

On his entering as assistant-surgeon in India, a great field was open to him, of which he happily availed himself. After a participation in some of the miseries of the Cabul campaign, though not actually serving in the expedition, and a narrow escape, in company with Lady Sale, of endless captivity, he was able to devote his time very much to science. He was employed in 1847 and 1848 in the Tibet Mission, a winter residence at Iskardo, a perilous journey along the portion of the Indus which runs beyond Iskardo, though, from the state of the country, he could not pursue its course to Kashmir, and the results of the previous journey gave him the opportunity of publishing a most instructive volume which, for soundness and multiplicity of information can scarcely be surpassed.

Dr. Thomson joined his friend Dr. Hooker in Darjeling in the end of 1849, after the completion of his arduous journeys in the North-West Himalaya and Tibet, and they spent the rest of the year 1850 in travelling and collecting, returning to England together in 1851. Having obtained permission from the Indian Government to distribute his botanical collections, which were equal in extent and value to those of Dr. Hooker, after taking part in the preparation of the Indian Flora, he returned to India as Director of the Botanical Garden at Calcutta. On his return to England, increasing infirmity soon made him unequal to any constant participation in the work, but up to a very few weeks before his death he was employed as examiner, his qualifications for which made him a most desirable and efficient colleague. Though in a very failing state of health, he collected last summer assiduously in the neighbourhood of Pitlochrie, and was so fortunate after three times ascending the Sow of Atholl as to rediscover the long-lost *Menziesia carulea*. It remains only to add that his kind and affectionate disposition endeared him to all who knew him, and to none more than to the writer of this short and imperfect notice.

M. J. BERKELEY

THE GREENLAND ESKIMO

A COMMISSION was appointed by the Anthropological Society of Paris to examine the Eskimo whom M. Geoffroy St. Hilaire, the intelligent director of the Jardin d'Acclimatation has brought from Greenland. This Commission was composed of MM. Broca, Dally, Girard de Rialle, Topinard, Masard, and Bordier (*rappor-teur*). The following are the details which I have given to the Society as the result of the observations made by the Commission.

The Greenlanders, whom all Paris has been to see at the Jardin d'Acclimatation, are six in number, viz., Okabak, thirty-six years; Majak, Okabak's wife, twenty-three years; their two daughters, Anna, twenty-five, and Catarina, thirteen, months; Kojank, twenty-three years; and Jokkik, forty-one years, who is recognised at once as a half-breed between Dane and Greenland.

These Greenlanders came from Jacobshavn, on Baffin's Bay, on the west coast of Greenland, about 69° N. lat., not far from Disco Bay and Island. In that latitude the temperature in winter falls as low as -49° C. It differs notably from that which has to be endured by other Eskimo whose habitat extends to the south of Greenland, from Labrador to Behring Strait.

Jacobshavn, although belonging to the north district of Greenland, is not, however, the most northern town; for Bessels has given, as the human habitat nearest to the pole, the town of Ita, in 78° 16' N.; Ita appears, however to be only a summer station. At Disco Bay the sun does not rise from November 30 to January 15. It may not be useless to give a rapid glance at the surroundings in the midst of which these Greenlanders live.

The flora is rudimentary. The Greenlanders have but

little wood at their command; the little they use is imported from Denmark.

The fauna, less poor, is composed, first of all, of the seal, which constitutes the prime material of all their

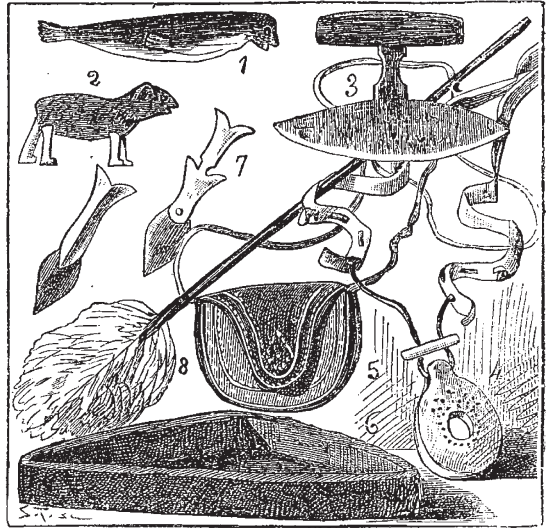


FIG. 1.—1 and 2. Toy dog and seal, cut in wood. 3. Knife to scrape fat off seal-skins. 4. Seal-skin hunting girdle with ivory medallion. 5. Seal-skin pouch. 6. Obsidian lamp. 7. Bone fish-hooks with iron points. 8. Tuft for catching vermin.

civilisation—food, light, heat, clothing, boat-building, various implements and utensils—the seal furnishes all. The white bear is sought for its fur, but the flesh seems to be reserved for the dogs. The reindeer is also found in Greenland. According to Dr. Hayes the reindeer is still very abundant in the interior of the land, but the Green-

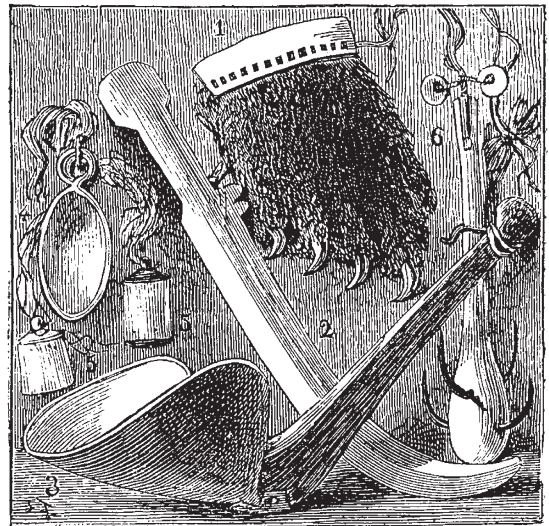


FIG. 2.—1. Fur glove with bear claws. 2. Bone knife for cleaning boats. 3. Drinking-spoon. 4. Bone table-spoon. 5. Bone boxes with bundles of thread made of birds' entrails. 6. Bone hook with iron points.

landers do not make use of it either as food or as a means of locomotion. Birds are very abundant; their plumage is used as fur, and their sinews as thread.

But the domestic animal is the dog, which they yoke to sledges by means of a small harness of seal-skin. The nine dogs which the Eskimo have brought to Paris, and

harness to their sledge, are very large. Their white hair spotted with black and red, is long and abundant; their ears are erect, head large, their iris of the colour of *café au lait*.

Let us, however, examine the more immediate environment of the Eskimo—their house. It is composed of a hillock of turfed earth, of square form, recalling somewhat our military fortifications. It is entered by a low door giving access to a narrow and very low passage, in which the Greenlander himself, notwithstanding his small size, is forced to bend down. The single apartment to which this passage gives access, and the floor of which is lower than the surrounding ground, is ventilated by an orifice in the upper part. It is lighted by two openings on each side of the door, and hermetically closed by strips sewn together of a sort of goldbeater's skin made of the intestines of the seal. This kind of immovable glazing sifts into the apartment a sufficient light, but appears from without altogether opaque. The furniture consists of a sort of camp-bed which occupies the entire half of the apartment, provided with sealskins, and on which the whole family pass the night, after having taken off their day costume, and put on another more ample dress. On the ground a stone basin, said to be of serpentine, the form of which resembles that of a fish, is filled with seal oil, in which are steeped several wicks. The flame which rises from this vessel

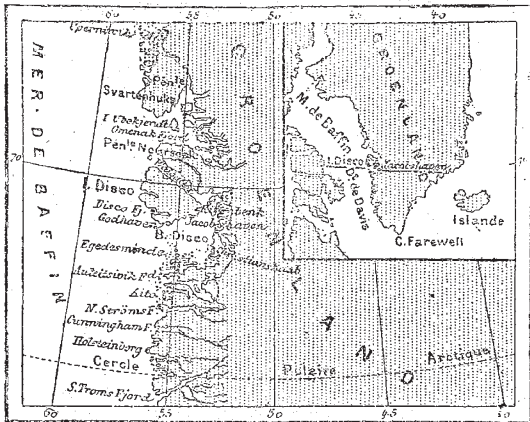


FIG. 3.—Map of Greenland.

gives a sufficient light, and maintains the confined space at a high temperature. The cotton wicks come from Denmark, as also the chemical matches which the Greenlanders constantly use to light their briar-root pipes, which, with their tobacco, their alcohol, and their coffee, are sent them each year by the Danes.

Their costume is made almost entirely of sealskin. It consists, in the case of the men, of a shirt (Danish), above which is placed a woollen vest. The pantaloon is of hairy sealskin; the boots, under the pantaloons, of sealskin leather. Gloves of fur, armed, when necessary, with bear's claws, blue spectacles—against the wind and the reflection from the snow—complete the accoutrement. The costume of the women is not wanting in elegance. The hair is raised *à la Chinoise* on the top of the head, and bound into a sort of vertical chignon, tied by a coloured knot. A well-fitting blouse of European material trimmed with fur, is provided with a hood, in which the mother carries, when necessary, her latest born, as the opossum does her young. The woman wears very tight breeches of sealskin and high boots reaching above the knees; red, embroidered with yellow, after marriage; white, embroidered with green, among unmarried girls.

Their arms consist of bows with which they shoot arrows pointed with bone or iron, and similarly made

harpoons, which they throw from the hand. When the harpoon is to be thrown into the water it is attached to a cord provided at the other end with an inflated seal-bladder which acts as a buoy and prevents the loss of the wounded animal, which would run away into deep water with the harpoon. Their other apparatus are iron fish-hooks, wooden baits representing fish, coloured, and very well imitated. To these we may add cases of skin which they put on the paws of the dogs when the cold is very intense; leathern muzzles to put over the snout of the dogs, smoothing-irons of stone, knives identical with those which iron-tanners use to dress skins, and intended for the same purpose. This will give an idea of all that the Greenlanders have to help them to struggle against the inclemency of their native climate.

But an element not less important than the house in the idea of an Eskimo is the boat. The boats, all of sealskin well stretched over a framework of wood or bone, are furnished with tackle of leather. They are of two kinds; every man possesses a small boat, the *Kayak*, a boat decked all over, except in the middle, where it is pierced with a circular opening, into which the fisher insinuates and fits himself, the legs extended under the deck, and where he remains hermetically enveloped around the loins by what looks like the upper part of a leathern bag fixed to the edge of the hole and attached round the waist. Thus united to his boat, the Eskimo manœuvring his double-bladed paddle produces an impression analogous to that which gave origin to the legend of the Centaurs. A large sealskin bottle placed behind the fisher—a sort of swimming-bladder—increases the specific lightness, and renders the whole unsinkable. The other boat, very much larger—the *Umyak*—is used only by the women, who manage it with the children and furniture.

Before concluding what relates to the surroundings, one word about the alimentation. The word *Eskimo* is not the name which they give to themselves. They call themselves *Innuik* (the men); so true is it that under all climates human vanity prevails (*Los Ombres: Innuik*). The name *Eskimo* (eater of raw fish) is a malevolent nickname given them by their American neighbours. It is not, however, so well merited now as it was last century, at the time when Crantz observed them. They continue, nevertheless, to eat raw the lard sent them from Denmark and also the lines of the seal. The rest is eaten cooked. This custom of eating raw lard gives rise to the frequency of tapeworm in Greenland.

What has been said of their voracity still appears not to have been exaggerated. Like all peoples whose *pabulum vite* is uncertain, they go two or three days, especially during winter, without food, but on the first favourable occasion they exhibit a gluttony which is not always a compensation.

Phthisis is extremely frequent; it produces about three-fourths of the total mortality, and is almost always characterised by blood-spitting.

If we seek for what relates to intellectual phenomena, we find little artistic sentiment, but great accuracy, and an easy submission to what has come to them from Europe. Converted to Protestantism by the Moravian Brothers, they read in the *Jardin d'Acclimatation* a Greenlandish translation of the Bible, which appears sufficient to satisfy their literary aspirations. They sing slowly psalms which their ministers have taught them. Their writing, in Roman characters, is neat, correct, and precise; it has something of the slowness of their movements.

An extreme precocity of development seems to characterise them. Thus, the young Cathariné Okabak, who was born on October 20, 1876, possessed, on October 20, 1877, four canine teeth, eight incisors, four premolars, in all sixteen teeth. She ran alone and commenced to speak at the age of ten months. Her sister Anna, who

is twenty-five months old, has twenty teeth. It is true that this precocity corresponds, as is often the case, to a feeble longevity. The *metis* of forty-one years appears already old, and it is generally acknowledged that in Greenland a man of fifty-five, or a woman of sixty years, is an exception. Young girls are quite formed at from fourteen to fifteen years; suckling continues for four or five years.

Their height is small; their black hair is straight; the face broad and flat; the head is dolichocephalic; the cheeks are large, plump, and round; the lips are thick, the lower pendent; the eyes are small, dark, oblique, like those of the Chinese, and connected by a fold of skin at the level of the internal angle. The teeth are large, yellow, but sound; the canines a little projecting. The beard is feebly developed, as is indeed the hair in other parts of the body; the skin is brown and even black

among the aged. The following figures give a more precise idea of these peculiarities:—

Their mean height is 1.46 metres, a figure higher than that which is given by Hearn to the Eskimo (1.299 m. for the men and 1.271 m. for the women), but inferior to that of MM. Bellebor and Guerault (1.50 m.); a figure which places them in the category of small-sized men, *i.e.*, under 1.60 m., and between the Veddas (1.535 according to Bailey) and the Negritos (1.478 m.), after whom we find only the Bushmen.

The cephalic index places these Eskimo among the dolichocephalic, one only, the woman, among the sub-dolichocephalic. Their mean index is 73.51 (maximum 76.88, and minimum 70.95). The mean index of Bessels was more dolichocephalic still; it was 71.37. It should not be forgotten, however, that the figure varies with the locality of the Eskimo. The Eastern Greenlanders of



FIG. 4.—The Eskimo in the Jardin d'Acclimatation.

Davis gave a cephalic index of 71, the Western, 72; those of Virchow, 71.8; those of Pansh, 72.

It is necessary to compare the anterior or intellectual part of the cranium with the posterior part. The results deserve to be given one by one. In Okabak, the total horizontal curve of the cranium being supposed equal to 100, the anterior curve will be represented by 45.2; in Kojanki by 48.5; in the woman by 48.1; lastly in the half breed by 44.7; I do not speak of the children. It is worthy of remark that this numerical classification corresponds exactly with that which each of us had made in estimating the intelligence of each of these subjects. Kojanki and Mrs. Okabak were judged superior to the two others. The mean of the anterior cranium is 46.6, which places the Eskimo in what Gratiolet designates the occipital races—those among whom the posterior cranium outweighs the anterior cranium. The mean facial angle is 66.7°. The height of the nose being supposed equal to 100, the mean breadth will be 70.5, while among the

Cochin-Chinese it is 89, and among the negroes 110, 112, and even 115. One index gives very well the measure of the small prominence or flatness of the nose; this is the antero-posterior nasal index. Among our Eskimo, the breadth of the nose at its base being supposed equal to 100, the mean prominence of that base in front will be 55.5, while the same mean index among Europeans is 66.6.

Such are the principal facts I have been able to collect in reference to the Eskimo of Jacobshavn, now in Paris; they may be defective, because based on a very small number of subjects; nevertheless, it is to be wished that the director of the Jardin d'Acclimatation will continue the experiment so well begun, and that besides the Nubians and Eskimo he will introduce other representatives of races so interesting and so little known, whom civilisation will, so far as science is concerned, cause to disappear sooner or later.

A. BORDIER