postponed at the wish of the author, and I am consequently only able to refer to my own rough notes, taken at a time when I examined the manuscript of my lamented friend. The general results seem to have been that the Norwegian skull, excluding from consideration all persons apparently of Lappish descent, was excessively short and round, that cases of brachistocephaly were frequent, and that cases even of hyperbrachistocephaly were to be found. The district investigated by Dr. Hunt was chiefly to the north of Drontheim, and especially the neighbourhood of Hammerfest. The Swedish skull, on the other hand, appears to be dolichocephalic to a degree; while the researches of Dr. Beddoe on the head forms of the Danes indicate a population whose cranial index oscillates from 85·9 to 75·3.

HUMAN CLAVICLE. ICELAND.

The cranial characters of the Esquimaux, Irish, Lappish, and Russian races have been so often described, that I pass over the minute comparison, and proceed at once to the evidences on the table. These consist of the following specimens:—

1. Fragmentary calvaria of adult human individual. The contour of the skull has been brachycephalic, though its measurement is precluded by the fact that the left parietal, which alone exists, has been broken off from the frontal bone. The frontal region is bombate. Moderate superciliaries overhang a shallow supernasal notch. The nasal bones extend forwardly, and have not the slightest approach to the form presented by the Esquimaux, and in the "Turanian" skulls described by Dr. Pruner Bey. The superorbital foramina are converted into notches on both sides. A small piece of the alisphenoid bone exists, attached to the right frontal, indicating that there was a normal spheno-parietal suture. The dentitions and seriations in the coronal suture have been deep. The parietal bone of large size accords with the frontal in all essential characters of these sutures.

The occipital bone is in a very fragmentary condition. It is not marked with any prominent ridges for the attachment of muscles, a fact which, coupled with the small development of the mastoid processes, leads the observer to consider that the present skull has belonged to a female.

Three petrous bones, with fragmentary mastoid processes attached, exist in the collection. The smaller size and parial relationship of two of these render it probable that they belonged to one individual, and that the same whose cranial vault has just been described. One large, light, petrous bone appertains to an individual of much larger size, possibly masculine, but I regret that no other specimens are found of this interesting person.

A fractured palate, with two teeth *in situ* (the first and second molars), leaves evidence highly conclusive as to the food of the inhabitants of Thorsmörk. The crowns of the molars are much attrited by the consumption of hard substances, and are in the same condition as is presented by the teeth of the neighbouring but different race of Skrællings. The first and second molars are both implanted by three fangs.

The right clavicle (pl. xix), which is found with both extremities broken away, indicates an individual smaller in size, and with lighter and more slender clavicles, than the Australian drawn by Owen in "Trans. Zool. Soc.," vol. v, plate ii, figure 4, and of course more so than in the European drawn in figure 2 of the same plate. Three long and slender femora, a right first rib, a large axis vertebra, a fragment of shattered humerus, and a cuneiform carpal bone are found in the collection.

II. Hog.

The remains consist entirely of fragmentary limb bones and of a few teeth. These need not be noticed in detail.

III. Horse.

The equine remains from Thorsmörk are interesting. The first molar, and the fourth premolar tooth of the lower jaw, as well as the third deciduous molar of another individual, indicate the existence of a horse of ordinary dimensions as large as the ordinary European horse of the present day, and larger than the Shetland or Dartmoor ponies. There are few points of resemblance between these teeth and those of the Equus spelæus figured by Owen. ("Philosophical Transactions," 1869, plate 57.)

IV. Ox.

Teeth of the Bos taurus are present, though in an imperfect condition.

From the above remarks it will be, I believe, clear that the skulls now described belong to the Norwegian race, though possibly there may be an admixture of Celtic blood derived from the descendants of the Irish prisoners brought into Iceland by the Norsemen. But in no sense can these be termed any Esquimaux or "Boreal" affinities. That prior to the year A.D. 860, when the expedition of Naddod to "Snæland" brought Iceland face to face with Norwegian civilisation, a more ancient race, allied to the Esquimaux, may have existed in Iceland is a possible speculation, but one of which as yet we possess no anthropological proofs. The domestic fauna which exists in Iceland appears to accord for the most part with that of Norway, and the people do not appear to possess any intermixture of Esquimaux blood.

Discussion.

Mr. Magnusson said, as regards the possibility of an admixture of Esquimaux blood in the Icelandic nation it cannot be maintained on historical grounds. There is no record extant to countenance the supposition that at any time Iceland has been inhabited, wholly or partially, by this polar race. The island lies out of the belt of the Esquimaux, and he would find himself there entirely out of his element, the conditions for the existence of human life in Iceland being entirely different from those on which life in the polar regions depends. The parts of the country first discovered by the Norwegians were found to be entirely uninhabited; and it was first in A.D. 874, or thereabouts, that the first settlers came upon living human beings there. These, however, were not Esquimaux, but Irish culdees, who had taken up their hermit abode in some of the outlying islands off

the south and south-east coast—their solitude being more congenial to the spirit of the anchorite than a residence on the mainland, which meant a more energetic fight with nature than a residence on the islands. The spirit of priest and pirate being then no more homogeneous than now, the Westmen—as they were called by the invader—were soon destroyed. This is, briefly stated, what we learn about these Westmen from Icelandic sources of history. But from Irish sources we learn more. The Irish monk Dicuil, of the eighth century, has written a book called "De Mensura orbis Terræ," in which he says that in A.D. 795, he spoke to some Irish hermits having returned from an island in the north, which he calls Ultima Thule, and which from his description can be none other than Iceland. It is therefore certain that Iceland had been discovered from Great Britain or Ireland some seventy years at the least before the Norwegians ever came there. As to the human remains before us, they need be no older than the eleventh century, unless scientific evidence should prove the contrary, for at the beginning of that century, and long afterwards, Thórsmörk, the locality from which they are said to come, was an inhabited countryside. Their real value, I presume, depends entirely on their antiquity; but being no philosopher in matters of this nature, I take leave of the bones and Captain Burton's paper, which has thus far disappointed me, that I have learned from it much less than I anticipated.

Dr. CARTER BLAKE agreed with Dr. King that no affinities to the Esquimaux were presented by the present specimens. Many Lapp skulls existed in the Continental museums, and some Tschuktchi; but there was great dearth of Esquimaux skulls from Behring's Straits. On the hypothesis that the Aïno skulls exhibited Esquimaux affinities, it was difficult to discuss the question. Dr. Rae's observations on the stature of the Esquimaux were certainly interesting. The skeletons in our museums were short and stout; but how far were they typical examples of the race? The circulation of the queries by the Arctic Exploration Committee would tend to elucidate these questions. With regard to the observations which had fallen from Mr. Erikr Magnusson; he was himself "agreeably disappointed" that the Institute was not to be converted into a 'holmgang' wherein to criticise Captain Burton's excellently narrated facts. He failed to perceive what evidence a French or Irish monk could have possessed of Culdees in Iceland in A.D. 795, as Iceland was not discovered (according to Mr. Magnusson's statement) till A.D. 874, and according to ordinary chronologists, till A.D. 860. In matters wherein the veracity of a distinguished traveller had been attacked, it was necessary that the utmost care should be taken respecting facts and dates. Captain Burton in no part of his paper assigned a high antiquity to the bones, which may either belong to the time of Björnt Njal, or to a far more recent period.

The meeting then adjourned.

DECEMBER 3RD, 1872.

SIR JOHN LUBBOCK, Bart., F.R.S., *President, in the Chair.*

THE minutes of the last ordinary meeting were read and confirmed.

The following presents were announced, and the thanks of the meeting voted to the respective donors:—

FOR THE LIBRARY.

From the AUTHOR.—Les Derniers Travaux relatifs aux Bohémiens, by Paul Bataillard.
From the SOCIETY.—Proceedings of the Royal Society, vol. xx, No. 138.
From the AUTHOR.—Project of an Instrument for the Identification of Persons, by Joseph Bonomi.
From the EDITOR.—Human Nature for December, 1872.
From the SOCIETY.—Oversigt over det Kongelige Danske Videnskabernes Selskabs, No. 3, 1871, No. 1, 1872.
From A. W. FRANKS, Esq.—Berliner Gesellschaft fur Anthro., Ethno., und Urgeschichte, 13, 17, April 1872.
From the EDITOR.—Nature (to date).

Colonel A. LANE FOX exhibited a series of stone celts, and read the following communication thereon:—

COLONEL A. LANE FOX exhibited seven stone celts presented to him by Colonel Pearse, R.A., who procured them from the grove and hill-top temples of the Malayalis or hill tribes of the Shevaroy Hills. Salem is the capital of this district, situated on the railway, half-way between Madras on the east, and Beypore on the west coast.

The following are the forms and dimensions of these objects: No. 1. 5½ in. in length, 2½ in. greatest width, 1½ in. thick, slightly chipped edge, almond shaped. No. 2. 5 in. in length, 2¾ in. in width, 1½ in. thick, chipped on edge, nearly triangular. No. 3. 4½ in. in length, 2 in. in width, 1¼ in. thick, triangular. Nos. 4 and 5. 3½ in. in length, 2 in. and 1¾ in. in width, 1½ thick, irregular wedge-shaped. Nos. 6 and 7. 2¾ in. in length, 1¾ in. in width, 1¼ and 1 in. thick. All appear to be composed of a hard dark-coloured trap rock, and are a good deal weathered.

Another stone of jasper, found in the Kamptee cantonments, is a purely natural form. This, Colonel Fox observed, was the second natural pebble he had received within the week from distant countries; one from India and the other from Greece,