



A FRAGMENT OF THE JAKORSHAVN ICE-STREAM.

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GREENLAND. By EDWARD WHYMPER.

IN the present paper I am going to speak of a land that enjoys a glacial period, which compels its inhabitants to live near the sea and upon what they can obtain from it; of a treeless country, without corn, where the scanty vegetation, pressed down by almost perpetual snow, creeps along the soil upon which it can hardly subsist. A land where none are rich, and where all are equal; where murders are unknown, and quarrels rare; where there is neither organ-man or wife-beater, and where children are allowed to do just as they like; and, *more* remarkable, a land without debt or taxes, criminals, soldiers, or policemen.

This land is Greenland; a country that stretches from 60° to beyond 80° N. latitude; that, in its widest parts, extends over forty degrees of longitude. It is entirely and completely covered by glaciers, with the exception of a narrow margin or belt of land upon the coast.

The country was not always covered by glaciers. In a modern geological period (the lower Miocene) the Greenlander, if he had then existed, could have sat under his own vine and under his own fig-tree, and after dinner could have taken walnuts and hazel nuts with his wine; he could have had a shrubbery of no mean order, and seen stately oaks and sequoias, which vied perhaps in magnitude with the 'big trees' of California.

This is not the language of parables. Leaves of all these trees have been found in a fossil state, and of more than seventy others, at places a little to the north of Disco Bay. Altogether about 140 species of trees or shrubs have been

obtained in a fossil state, none of which now grow in the country ; from which it is evident that at an earlier time the climate of Greenland was at least temperate and mild, if not semi-tropical.*

All my readers are, no doubt, perfectly aware that the name Greenland has not only been applied for several centuries to the islands of Spitzbergen, Jan Mayen, and Iceland, as well as to Greenland proper, but that those engaged in northern trade still use it in this manner.† The practice doubtless arose from the supposition that these lands all formed part of one great mass. It has long been known that these islands are all separated from Greenland by many leagues of sea, but the extent of the continent itself remains a great and perhaps an impenetrable mystery. Its early history is both interesting and romantic.

Soon after Charlemagne had eaten up Germany, and about the time that the Danes, in their turn, were trying to do the same to England, about the time that King Alfred burnt those memorable cakes, there was a disturbance in Iceland, in which some were killed. It was signified to one Eric, the red-head, who was concerned in this affair, that he must take up his quarters somewhere else for the space of three years ; and he, instead of going to Scandinavia, steered boldly to the west in search of new land. The result was he discovered Greenland. He gave to it its name. A very plucky fellow he must have been ; but one's opinion of him is lowered when we learn that after all he was only a species of 'promoter.' At the end of his three years Eric appeared again in Iceland, and represented, with the absence of exaggeration for which promoters are so noted when getting out their preliminary prospectuses, that

* Sir Charles Lyell delivered an admirable address upon this subject, after the reading of a paper by the writer, upon Greenland, at the Norwich meeting of the British Association in 1868. Several of the species from the Miocene beds of North Greenland are identical with those found at Bovey Tracey, in Devonshire ; which latter were described by Mr. Pengelly and by Prof. Heer of Zurich, in a paper communicated to the *Philosophical Transactions* several years ago. A paper by Prof. Heer, upon the new species obtained by the author and his assistants in North Greenland in 1867, has just appeared in the same publication.

† A paragraph is usually seen every year in our newspapers, towards the end of April, headed 'The Greenland Fishery.' The *fish* are seals, and they are not caught, as the uninitiated might suppose, off the coasts of Greenland (or, indeed, anywhere near it), but somewhere between Iceland and Spitzbergen.

the land was A 1; abounding with pastures, wood, and fish, and would prove a first-class investment. Twenty-five ship-loads of Icelanders, it is said, took shares; but of these only fourteen arrived: with the others it seems to have been a case of 'small profit and quick return.'

Many other Scandinavian colonists arrived as time went on, and at length a considerable portion of the coast was settled. The colonies were known by the name of the East and West settlements. In the former there were two towns, 190 farms, eleven churches, and a cathedral; and in the West settlements there were 100 farms and four churches. Bishops—Roman Catholic bishops—were regularly appointed from Europe, and for several centuries resided among their people; and the grateful people used to send large tribute to the Pope, in the shape of walrus tusks.

For a considerable time all seems to have gone well with these Norse colonies; the Scandinavians do not appear to have come in contact with the Eskimo. It is doubtful, indeed, whether the Eskimo lived in the country at the time of which we speak. But at length they appeared; dwarfs, it is said, in comparison with the burly Norsemen, who contemptuously called them *Skrellings* (a Danish word that signified weak or puny); but the *Skrellings* showed themselves a match even for the Norsemen, and did not come off the worst in encounters that took place with them.

Where these Eskimo originally came from who thus came down upon the Scandinavians is unknown. They are the ancestors of the Greenlanders of the present time; and it is traditionally asserted among themselves that they travelled down the east coast. If they did so, they must have travelled over land unknown to us.

These Norse colonies continued to prosper for several centuries. Trade was carried on between Greenland and Europe, and appears to have been profitable; anyhow, Queen Margaret, who ruled Scandinavia towards the close of the fourteenth century, seems to have set up some claim to a share in the gains, and to have stopped free trade. About the same time a good many vessels were lost by shipwreck, the trade gradually dwindled down, at the beginning of the fifteenth century entirely ceased, and Greenland was left to its own resources. The subsequent history is very dubious; there is a long period about which nothing is recorded. It is said, however, that the colonies were not in a flourishing state, and that the Eskimo had destroyed many of the settlers.

The last we hear of them is from a certain bishop; who,

some say, wanted to land, but could not, on account of the ice. He could see the people, the pastures, and the cattle, but he could not come to shore, and so went to Iceland.

I have often thought that this, if not a myth, is one of the saddest events recorded in history. This poor bishop could see endless fat cattle, but was not able to take any tithes; he could see his people, but was not able to excommunicate them; and he—who might have been converted by an Eskimo if he had not been destined to remain in the errors of Christianity—was compelled to return to the country from which he had set out.

At the next time that Greenland was visited, the Norsemen had disappeared, and Greenlandic Eskimo, of the appearance of those now existing, were alone seen; but whether the remnants of the Norsemen were slaughtered by the Eskimo, or whether they simply married among each other until the original, fair-haired Scandinavians became merged into the swarthy Eskimo, we are entirely unable to say. Traces of the Norsemen remain, however, to the present day. They are spread over the coast from Cape Farewell to near Upernivik (a distance of 900 miles), but they are chiefly found in the south. Near Upernivik a stone was discovered some years ago bearing an inscription to the effect that so-and-so and so-and-so cleared the place and erected the stone on April 18, 1135. The stone was sent to Copenhagen, and was considered so precious that it was placed in a conspicuous part of the Ethnographical Museum, enclosed in a sham gold case. The case appears to have demoralised some one; for one day case, stone and all vanished, and no one knows any more about it.*

The first account of Greenland we possess which is not dimmed by medieval fog, is that of our countryman Frobisher, and succeeding him, a long list of worthies, of many nations, tried at intervals to land upon the coast, either east or west. But whilst explorers on the latter coast gradually crept up Davis' Straits, on the former they uniformly met with disappointment. At this period, during the sixteenth and seventeenth centuries, it became the fashion to import natives from Greenland, as we now should do the walrus; and it is not wonderful that they (who were described at first as 'very humane and civill') became both dangerous and treacherous.

* The buildings of the Scandinavians can be distinguished from those of the Eskimo, from the fact that the former almost always dressed their stones. The latter people invariably build with rough stones and turf.

All these voyagers, however, only sailed along the coast; they did not attempt to form settlements, or to explore the fiords or the interior; and it was reserved for a man in humble circumstances to plant the seeds of the present Danish colonies, and to bring the uncivilised natives under the influence of Christianity. I refer, of course, to the distinguished missionary Hans Egede. A new era commenced in Greenland from the time of his landing in 1721, and, one by one, settlements were formed along the west coast, until they stretched, as they do now, from Cape Farewell to beyond lat. 73° north.

Egede settled down at a place he called Baal's River, which is the Gothaab of the present time. He had many difficulties to contend with; not merely from imperfect means and the language, but from those with whom he was unfortunately associated. The traders who went out and settled there were by no means excellent examples of morality. One need only mention their manner of conducting the trade. Blubber was the article in which they chiefly dealt: there was a tariff of course; so much for a barrel of a certain size. But, after the price was agreed upon, they got into the way of knocking the bottom out of the barrel and standing it over a hole made in the ground, and then required the natives to fill it up to the brim as before. They didn't like it, but they did it. It is said they remarked, 'Well, it will get filled at last.' Not only on these accounts had Egede difficulty. When he came to speak on religion, and on future rewards or punishments, there was much trouble, particularly about the latter. He described, in glowing terms, a fiery place of torment, and the natives listened attentively to him. But he found that the little wickednesses he was endeavouring to get rid of, were only practised still more, and he at length discovered that that which he was holding up as a deterrent had no horrors for them—that eternal fire was an extremely agreeable idea. It must not be supposed that in saying these things I wish to depreciate Egede. He was a worthy man, who did much good to the natives, and his memory still lives in the country.

The great ice-covered interior plateau of Greenland can be seen a long way off if the weather is clear. Its summit is almost a dead level from north to south. But when one comes nearer to the coast it is concealed by the hills which are on its outskirts.

The whole of the land on the Greenland coast is mountainous, and although the hills scarcely ever, if ever, exceed a height of 8,000 or 9,000 feet, they effectually conceal the inner, or

glacier-covered land. This latter is at a distance from the coast, varying from ten to sixty or more miles, and, when it is reached, there is an end to land: all is ice, as far as the eye can see. Great as the mass of ice is which still envelopes Greenland, there were times when the land was even more completely covered up by it; indeed, there is good reason to suppose that there was a time when every atom of the country was covered, and that life was hardly possible for man: that the native, if he existed, far from being able to sit under his vine and fig-tree, could hardly have found a spot whereon he could rest. With the exception of places where the rocks are easy of disintegration, and the traces of glacier action have been to a great extent destroyed, the whole country bears the marks of the grinding and polishing of ice; and judging by the flatness of the curves of the *roches moutonnées*, and by the perfection of the polish which still remains upon the rocks, after they have sustained many centuries of extreme variation of temperature, the glacial period which produced such effects must have vastly exceeded in duration, or severity, the 'glacial period' of Europe; and the existing great interior ice-plateau of Greenland, enormous as it is, must be considered as but the remnant of a mass which was incalculably greater, and to which there is no parallel at the present time, excepting within the Antarctic circle. This remnant, although it appears to be continuing to shrink, still sends forth icebergs out of several fiords in Danish Greenland; and the accompanying plate, which represents a fragment coming out from one of these fiords, will serve to give some idea of the prodigious size of the glaciers even in their shrunken state.*

When you approach the shore you will look in vain for towns or villages. One can almost tread upon a Greenland settlement without observing its existence; for the houses,

* In South Greenland, near Frederickshaab, there is a glacier which comes down completely into the sea, with a width of sixteen miles; and nearer Cape Farewell there are several glaciers which give birth to bergs. Between the 63rd and 69th parallel of N. latitude I am not aware that there are any which do so. The Jakobshavn ice-fiord, between 69° 10' and 69° 15' N. latitude, gives off a great number. It is about five miles wide at its mouth, is always completely choked with bergs which extend usually into Disco Bay, as an almost continuous mass, for a distance of seven or eight miles. Although the water off the mouth of the fiord is 600 to 700 feet deep, these bergs are constantly grounding.

being only built of stones and turf, are very difficult to perceive.

On the arrival of a ship, the natives, naturally, flock out to see it; and the first thing that strikes a stranger is that they seem to be all men and boys, and on closer approach it is still not easy to distinguish men from women. This is almost as much the result of physiognomy as of dress. Dirt does something, dress does something, and physiognomy the rest.

They dress almost entirely in seal skin, and the same in summer as in winter. The males' dress is composed of a tunic of the shape of a blouse, fitting closely around the neck and wrists. This is termed an 'anarak,' and it has commonly a hood, which serves for a covering to the head. Sometimes they wear a double anarak; one with the hair inside, and the other with it towards the exterior. Their trousers, also of seal skin, differ but little from the European style, and fit tightly in the leg, going underneath the boots. The boots are formed of two cases. The exterior one, of seal skin with the hair removed; the interior one, of dog skin with the hair turned inside. The soles and the strings by which the boots are tightened around the ankle are usually made of the skin of *Phoca barbata*, which is stouter than that of other species. It should be observed in regard to boots, that European ones are entirely unadapted to Greenland. The country has been so completely worn and polished in former times by glacial action that it is all but impossible to walk in other than native ones. Their soles have not the stiffness of ours, and they consequently allow one to walk over surfaces on which it would otherwise be impossible to keep on one's feet. Soil is extremely scanty, always shallow; when there is soil, it is usually in a rocky hollow into which the water produced by the melting of snow drains. When soil is found it is therefore swampy; and it is not only necessary to have waterproof boots, but to have high ones. The native boots meet all these requirements, and they are light and warm.

The dress of the women is similar to that of the men. The anarak is less tight around the neck and wrist, and is usually without the hood: they occasionally wear underneath it a shirt of thin flannel, or sometimes, one of linen. Captain Graah*

* The whole of the east coast of Greenland, from Cape Farewell to N. lat. 65° 10', is laid down on the sole authority of the late Captain Graah, of the Danish navy. This officer was sent out from Denmark, in the year 1828, to search for remains of the lost Scandinavian colonies; and, in pursuit of that object, made one of the most extraordinary boat voyages that has ever been accomplished, up the east coast of Greenland.

says :—‘ Fashion and vanity have, even here, done their best to make the dress of the women more unsuitable to the climate than it originally was. Formerly their seal-skin jackets reached a good way down over the hips, thus covering the whole body. Since shifts, however, came into use, they have been so much curtailed as to reach now only to the waist : the linen of the ladies would not else be visible.’ As a matter of fact, few women wear the shirt, but all, now, wear the anarak very short. The trousers or drawers of the women are also short, but their boots are much longer than those of the men. They are elaborately embroidered with small square pieces of dyed seal-skin on the front and on the sides, and the upper portions of them are frequently enclosed by a covering of linen. The most material distinction between the dress of the men and of the women is in the top-knot worn by the latter. This, in common with other ‘chignons,’ is sometimes of the natural hair of the wearer, but is frequently stuffed with tow, rags, and all kinds of rubbish. The condition in life of the wearer is indicated by the ribbon with which the top-knot is bound round. Thus young girls, or unmarried women, wear a red ribbon ; married women blue, widows black, and others green. There is a certain significance in these colours, and the custom is one of great convenience to males.

The Greenland women prefer the skin of the common seal to any other for the ornamentation of their persons, and Capt. Graah says that the women who went with him, to row his boats, did so chiefly because of ‘ their expectation of procuring on the east coast, some of those variegated skins of the Kasiniak (*Phoca vitulina*) with which they so much love to adorn their persons on Sundays and holidays ; and which are said to be found there in greater plenty than in the rest of Greenland, and to be purchaseable at a cheaper rate, being held there, in fact, in less esteem than other sorts of seal skins.’

The anarak of both males and females formerly had a kind of tail hanging down both before and behind, but this pattern

His means were insufficient, and he suffered great hardships ; but, nevertheless, during the years 1829–31 he acquired a large amount of information, from which, as above stated, our present maps profit. His voyage was made in an ‘oomiak,’ that is, a seal-skin boat. An account of his journey was published in Danish, and was translated into English by order of the Royal Geographical Society. It may be observed, that all the accounts we possess of Greenland are translations ; excepting an article in Brewster’s *Edinburgh Encyclopædia*, by C. L. Giesecke, there is not a single original description of the country in our language.

has gone out of fashion: they have learnt that not only is it wrong for human creatures to wear tails, but that it is deemed improper to think that they ever had them.

Out of the 2000 males in North Greenland about one-third (630) can catch seals. This is done in the summer time exclusively by means of the kayak. In the winter they have other ways of catching them, which I will explain presently.

The form of the kayak is so well known that it is not necessary to describe it minutely. It has a framework of wood, which is covered by seal skin. It is pointed at both ends and draws less than a foot of water; it is so light that a man of ordinary strength can tuck it under his arm, and, but for its awkward form, could carry it easily.

The pace that a Greenlander can paddle in his kayak, and his skilfulness in it, have been greatly exaggerated. I found, from timing their pace, that it was not ordinarily more than three or four miles per hour, and that the maximum speed of a first-rate kayaker, paddling his hardest, was scarcely more than eight miles an hour. It has often been stated in regard to their use of the kayak, that they can turn completely round in it; that is to say, go under the water and come up the other side. But few natives can accomplish this, and to do it they must wear their especial kayak dress, which is in three pieces, in addition to those already mentioned. First there is an extra anarak, with a hood which can be drawn tightly round the face by means of strings; there is a second article, which is circular, and fits at the lower part closely round the ring of the kayak, and at the upper part underneath the arms. This is also tied down tightly. Thirdly, they have gloves, over which the wristbands of the extra anarak are tied. Thus equipped, *some* natives can perform the feat; but a much greater number cannot do it. Some of the most accomplished natives, however, have performed wonderful exploits in the kayak. I have seen a man—one Timotheus David—who once upon a time harpooned a seal, but the coil of walrus hide attached to his harpoon, managed somehow to pass round his head: he was overturned, and dragged down under the water. Notwithstanding, he managed to extricate and to right himself, to kill his seal and to bring it home. This worthy is still living. His education was rough, but it seems to have been efficient. His father, instead of taking him out in a boy's kayak, by the side of his own, and instructing him in the mysteries of paddling, made him carry his canoe to the top of a little cliff and get in, and then pitched him neck and crop into the sea; remarking as he did it, that if he could not learn to right himself after that, he

would be certain to come to grief sooner or later. This man, Timotheus, has become so expert that he has been known to bring to shore in one day no less than twenty-three seals and a white whale.

There is a tradition that the kayak, instead of being closed at the top, as it now is, used to be an open canoe. It is said that when natives went out in those times, others would stay by the shore to watch the sea-weed, and, when it became agitated they would shout to those on the water, who immediately returned. But, in course of time, seals became scarce, the natives had to pursue them to a greater distance, beyond the point to which the shouts of the watchers could be heard; and thus, unwarned, many who were out in kayak were surprised by storms and perished. The origin of the kayak is attributed to a Greenland mother who had an only son, whom she loved much; and, fearful for his safety, she addressed him one day in the following words:—‘Oh my son! thou who bringest me blubber and seal meat, look out for squalls!’ The rest of her speech it is unnecessary to mention: the result of it was that skin was sewed over the top of his canoe, and it thus formed the pattern of the present kayak.

Nothing but necessity takes the Greenlander out in his craft. There are many young and middle-aged men who shirk using it, and who prefer to idle about and live by the catching of others. It is one of the features of this people that such men do not seem to be despised or to be held in any less esteem than those who do the work.

It is a curious sight to see the kayak at sea. If there are only *small* waves, the canoe itself will be almost hidden, and the man will seem as if standing in the water. They used to puzzle the earlier voyagers a good deal, and some came home and swore that they had seen mermen. One author says:—‘The first of these monsters (or mer-men) had the likeness of a man, as to the head, face, nose, and mouth: save that its head was oblong and pointed like a sugar-loaf. It had broad shoulders and two arms without hands. The body downwards was slanting and thin. The rest below the middle, being hid in the water, could not be observed.’ This description clearly refers to a kayaker.

When a native goes out seal-catching he takes his kayak down from a stage where it has been placed to keep it out of the way of the dogs, bottom up, to keep out rain or snow. He carries it down to the water, and then secures himself as I have described. He sets up a little piece of calico in front, so that he can only just see over it. This is supposed to make the

kayak look like a bit of ice. He paddles away to a likely place, and looks out. When he sees a seal come up to take air, he ducks his head behind the screen, and, directly the seal goes down, paddles forward desperately for a few seconds. If he is near enough to the seal the next time that it comes up, he endeavours to strike it with the harpoon. This is a very ingeniously contrived weapon. There is a flat piece of wood, a kind of handle, which is detached from the shaft, and which is left in the hand when the harpoon is thrown. There is, secondly, the shaft, also of wood, with an ivory point; and, thirdly, there is the harpoon head, of bone, tipped with iron, which is placed on the ivory point attached to a walrus-hide line, but which becomes immediately detached from it when the seal is struck. When the harpoon is thrown the man at once puts the handle or 'harpoon-steerer,' as it is termed, into a place of safety, and then paddles forward to pick up the shaft, which remains floating on the water. If he has struck a seal, he can watch it by the movements of a seal-skin bag, inflated with air, which was fastened to the other end of the walrus-hide line; and, if he has struck one, this same bag will sooner or later exhaust or kill the animal, which naturally endeavours to escape under water. If, on the other hand, he has failed to strike the seal, he has only to pick up the line and the bag, and to try again. They fasten the seals, when caught, to the side of the kayak; and, when two are caught, they usually return to shore: but it is no uncommon thing to see a man come in with a seal on each side, and with another towing behind, or laid upon the hind part of the canoe.

We will now suppose the man has got to shore with his seal. If he is a married man, his wife, or, if not, his mother or sister, run down to meet him; drag the seal at once upon the rocks, and take off the skin and blubber. If it is fat, that is to say, has a thick coating of blubber, many will be their exclamations of delight. 'Oh, see what lovely blubber!' or words to that effect, will be echoed all around. The meat, skin, and blubber are then dragged up by the women to the man's house. But in the mean time the dogs will have collected, and some will most likely run through the legs of the women and upset them; while others run off with the food. If this occurs there will be a tremendous hullabaloo. The women tear their hair and howl, the men throw sticks and stones at the dogs, while the children pull the dogs' tails, or batter their heads. I have several times seen a seal carried off in this manner, and nearly devoured or pulled to pieces before the owner could recover the remnants of his property.

When these little difficulties are overcome, the meat goes at once to the pot and is eaten. If there are two or three seals, representing at least ninety or a hundred pounds of meat, it will still be the same. It is certainly correct on the whole to say, that whatever number of seals a man brings to land, every morsel of the meat will be eaten in three or four hours' time. The blubber is for the most part sold to the Danish traders: only a little is reserved for the lamps. The skins are not bought from the natives until they have been cleaned, and a considerable number are retained by them for their own use.

Seal meat may not be at all bad eating, but for my own part I would not eat it if I could get anything else. With the natives, it is just the contrary; they will not eat anything else if seal meat is to be had. I tried them with preserved ducks and green peas, but they shook their heads and said they very much preferred pussy meat, which is a sort of nickname for seal meat. They live, in fact, almost exclusively upon it: vegetables of all kinds they despise. There is no doubt that seal meat is very nutritious, and if it is well stewed, it bears a close resemblance to beef. An extract is made by boiling it down that is almost precisely the same as Liebig's in taste.

In winter the seals are obtained in other ways. Some they catch by nets, but more commonly they drive out with their dog-sledges, and endeavour to come upon them when they are lying upon the ice; or else to find holes at which they are coming up to breathe. For stalking them the natives use a little sledge upon which a calico screen is set up; the dogs are trained to stand still as the Greenlander wriggles along the ice, pushing the sledge before him; and directly he fires they rush up and make for the seal.

But the easiest way of getting a living in the winter is by looking out for one of the holes in the ice at which seals, narwhals, and frequently walrus and whales, may be found endeavouring to get air. The crowding together of the sea animals to one opening in search of air is called 'sarps' by the natives. Giesecke* says, 'The poor animals try to escape from

* Charles L. Metzler von Giesecke, to whose account of Greenland I have referred at p. 8, was born at Augsburg, in April 1761. His father was a wine merchant, but the son was educated with a view to the Church. The idea was changed, and he studied law; but this too was abandoned, and he took to mineralogy. He became acquainted with Schiller and Goethe, and it is supposed that association with them caused him to turn his attention to dramatic literature. Anyhow, he did so, and subsequently joined the company of a small Bavarian theatre. He performed various parts with the company until it came to grief,

death by suffocation, instead of which they are killed in a much more cruel manner. We ate some pieces of "makkak," or skin, which the Greenlanders had cut from a live whale which had come up to take air. I saw pieces they had cut out more than one yard in length.*

I have lingered thus over the seals because they are all-important to the Greenlander; without them he would cease to exist. Five species are found on the Greenland coast, two of which, the *Phoca barbata*, or bearded seal, and *Cystophora cristata*, or hooded seal, are only caught occasionally; while another pair, the *Phoca Grælandica* and *Ph. fœtida* occur in such numbers as almost to defy calculation. It is not uncommon for forty, fifty, or sixty thousand skins to be sold in one year to the traders. This by no means represents the whole number caught. Each native probably uses for dress, for coverings to boats, and for other purposes, or wastes, at the very least, five or six skins per annum; so there is no

and then C. L. Metzler, disgusted with his reverses, changed his name and assumed that of Giesecke. He then studied for some time under the celebrated Werner, and afterwards joined the Austrian army, but, receiving a severe wound, he was obliged to retire. He next went to Copenhagen, and was there when the city was bombarded by Nelson. A few years afterwards he was sent to Greenland by the Danish Government to report upon the resources of the country, a work which occupied him nearly eight years. He travelled completely down the west coast, from about 74° N. lat. to Cape Farewell, and made very extensive collections of rare and valuable minerals; but his usual ill-luck pursued them, and a great portion of them were lost to him; being captured by a French ship, when on their way to Europe. The French ship was taken by an English frigate, and poor Giesecke's collections were turned out at Leith Custom House and sold for the nominal price of 40*l.*, to Mr. Allan, of Edinburgh. They were subsequently purchased for a very large sum for the British Museum, where they at last rest in peace. Another of his mineralogical collections is at the University Museum at Copenhagen, and fills forty-five drawers, and a third is at Frankfort-on-the-Maine. Giesecke finally settled down at Dublin, as Professor of Mineralogy, and died there in 1833. He was rewarded by the King of Denmark with the Order of the Dannebrog, and upon the strength of this has been frequently called Sir C. Giesecke. His journal of his residence in Greenland is well known, but it has never been published, although several copies have been made of it. It is from one of these that the above extract is made. I am indebted for most of these particulars of the life of Giesecke to my friend Mr. R. H. Scott, Director of the Meteorological Office, formerly Professor of Mineralogy at Dublin.

* Whale skin is both wholesome and palatable. In taste and in crispness it bears a considerable resemblance to filberts.

doubt that more than 100,000 seals per annum are caught in Danish Greenland alone.

This quantity, large as it is, is necessary for the existence of the natives under their present circumstances. The whole of the meat they obtain from other sources amounts but to a fraction of that which they obtain from seals, and they could not increase this extra supply to any great extent. When the seal becomes extinct in Greenland, the natives will probably follow.

Commercially these seals are most valuable for their blubber, the skins are not worth much; 3*s.* to 8*s.*, according to size, is about their present market price. It is unnecessary to observe that the fur seal is not found among the five species.

A more agreeable pursuit than seal-catching is fishing for sharks. The Greenland shark may literally be said to swarm in the deep waters of Disco Bay. They are so numerous that you have only to let down a hook to the bottom to catch one. A few small boys will go out in a boat for a mile from the shore, and come back in less than a couple of hours with their boat surrounded by sharks of seven or eight feet length. There is no particular sport in this kind of shark-fishing, but it is the results which are so agreeable. These sharks have fine livers full of admirable oil, and all that the natives have to do when they come to the shore is to take out the livers, put them into a cask, and sell them to the Danes. The wretched sharks, left ripped open on the shore, are often partially eaten by the dogs before they are thoroughly dead.

These sharks frequently grow to a length of twenty feet and upwards, and a single liver will sometimes yield a Danish tun cask (about twenty-seven gallons) of oil. It is commonly said that this oil is the cod-liver oil of commerce; I cannot say whether this is the case, but I can state from my own knowledge that it has *not* a very disagreeable taste, and that it is excellent as a lamp oil, giving little smoke and a brilliant white light. The following statement will give an idea of the quantity of sharks, and of the ease with which the oil may be obtained. In the month of July 1867, during which time there was great sickness, and consequently few people at work, nearly 2,000 gallons of shark-liver oil were brought in by the natives at the settlement of Jakobshavn alone. This was chiefly obtained by children, and was probably the result of about 500 livers.

After the seals, the sharks are perhaps of more importance to the Greenlander than any bird, beast, or fish which he has the opportunity of slaying. But this fishery is not encouraged

by the Danes; the natives can earn money so easily by it that it makes them inordinately lazy, and troubles result. Fish are plentiful on most parts of the Greenland coast, particularly cod, hálbut, and salmon. But, although their quality is little, if at all, inferior to the best we can obtain in this country, the Greenlander does not care for them; he will eat them, and does eat them, but he will seldom do so unless there is great necessity. Seal meat is usually the alpha and the omega of a Greenlandish dinner; if it is present all the rest can be spared, if it is wanting, they think the times are very hard indeed. Yet *we* should not grumble if, transplanted to Greenland, we found it wanting! while ptarmigan, eider-ducks, the glaucous gull, and the Greenland falcon were to be had. The last-named bird is superb eating; it is superior to the partridge, and possesses the great merit, when in fair condition, of yielding plenty of meat. All of these varieties of food the Greenlander has, and frequently has in abundance; but it is to be doubted whether he could obtain a sufficient supply to support life from these sources at all seasons, and it is certain that in his heart of hearts he cares for none of them as food. Let us now give a glance at a Greenlander's home.

The Greenlandish house, it has been already said, is built of stones and turf; few of them have doors, and they are entered by a sort of tunnel of the ordinary Eskimo kind—lowest at the entrance and widening as you advance. Now-a-days most of the floors are planked, but the furniture is remarkably limited. A low bench serves as bedstead, and a few dog skins and seal skins for coverings. Some exceptional natives have bear skins or eider-down coverlets, but these are not often seen. Two or three pots, which are used indiscriminately for every purpose for which pots *can* be used, and a few bone implements, which serve as spoons, or pot scrapers, or skin scrapers, will be almost all that you will see; but it will not be all that you will smell, and perhaps feel.

The houses remain, upon the whole, very much as they were formerly; not at all because the natives have not the means or the opportunity of bettering them, but simply on account of their natural indolence. The price that a Greenlander receives from a trader for the skin and blubber of one seal is seldom less than five or six shillings; it may be much more, and it is not difficult for an industrious man to catch several seals every day throughout the year. Planks, stoves, and almost every article of general utility can be bought at fair, fixed prices at the Danish stores, but the natives spend very little of their

money upon such things, and chiefly get rid of it over what may be considered luxuries or superfluities. So their houses remain very much as they were formerly.

The Greenlander of the olden time, on the contrary, was thrown almost entirely on his own resources. Timber he had none, except such as drifted to the coast. Of iron he had none, except what he could get from foreigners.* He used bone chiefly in place of wood, and stone combined with bone in place of iron. These old tools were in common use and manufactured to within a century and a half from the present time. The elder Egede saw them in use and brought some to Copenhagen. After the colonisation of the country they were superseded by superior tools, as the Danes brought wood and iron sufficient for all the wants of the natives. The old tools and weapons were cast on one side, despised, and the knowledge of the means by which they were fabricated passed away. At the present time it would be as difficult to find a native who could make a stone arrow-point as it would be to find a cockney who could make one. But although the knowledge of the means by which their implements were made may be said to have entirely died out, it is not so in regard to their uses. Though the native uses new materials, he retains in some cases the same form—in harpoon and in lance-points, for example. But in place of bows and arrows, the scrapers for skins, and the flakes, he now uses rifles and knives of different kinds. Bone he still uses for numerous purposes, but stone, except for blubber lamps and for weights to fishing lines, has no economic value. The aboriginal Greenlanders, like most uncivilised peoples, had a great objection to use the property of persons deceased, and placed all their possessions in or around their graves. The stone and bone tools and weapons were disposed between the chinks of the stones forming the tombs, or were sometimes enclosed in a small wooden box, neatly fastened at the corners by little pegs of bone. This has, of course, been extremely convenient for European collectors; and so thoroughly have the graves been denuded of these interesting (although not prehistoric) remains for the Scandinavian museums, that it is rare to find one which has not been rifled.† A search among the *débris* in the interior of a single ruined native house of the proper age is likely to produce more results than an examination of twenty graves, and the best

* Meteoric iron is occasionally, although rarely, met with.

† I refer to the northern districts, but, for aught I know to the contrary, the observation is true in regard to the whole country.

places to examine are the little groups of houses (one can hardly term them villages) which have been abandoned since the formation of permanent settlements by the Danes. In such places, after the turf has been removed, stratum below stratum, floor below floor, of accumulated filth will be found, composed of fragments of bones of seals, whales, and reindeer, scraps of all kinds of skin, and of animal matter more or less decomposed. Amongst this one finds the old stone tools and implements, lance and harpoon-points, arrow-points with highly polished sides, carefully barbed, or frequently elaborately dentated on the edges, scrapers which were used to prepare the skins, and drills of stone for drilling holes in stone. Those found in the centre of the floor are usually broken, or more or less imperfect, and were probably cast on one side; and the most perfect are almost invariably found by the sides of the walls, or between the stones with which the walls were built. The natives, in the absence of cupboards, seem to have been in the habit of placing their points and tools in the nooks and crannies, to take care of them, and frequently put them away so carefully that they could not again find them. Amongst other things, one will sometimes find old Dutch beads, which were doubtless obtained by trade with the early whalers,* or a rudely carved imitation of the female form, with top-knot and pendulous breasts, made probably by some fond father for his dusky darling. Such suggestive discoveries serve to lighten one's labour; for it is both laborious and tedious to extract these interesting relics of a past age. Each lump of dirt, each mass of putrid matter, has to be crumbled into small fragments before anything will be found, and usually, when something hard is met with which seems to be promising, its envelope of dirt has to be washed or scraped away before its true character is revealed.

The juveniles are invaluable for this work. They grub admirably; they cram the lumps of filth into their little mouths, and thoroughly masticate the dirt, to see if they cannot obtain anything hard among it; and, in this respect, they are much superior to their elders, who are above doing such things. Peppermint lozenges and raisins are most certain producers of stone implements by this process. The implements themselves are made of flint, chert, chalcedony, agate, jasper, rock crystal, greenstone, hornblende, and clay-slate. Many of them are excellently finished, and show that the

* They have not been obtained from the Danes, and are found deep down in the *débris*, which is a proof that they are of considerable age.

natives had attained high proficiency in this branch of art. Some of the scrapers are identical in form with those obtained in France from caves of great age, and some of the other varieties can be matched with implements found in Yorkshire, and also in Ireland. A few forms are characteristic of Greenland; but, for the most part, the types are similar to those which have now been discovered all over the world—from Britain to Japan.

I have reserved to the last a description of the Greenlander himself. The population of Greenland amounts, almost exactly, to 10,000 persons; of these, 4,000 inhabit the northern districts, and the rest the southern ones. The whole number is divided very equally between males and females. Rather more than one half of the people in Greenland are known half-breeds. In height the Greenlander of the present time is rather below the average height of Europeans. He can be exceeding ugly, but he is frequently not ill-looking. The complexion varies greatly. He is not long lived; out of the whole population but 11 per cent. are above forty-five years of age, and sixty years is considered a great age to arrive at.

Children are spotted at birth,* and are slow to be weaned. Examples have been known, who, up to the age of seventeen or eighteen, have behaved in the manner of infants. In their marriages and burials they have adopted Danish customs, and polygamy is practically unknown.† The former practice of burying their dead under a pile of stones is now abandoned; they are for the most interred with the ceremonies of the Lutheran Church. They have also given up placing the property of persons deceased in the grave; but they still exhibit reluctance to use anything that has belonged to one who has died, and they refuse altogether to wear their clothes. In former times, when troubled by fancy or in reality, they used to 'consult their medicine men, who were termed 'angekoks,' and who were a convenient combination of priest, doctor, and conjuror. These angekoks seem to have been the only persons distinguished from the general mass of the natives,

* I am informed that they have the usual colour of newly-born infants, but that there is one spot of dusky colour upon them, which afterwards gradually spreads over the whole body.

† Egede says: 'Commonly they are contented with one wife. There are some, but very few, that keep two, three, or four wives; but these pass for heroes, or more than ordinary men, in that, by their industry, they are able to subsist so many wives and children.' Now there are no heroes. Mormonism has not yet taken root in Greenland.

and they had many privileges. The Danish pastors and missionaries believe that the angekok is extinct. Publicly he appears to be so, but the natives are known to hold secret meetings, about which, strange to say, none of the Danes are able to learn details; and at these, it is believed, angekokism is still practised.

The profession, as already said, included spiritual affairs, medicine, and jugglery. An important part of the income of the profession was derived from raising good winds and calming bad ones, and this branch of the business seems to be still carried on. My interpreter, who had lived several years in the country, told me of a case in point. He was travelling along the coast in a boat when a bad wind set in, which continued for many days; he wanted to go on, but could not, the wind being contrary. After several days a native came to him and said, 'I am angekok; I can get you good wind.' My interpreter, being a man of the world, said, 'How much?' The answer was prompt and business-like: 'Two glasses of brændeviin, two dollars, and *you must not tell the priest.*' 'Very well,' said my interpreter, 'when you get the wind I will pay you.' 'No,' the other quickly replied; 'it is strong work to make wind, and I must have the brandy first.' So he had it, and then commenced operations. He obtained a stick, then some tar, and smeared the stick with the tar; then, going to the top of the highest ground near at hand, he stuck in the stick, and selected from his person one of those small insects that plagued the Egyptians, put it in the tar, and watched its strugglings; he stood above it and waved his arms, muttering unintelligible incantations. The wind, it is said, came, and my interpreter went on his way. I relate this story as it was told; it will serve to show the ridiculous arts practised by the angekoks.

The Greenlanders are not apt to express either pleasure or displeasure. It is rare to see an angry person, and even the sulky stage is seldom witnessed. Gratitude for gifts must not be expected. If you have property, it is considered right and proper that you should give; you are not obliged to give, but if you once stop before all is exhausted, you will produce difficulties. These facts must be considered at the same time as another, namely, that all property with the Greenlanders themselves is common. If you have nothing to give, or if you have clearly exhausted all your resources, that is nothing: it is a state the Greenlander is accustomed to, and understands. But, inasmuch as the Greenlander may be said to possess no property but that which is eatable, and all such property is by

long usage common to all, he cannot be got to understand when a gift is made that he is in any way indebted for it.

The Greenlander has a great aversion to soap, and is never known to use it, except to wash the bodies of persons deceased. Great as is their dislike to soap, it is surpassed by their dislike to corpses. Hence, when a person is taken seriously ill, the relatives or friends will visit the Danish stores to lay in soap; and it is remarked that whenever soap is purchased there is sure to be a death. The soap, perhaps, hastens dissolution; whether this is so or not, I am unable to determine. But on all hands it is agreed that the Greenlander does no murder—the crime is unknown in the land.* Of the remaining Commandments he observes about seven, but scarcely more. Envy, hatred, and malice are less common than in more Christian lands; honesty is scarcely a virtue with him, it is a habit.

The Greenlanders exhibit a strange mixture of boldness and timidity. In their canoes they will perform feats that would be trying to most Englishmen, but in their nervous fancies they show a weakness that would disgrace a child. An angry look, a gesture, is sufficient to terrify them, or to fill them with the gravest apprehension. They are haunted by fears of imaginary wild beasts, and shudder at the very idea of their unknown ice-covered continent. They hesitate to venture out of sight of the districts with which they are acquainted, and show the greatest repugnance to go alone with a stranger. In these matters the adults seem to be more childish than the children.

The last topic upon which I will speak is the Administration. The country is colonised by the Danes, and the trade carried on is directed by a separate department at Copenhagen. With the exception of the mineral cryolite, it is a strict monopoly. No one is allowed to settle or to trade in the land, except such persons as are appointed by the Direction at home. The trade is not carried on under ordinary commercial principles; it is conducted for the benefit of the natives—not with any idea of making a profit. I confess to having been sceptical about this when I found the paternal Government buying bear skins worth 5*l.* apiece for 4*s.* 6*d.*, although they did

* No murder is known to have occurred in Greenland for many years. At the same time, one may observe that it would be more easy to commit murder without detection than in a more densely-populated country. It is possible that some of those who are returned as 'lost in kayak' may have fallen victims to the enmity of others. Anyhow, the Danes are so unaccustomed to the crime, that they declare they would not know what to do if one occurred.

supply priest and doctor for nothing ; but I have now reason to believe that they do carry on trade, to the best of their ability, for the benefit of the natives, and that it yields a remarkably small profit.

The prices are low that are paid to the natives for their commodities ; but, paradoxical as it may seem, it is probable that if the traders paid very much less the natives would be proportionately better off ; for this reason—the Greenlandish creed is, ‘ take no thought for the morrow, eat, drink, and be merry.’ So long as they have any food to eat they eat ; they have no idea of laying up for a rainy day. If a man catches three seals in a day—as one can very easily most of the year—he has 60 or 70 lbs. of meat to consume, and he will receive from the Danes for skins and blubber about 18*s.* or 20*s.* The native passes from the blubber-house to the shop, and lays out the greater part of his money at once in coffee, tobacco, gunpowder, and lavender water. He gets a great quantity for this money, for, by the regulations of the trade, coffee and tobacco are supplied to him at European prices. This is one way in which the profit goes. But do not suppose that there is any difficulty in his getting through the amount : all property, you remember, is common ; the neighbourhood flocks in, and quickly consumes it ; hence, the more a man gets the worse he is off ; the more a neighbourhood has, the more gluttonous, intemperate, and idle it becomes. The cream of the joke is, that those who do the catching do not get the smallest credit for it ; the others consider **THE FOOD**, purely and simply, without any reference as to how it has been obtained. It will be understood from this that any endeavour to compel the natives to work would most probably turn out a failure. The Danes do not attempt it, and they have not a single policeman, soldier, or magistrate in the land. What the natives will sell, that they buy, paying for it in money.

The colonies or ‘ districts,’ as they are termed, are thirteen in number, and are divided into two ‘ inspectorats.’ The inspector of the northern districts resides at Godhavn, and of the southern ones at Godthaab. The chief place of each district has usually a principal and an assistant trader, a Lutheran pastor, and a cooper. These are all the Europeans ordinarily found at the principal settlements. Each district has, on an average, five smaller trading posts, at each of which a solitary Danish man, or perhaps a half-breed, resides.

The Danish establishments are very small ; they are frequently short-handed and in need of assistance. But how can assistance be obtained from the natives with the state of things

described? They have so few wants, and can supply them so easily that there is no inducement to labour. No ordinary pay would be an inducement! The mystery can be explained in one word—'schnaps.' Schnaps in Greenland does not mean exactly that which it does in Europe. It means something hot, tasty, and piquant; dilute sulphuric acid, mixed with cayenne pepper, would be considered a very superior schnaps. Petroleum would also represent schnaps. What the Danes do is this. When a native works for a day, he gets ten pence in money, and three glasses of very inferior brandy, or, if rowing, perhaps four. This is how Greenland is ruled; the post is carried on by this means, and the ships are loaded, unloaded, and towed out of harbour.

This powerful agent would of course become of none effect if unrestricted communication were allowed with the world, or if spirits were sold by the Danes themselves. No spirits, therefore, are sold, with one curious exception. Lavender water is sent out from Copenhagen to the traders, under the impression that it will find favour with the ladies; so it does, but they do not, however, apply it externally, but drink it, because it makes them comfortable. This is the only spirit that can be purchased, and it is in great request. A century ago brandy was disliked, refused, by most of the natives. They called it 'the maddening drink.' But *now* the lust for spirits which has been developed is altogether horrible; the demand for them is unceasing, and it is not too much to say that in Greenland all things are possible to a man who has a cask of brandy, so long as it lasts. It is impossible to describe how revolting this incessant demand for spirits becomes. Fortunately for the natives, the amount they can obtain is very small, and, even if it were otherwise, their interiors, from being so well coated with grease, might allow them to do with impunity that which would be fatal to others.

I must conclude with but one word about the language; and, indeed, if the space at my disposal were greater, I should have some difficulty in doing justice to that sententious dialect of the Eskimo tongue. A single word frequently embodies an idea; but then the word has no deficiency in length. It will readily be understood that a language which can boast a word like 'savecenaarreatoresoaratlaromaronatetok'* presents

* Words of twenty to twenty-five letters are common in the Greenlandic-Eskimo dialect. That quoted above is said to mean, 'You must try much to get a good knife,' and I am informed that the meaning of this sentence cannot be expressed in a shorter manner.

some perplexities, both in construction and pronunciation, to the beginner, and it is possible that there is not a man living who could intelligibly describe the principles upon which this and their other equally magnificent words are built.

In these slight sketches I have endeavoured to present some of the least disagreeable features of Greenland and the Greenlanders. In several respects the native of the present time is an advance upon his forefathers, but in others he has decidedly retrograded. The policy of the Danes, although far from perfect, is perhaps as good a one as can be devised for this peculiar people; and, although it is impossible to express any particular admiration for a system of administration which governs a country by means of brandy, it must be admitted that it is a very easy thing to point to natives who have been treated in a far more objectionable manner. At no time since the Danes have had possession of the land has there been any interruption to the good-will which has prevailed; and the indigenous population, instead of being exterminated by different processes, is, and has been for a long time, steadily increasing.

THE FATAL ACCIDENT ON THE LYSKAMM. Read before the Alpine Club on Tuesday, March 29th, 1870. By W. E. HALL.

IT is, I trust, unnecessary to say that the following paper has not been lightly undertaken. Under ordinary circumstances, to review after some months the sad remembrance of an Alpine accident would be as painful to the Club as it would be useless and unjustifiable. None of us would wish that the way in which a relation had died should be made a subject for public remark; and fortunately it has been very rarely that an accident has occurred of such kind that any good purpose would be served by dwelling upon its incidents. It has in most cases been easy at once to see that rashness or incompetence on the part of the victims, or of one of them, has been the cause of disaster; and until in some new order of things rash men listen to the words of prudence, and incompetent men are willing to be persuaded of unfitness, it is best that criticism should be silent, and that we should each draw morals for ourselves alone. If, then, I speak to-night, it is because in the particular instance the circumstances are not ordinary—because, in fact, they are such that it has become a positive duty to direct to them the attention of the Club.