

FROM THE EQUATOR TO THE POLE

ADVENTURES OF RECENT DISCOVERY

BY EMINENT TRAVELLERS

WITH FORTY-FIVE ILLUSTRATIONS



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PREFACE.



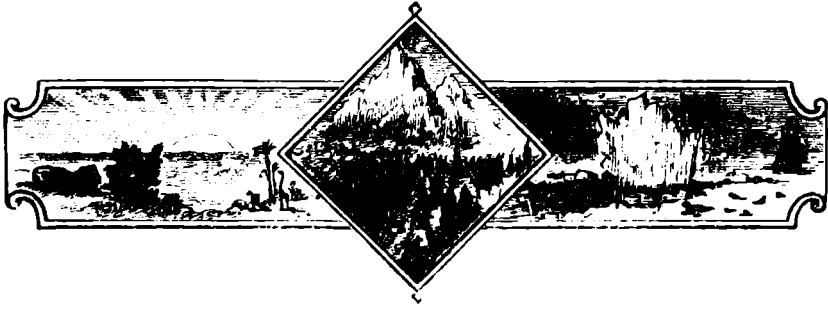
THE globe on which we live appears very much smaller to us than it did to the ancients.

With certain exceptions of eternally frozen waters, every part of the ocean has been sailed over; so that the navigator is lucky who finds an island of even a few hundred yards square which has never before been visited. The great continents have been mapped out; and, therefore, the world seems much more limited to us than it did to the English and Spanish explorers of the sixteenth century, when, westward and northward and southward, civilisation was bordered by unknown mysterious realms.

This very fact, perhaps, gives an intenser interest to the few untrodden tracts which still remain. These are chiefly to be found along the equator

in Africa, amongst the tops of the Himalaya mountains, and around the north and south poles.

By the kindness of the enterprising travellers whose narratives are given in the following pages, we are enabled to bring together in one small volume some of the latest discoveries made in all these three comparatively unknown regions. The great lake or inland sea of Tanganyika formed, as is well known, the limit of the illustrious Dr. Livingstone's travels from southern Africa towards the north. Mr. Thomson has made it the centre of new and striking discoveries. The achievements of Mr. Graham with Swiss guides amongst the great Himalaya range have not only enlarged human experience of high altitudes, but would seem to bring within the range of future possibility an ascent of the highest ground on earth. Captain Markham, who reached a point nearer the pole than any other explorer, here tells briefly the story of his achievement. Our young readers may well be grateful to such distinguished men for allowing these various exploits to be brought together in one view.



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IN THE HEART OF AFRICA.



IN THE HEART OF AFRICA.

BY JOSEPH THOMSON.

CHAPTER I.

ON THE SHORES OF TANGANYIKA.



WHEN our story begins, the East Central African Expedition stands by the shores of the Tanganyika. It is a proud moment for all of us ; and, like boisterous schoolboys, we give free vent to our delight. Down go the loads, and with shout and song a ring is formed of energetic dancers, who literally plough up the ground as if they were shod with iron, while the woods and rocks re-echo with the thunders of their guns.

With the waves of the lake rippling at our feet, the roll is called ; and as each sonorous name is uttered, a cheerful “ Eh Wallah ” (Here, Sir !) is

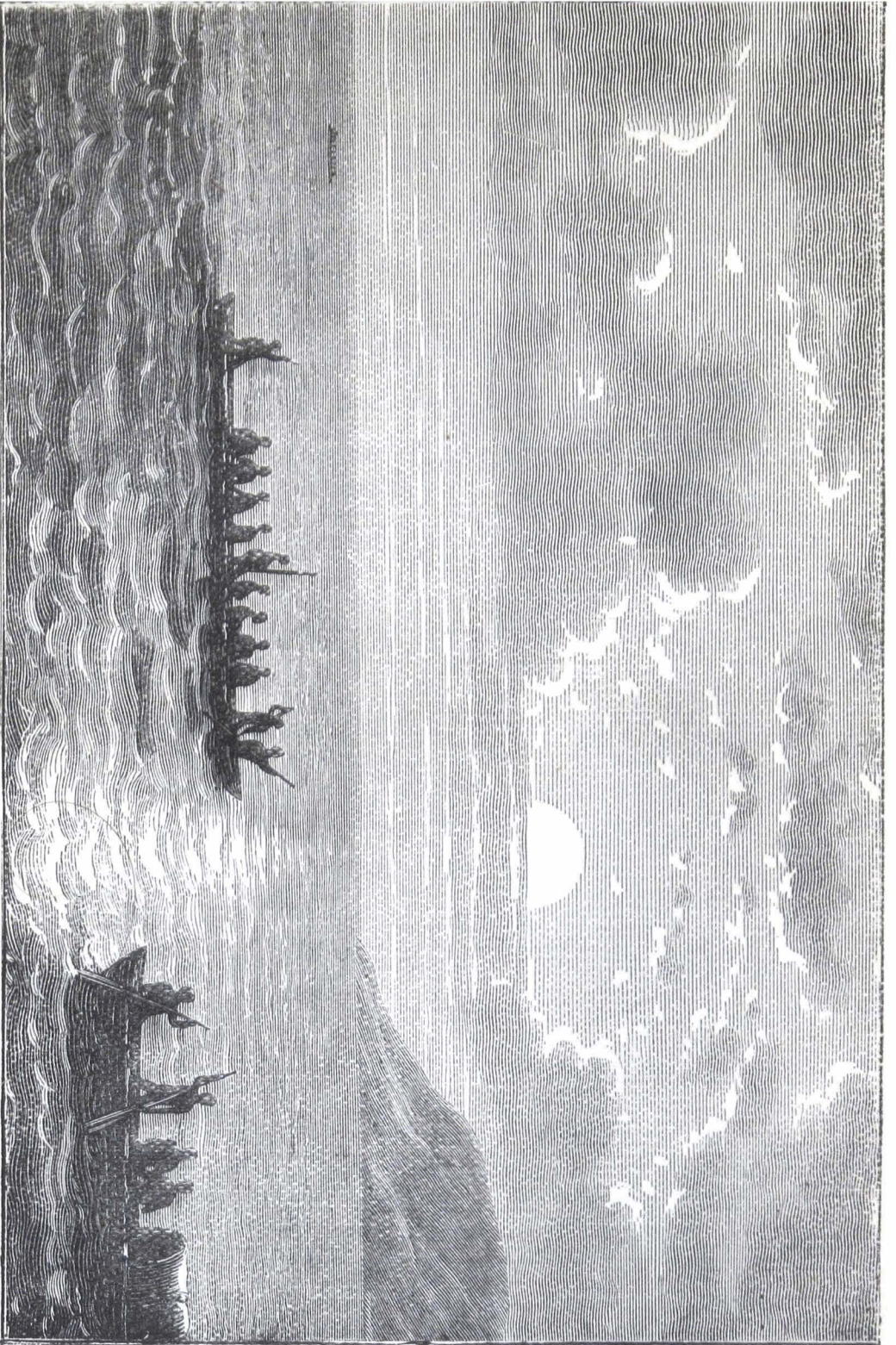
returned, until the list is finished. Out of the one hundred and fifty men who had left the Indian Ocean there was not one absent. Neither desertion nor death had deprived us of a single porter—an occurrence unique in the history of African travelling.

Tanganyika was the terminus of the route marked out for us by the Royal Geographical Society. Our appointed work was thus finished, and we might with all honour have returned once more to the comforts of civilisation and the joys of home. But an irresistible impulse within me forbade the thought. The sight of that glorious lake, with its enclosing mountains, in the bosom of which it lay so calm and still, raised a craving to see and know more of it. The setting sun, reflected from the rippling water, seemed to form a veritable path of gold inviting me onward.

And then there was the fascination of mystery about the question of the lake's outlet. The conflicting statements of Cameron and Stanley had only made the mystery greater. Was the Lukuga the lake's outlet or not? Here was a problem which I could not leave unsolved, so I braced myself for a new effort.

The point we had reached was the most southerly part of the lake, where it forms a narrow

“In front lay the lake.”



acute angle, running into the subtending plateau. At one side a point of land extended into the water, like a huge quay, rising to a height of three hundred feet in sheer rocky precipices, and topped by a covering of trees. Over this could be discerned a bay, surrounded by picturesque and almost perpendicular mountains, three thousand feet in height. On the opposite or eastern side the shores rose less abruptly, but in great inclined steps, till they culminated in the magnificent Lam-balamfipa Mountains, eight thousand feet above the sea, the whole being clothed with a dense and uniformly green vegetation. At our feet dashed a delightful clear stream, lined with luxuriant trees and tangled creepers. In front lay the lake in expansive beauty, with its broken shore-lines and threatening walls of rock, here sweeping round in a fine bay, there forming a miniature fjord, while the scene was further varied by capes and islands, like emeralds set in a sea of glass.

The day after our arrival we proceeded to that classic spot where Livingstone had first seen the lake, namely, Pambete. Here, after his weary and arduous wanderings from the south end of Lake Nyassa, he arrived half-dead with hard fare and malignant fevers, to rest for six weeks among the friendly and hospitable natives.

As was the case with Livingstone, I was extremely reduced by fever on my arrival at Pam-bete, and I therefore resolved to have a few days' rest to recruit.

On the fifth, while lying in a native hut musing over my plans for future action, I was much surprised to hear a strange hubbub. Yelling and shouting and firing of guns suddenly became the order of the day. Thinking that the village had been attacked by some enemy, I rushed hastily out of the hut, gun in hand; and there to my infinite amazement stood a white man! In my astonishment at the sight I seemed like one paralysed. Similarly the "great unknown" came forward, and according to the African salutation *à la mode*, he touched his hat and said, "Mr. Thomson, I presume." Recovering myself somewhat I replied, "Yes, that is my name; but, good gracious! who are you?" "My name is Stewart." Ah! thought I, a Scotchman of course! But what on earth is he doing here? And how did he come so unexpectedly? Can he have been sent by some one to bring me back, and, fearing that I should run away, determined to take me by surprise? These and similar notions which flashed through my dumb-foundered brain were soon dissipated. I learned that he was no such unwelcome emissary,

but an excellent lay missionary from Livingstonia, at the south end of Lake Nyassa, who had come to explore the country between the two lakes, and who for several days had been following my footsteps.

The effect of such a meeting upon me after my long weary months of isolation from civilised society cannot be expressed in words. With breathless interest I hung on every word he had to tell of the latest European affairs, and I began to feel as if I had got a new lease of life, so invigorated did I find myself.

Pambete we found to be very much altered since the days in which Livingstone visited it. Then it was a thriving and prosperous village, with its well-cultivated fields, its oil palms, and busy fisheries. Now it has almost dwindled out of existence. The huts are deserted, except by a few old men and innumerable rats. The oil palms seem to have been destroyed, and there is little fishing in the lake.

The scenery around Pambete is picturesque in the extreme. The village occupies a niche in the surrounding mountains, and over their rugged red sandstone cliffs the River Eisè falls in a beautiful cascade. At their base is a small plain, formed by the detritus brought down by the stream, and in

the dense jungles and forests which cover it buffaloes roam unmolested. In front is the lake, with its broken outline and little islands. The place however, is entirely unhealthy. It is a perfect oven, where the wind rarely enters, and, from the swampy surroundings, a malaria ever seems to hang over it. It may be a romantic, but it is by no means a desirable residence.

During our stay here I ran a narrow escape of being caught by a crocodile. According to my usual custom I went out one morning to enjoy a good splash in the lake. Wading out a considerable distance, but not out of my depth, I observed what appeared to be a log of wood floating a short distance from me. Taking no notice of this, I went on laving the cold water over myself. Looking up after a few minutes I observed that the apparent log floated nearer to me. Noting it more closely, I made out the outlines of a crocodile's head, with its ugly snout, wrinkled skin, and glittering eyes. I stood for a moment aghast at the sight, for I was a considerable distance from the shore, and still it came nearer. Regaining my presence of mind, I made the welkin ring with a shout of "Mambo! Mambo!" (crocodile). The cry instantly brought my men with their guns to the water's edge, and they, seeing my imminent

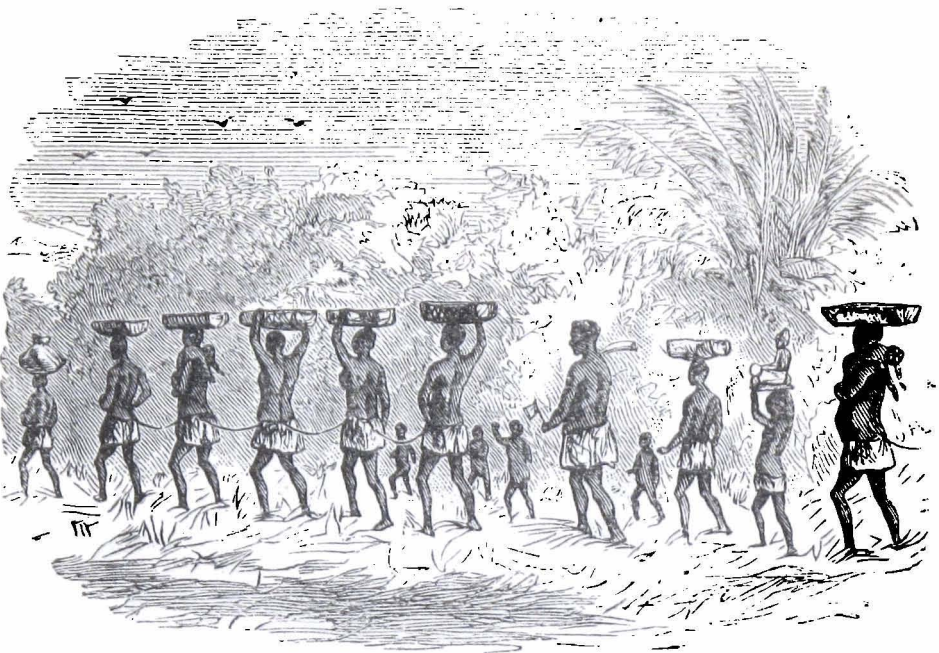
danger and desperate efforts to reach the shore, rushed in in a body to meet me, making the waters boil. When they reached me the crocodile was within a few feet and would have seized me in another minute. But seeing the porters in such numbers, yelling and shouting, and firing their guns, it evidently thought that an empty stomach was better than a feast of bullets, and wisely disappeared. If I had been out of my depth at the time, my chance of surviving the rencontre would have been a poor one.

Half-recovered from a sharp attack of fever, I prepared to continue my journey northward, while Mr. Stewart retraced his steps. On the 10th of November we separated on our different roads—I for Lukuga, he for Nyassa.

Crossing the river Eisè, we commenced the ascent of the bordering precipices of the lake. The first part of my way led up an extremely rocky talus of fallen rubbish, where we had to jump from boulder to boulder like so many goats. As we ascended, the path became steeper and more rugged, till hands and knees had to be employed—the men alternately putting up their loads on some resting-place above them, and then clambering up themselves.

Half-way up the ascent a sad spectacle met our

eyes—a chained gang of women and children. They were descending the rocks with the utmost difficulty, and picking their steps with great care, as, from the manner in which they were chained together a fall meant dislocation of the neck. Truth compels me to say that this was the first



Slaves.

slave caravan I had yet seen in Africa, though I had heard of a number which had kept out of our path for fear of our liberating the slaves. But, though it was the first, it exhibited all the well-known horrors of the cursed traffic. The women, chained to each other, were carrying many of them their children on their backs, besides heavy

loads on their heads. Their faces and general appearance told of starvation and utmost hardship, and their naked bodies spoke with ghastly eloquence of the flesh-cutting lash. Their dull, despairing gaze showed that all hope of life and liberty was gone for ever. Even the sight of an Englishman gave no hope to them; for, unfortunately, the white man has more the character of a ghoul than of a liberator of slaves in the far interior. Saddest sight of all was that of some little children reduced to perfect skeletons, looking up as if they beseeched us to kill them and put them out of further torture.

It was out of the question to attempt releasing them. The most I could do was to stop them and give the little things such a feed as they had not had for weeks. The rascally leader came fawning up to me; but I gave him a look, as I touched my gun, which speedily sent him out of my sight.

Resuming our climbing, we reached the top of the cliffs after several hours' hard work, and were rewarded by a magnificent view of the south end of the lake, lying like a great panorama two thousand feet beneath us.

Two hours' marching over a deserted bushland brought us to the village of Setche, where we encamped. I sent a small present to the chief,

according to custom, but it was returned with the observation that I was probably not aware he was a great chief, and could not accept such a paltry present from the great white man. I represented that I was ashamed to send so small a present, but I had travelled far and my goods were dwindling fast away. In reply, I was informed that the times were hard and the harvest bad, and he was extremely sorry to say that, in consequence, there was no food in the village for the white man's caravan. Thereupon the porters raised a howl of dismay as they thought of their empty stomachs, and bad names began to circulate. Rather alarmed, I took the question of the present once more into consideration; I found that, after all, I could gladden the heart of the chief with a nice cloth, which proved an "Open Sesame" to the granaries of Setche.

Two more hard marches brought us to the Arab settlement of Iendwe, situated near the mouth of the river Lofu. It lies in a deep depression of the plateau, forming a broad, densely populated plain on the bank of the river. We entered this important place with all the pomp and circumstance attainable in a caravan. A new English flag replaced the battered Union Jack which had led us from Dar-es-Salaam. The men donned their best,

while in front I myself marched, surrounded by a brilliantly dressed bodyguard of headmen, each carrying a spear in his hand and a gun slung on his back. I presented a considerable contrast in my free and easy suit of tweeds and only a stick in my hand. The caravan band, with its native drums, clarionet-like zomiri, and antelope's horns, made an appropriate amount of noise as an accompaniment to the recitative and chorus of the porters. Crowds of astonished natives lined the path, and at our camping ground there stood a group of Arabs in snow-white shirts and ponderous turbans, ready to welcome me with their "Salaams" and "Yambos."* They were dying with curiosity to know where I had come from, and what my objects were.

As the tents were being pitched I told them the story of my wanderings, and many were the looks of astonishment and wonder with which it was greeted. Such a march they had never heard of. Countries had been traversed which no Arab would have dared to approach. And then there had been no deaths, no desertions, no stealings, and, strangest of all, I had walked every step of the way, and had neither ridden donkeys nor been carried by my men. I was looked upon as a

* Words of Arab salutation.

perfect prodigy, and was universally voted a "Mzungu hodari sana" (a very strong and lucky white man).

When I next told them that I intended to go along the west side of the lake a chorus of disapproval met the scheme. It was not to be thought of. No one ever attempted it. One declared the mountains were impassable, and drew dark pictures of the danger of trying to cross them. A second described the fierceness and the ungovernable savagery of the natives. A third declared there was no food, and that we would all be starved. Not even the natives dare go such a road! Though rather taken aback by these ominous assurances I was not convinced. "See," said I, "these good men of mine. With them I have scaled great and dangerous mountains. I have passed unhurt through tribes that you yourselves say would fight you, if you went among them. We have together crossed countries hitherto unknown. And yet there they all stand, without a single break in their ranks. Shall I, then, be afraid of this new work? No, I am determined not to be baulked! If the mountains be difficult, I shall take light and easy loads. If there is little food to be got, I shall take few men with me. And if the natives are dangerous I shall make them my friends, and

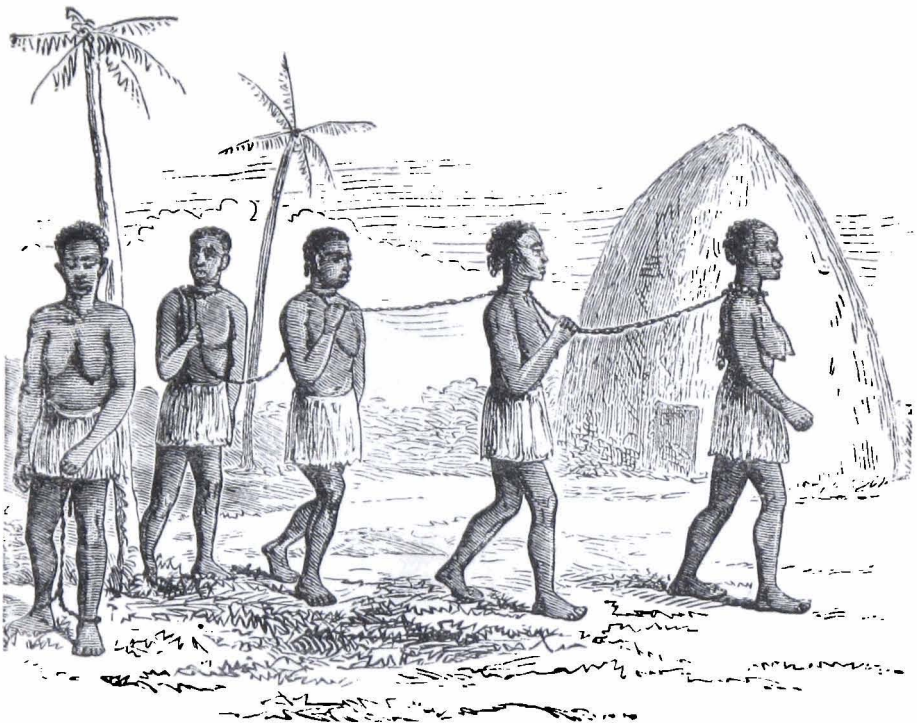
show them that the white man comes with a different purpose than to make slaves and to steal their food.”

This interview shaped my plans at once. Iendwe was a populous place with unlimited supplies of food. I therefore determined to leave all my men, except thirty, under the charge of Chumah; and then, taking only absolute necessities, to push on by forced marches to the Lukuga. The prospect of a difficult road and adventurous march quite animated me, and made me commence with eagerness the needful preparations. So, on the following morning the men were collected by beat of drum, and my intention was declared.

It was necessary to build a house for our goods, and that was at once commenced. The whole caravan, headed by the drummer and piper, set off for the wood to cut poles and bark ropes. At mid-day they returned loaded, but singing lustily all the time. The men entered into my schemes most heartily, and as it was necessary to hurry off before the worst of the rainy season came, they worked as if it was a matter of life or death. In two days the largest house in that part of the world was erected by the hundred and fifty men, and we were ready to start. The loads were speedily prepared, and it only remained that the

personnel of the travelling party should be determined.

As this trip was to be manifestly a dangerous one, I determined to take only volunteers. The men were called up and the question was asked, Who would go? On the one side were hardships and manifold perils: on the other idleness and ease. The latter alternative was tempting to dispositions like the Waswahili. Yet no time was lost. First one and then another and another cheerfully offered himself for the enterprise, till, from the best of the caravan, I was able to select the required number—thirty.





CHAPTER II.

A TOILSOME JOURNEY.



AND now commenced a piece of work which, for hardships, difficulties, and dangers, is perhaps unparalleled in the history of African travelling. It certainly far surpassed anything we had as yet met, though we had had our share of hard work. One hundred and eighty miles (as the crow flies) of mountains were traversed; no gentle undulations and rounded valleys, but savage peaks and precipices, alternating with deep, gloomy ravines and glens. Ridge after ridge had to be crossed, rising with precipitous sides, and requiring hands and knees in the ascent. Now we would go up three thousand feet, to descend as far—repeating the process perhaps three times a day, and never getting half a mile of moderately good walking ground. The streams falling into the lake

ran, of course, at right angles to our line of route, and thus cut the mountains into innumerable deep gorges.

The rainy season had now set in with all the fury characteristic of the tropics, and the very flood-gates of heaven seemed to have opened full to deluge the land. Yet through the remorseless downpour we must march hour after hour and day after day. The huge rolling thunderclouds overspread the heights, and the thunder with appalling roar echoed and re-echoed on every side ; now it was above us—the lightning flashes ever and anon splitting the clouds open with their awful power. Then we were in the midst of it, with view circumscribed by the enveloping darkness, while the ground shook, and we perfectly cringed with awe as the gloom was for an instant dispelled with blinding effect. Pressing upward, we would next stand triumphant upon some savage peak and look down on the incessant war of elements. And with what a wild exultant excitement did we watch the grand scene beneath ! The rugged mountains and valleys, with the murky clouds rolling in dense masses around them, the swollen headlong torrents adding their monotonous roar to the ever-renewed thunder-peals, while the resistless wind whistled through the trees, bending them like straws.

Yet this savage and awe-inspiring grandeur was not without its relief. Here the sun, darting his rays through some rift in the overhanging cloud-bank, would glorify as with a golden crown some conspicuous peak, or smile upon some pleasant glade; and there glimpses of Tanganyika would be obtained thousands of feet beneath, its waters in the distance seeming as calm and undisturbed as the face of a sleeping child.

Amid such experiences, then, did we toil over our rugged way, plunging time after time through raging mountain streams, in frequent danger of being swept by whirling waters to destruction; yet our only thought was onward. Our difficulties by no means dismayed us. We gloried in these awful scenes and the magnificent works of nature around us. As for myself, I felt as if, free and unfettered, I once more roamed on my own Scotch hills. I revelled in the sense of deliverance from the soul-wearing troubles of a large caravan, which, like an incubus, stifles all a traveller's pleasure; for when he would prefer knocking about unfettered in this place and in that, in search of something new or fascinating, he must ever keep on beaten tracks, always suspicious, always watchful of his men, while endeavouring with as much minuteness as possible to comprehend his sur-

roundings ; but now, with only thirty good men and true, I seemed to have no anxieties or cares. So light of heart did this feeling make me that I was tempted sometimes to execute a good Scotch dance for the benefit of the natives, in order to reduce the effervescence of my spirits.

But to resume the thread of my narrative. On leaving Iendwe we crossed the river Lofu and entered the chieftainship of Itawa. Ulungu now lay behind us. The people of Itawa were exceedingly interesting in their appearance and habits. They have remarkably well-made figures, and faces which were frequently very pretty, with small features, straight, well-shaped noses, and thin lips, not at all like the negroes we usually see in England ; and then their colour!—such a pleasant warm brown as made dress appear quite superfluous.

These people shave their hair back from their brows, round which they tie a band of beads with much tastefulness and effect. They wear enormous cylinders in the lobes of their ears, and copper pins sticking through their lips. Their dress consists almost entirely of a flap of skin behind. The absence of this would be considered highly improper, although to me its sole use appears to be as a protective from damp when sitting on the wet ground.

Not to chronicle *in extenso* our movements through Itawa, let me simply describe our reception at Pamlo, the village of the chief. On the fifth day of our march from Iendwe I was, as usual, considerably in front of my men, who with the loads were not able to walk as fast as myself. The sky threatened a storm, which made me hasten to reach Pamlo. On approaching the village nobody was to be seen, the natives being either out in the fields or in their houses out of the rain. The stockade presented a rather uninviting appearance, being ornamented with a few hundred human skulls in all conditions, from the freshly stuck up head to the bleached cranium, and all apparently snapping their jaws at the thought of a new companion as the wind wheeled them backwards and forwards. However, the rain was falling fast, and there was no use being squeamish. So into the village I marched unnoticed, and finding out a hut with a broad overhanging eave I took refuge out of sight, waiting till my men came forward, in order that I might appear with appropriate pomp.

I had been thus ensconced nearly ten minutes, when suddenly the stillness of the village was broken by a loud peculiar shout. This was almost immediately taken up from every quarter of the

village, until every stone seemed to yell out the strange cry. Drums added to the uproar, while women screamed, and the men were seen to hurry towards the gates, shouting and brandishing their spears. I was very much astonished at this ; but, supposing it was simply the fashionable mode of receiving a caravan, I remained still, expecting my men every minute. However, the uproar continued without abatement, and my men did not appear. Thinking there must be something wrong, I emerged from my cover. To my surprise I found the gates closed, and the stockade and crow's-nests manned by an excited multitude brandishing their spears at some apparent enemy outside. It instantly flashed upon me that I was a prisoner, and cut off from my men.

My presence in the village was evidently unknown. For, on my appearance among them, every voice was silent, and the once excited multitude seemed to have become paralyzed with fear. I was supposed to be a ghost. Seeing this, I recovered my presence of mind, and, striking an attitude like Hamlet's ghost, I moved forward with slow, deliberate steps, and a severe expression of face. At each step the warriors recoiled. Struck with awe, they looked at me with staring eyes and open mouths in breathless silence. This was too

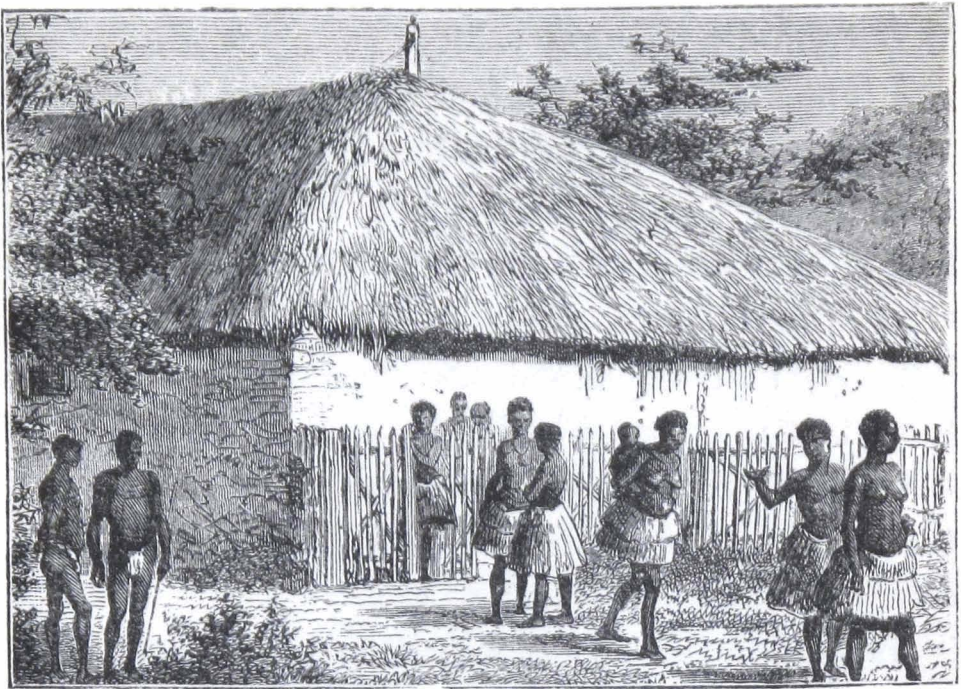
much for me, and unable to keep up the character, I burst out with an irrepressible roar of laughter. The effect of that laugh was tremendous. The amazed savages recoiled still farther, leaving the gate free. With a bound I reached it, and before they could recover their senses it was open, and I was outside, to the unbounded joy of my men, who were trembling for my safety.

I immediately despatched messengers to demand why they had received the great white man in this inhospitable manner, and made them shake with fear at the threats I gave free vent to. They were soon brought to their senses, and apologised humbly, and explained the matter. I then, to show there was no ill-will, went into the village, though the inhabitants had evidently not got over the feeling of awe with which I had inspired them, and prudently kept clear of me.

As Mlilo, the chief, was a potentate of some note, I gave him a handsome present. I was received for that purpose under the eaves of a huge granary, the roof of which was so large in proportion to the house, that it looked like an umbrella with a short and thick handle. The reception was very imposing; indeed, it was the only case I had seen in which some warlike display and discipline was observed. I was, however,

treated very scurvily, and got no return present. In fact, it was only with difficulty I got a guide.

Leaving Pamlico, with much show of indignation, we continued our march. Our route led us still over the mountains, which are very poorly populated, owing to the dearth of water in the dry



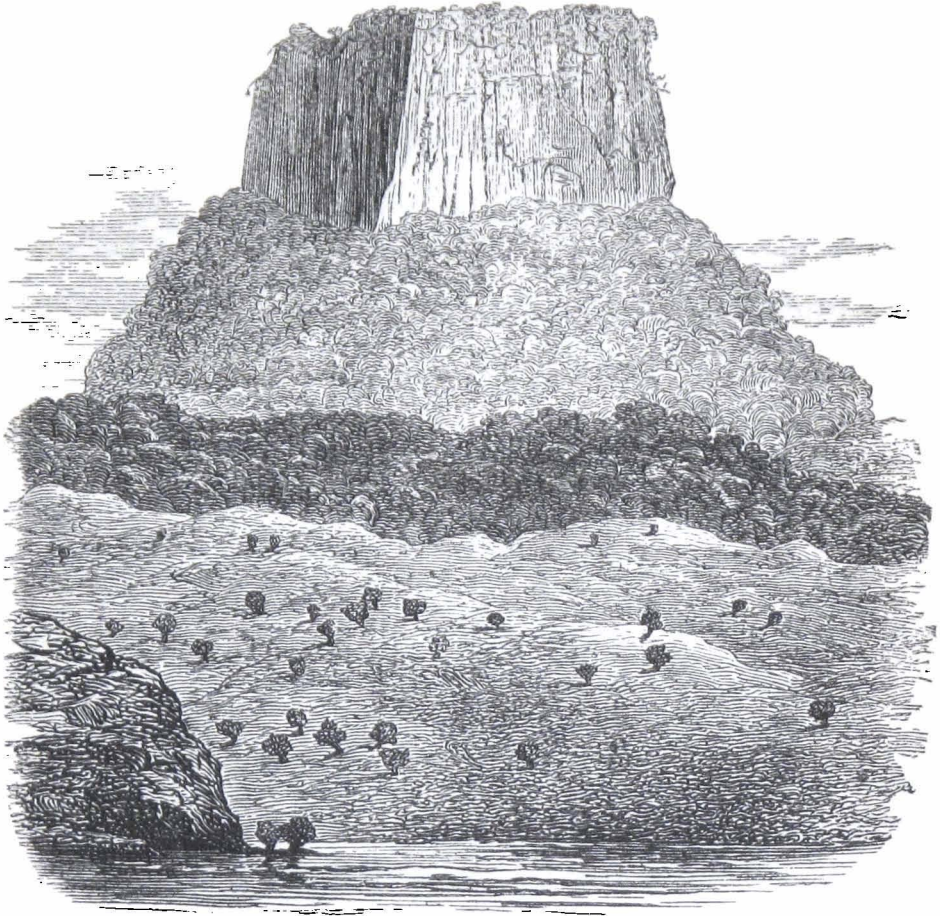
After I left.

season, and the absence of ground fit for cultivation. On the third day from Pamlico we approached the boundary of Itawa. This fact was abundantly indicated to us by the absence of inhabitants, the deserted villages and fields which, for a distance of forty miles, marked the limits of the debatable

ground. These marches were excessively severe. Rising at break of day we partook of some sugarless coffee, accompanied by some cassava or other native food. Then off we marched in the chilly morning, pushing through grass from four to ten feet high, laden with cold dew, which drenched us thoroughly. Then a precipitous ascent would test our limbs and lungs, till, reaching the height of 2,000 feet above our morning's camp, we would commence our descent on the opposite side, slipping and falling, ever in danger from rolling stones from behind, and requiring to exercise the utmost care and caution. Arrived at the bottom, we would vary our march by plunging through a foul, reedy swamp, by a hippopotamus track, full of treacherous holes, into which we would unexpectedly sink with an electric shock to our nerves. Then wading through a marshy stream, not unfrequently up to the breast or neck, we would commence the laborious escalade of another mountain, which required the mutual assistance of the men to get their loads up.

Leaving Itawa, we entered the country of Marungu, ruled over by a number of petty, insignificant chiefs. This country was still more mountainous and rugged than the one we had left. The people, also, were in every respect different,

partaking much of the wild and savage character of the scenery. The inhabitants were exceptionally numerous, notwithstanding their surroundings. They were black, sooty savages, with muscular



Mount Murumbi.

figures, thick, everted lips, and bridgeless noses. Clothing was at a discount, and what there was of it was chiefly native-made bark cloth. There was no such thing as imported European cotton. Goat-

skins, however, were most commonly used, worn simply over the back and shoulders. The existence of these natives must be of a miserable character, living as they do among treeless, grassy heights 7,000 feet above the sea. The soil is cold and clayey, while rain seems to fall incessantly, and, having almost no fuel, they have to warm themselves as best they may. Necessity, however, compels them to organize for the common benefit. As every family cannot afford a separate fire, there is a common meeting-house or shed in each village, with a good fire kept always burning for the comfort of the men, the women not being admitted. Food is abundant owing to the incessant rains.

A curious fact relating to these Marungu natives is the prevalence of huge swellings in the throat among those dwelling in the mountains, while those beside the lake are not afflicted with this disease. It is said that any one so troubled becomes cured in time by simply living on the lower level.

The greatest peculiarity of the Marungu is their extraordinary excitability. This was shown under various circumstances, and it placed our lives in constant jeopardy, from which we escaped only by the utmost coolness and self-possession. This

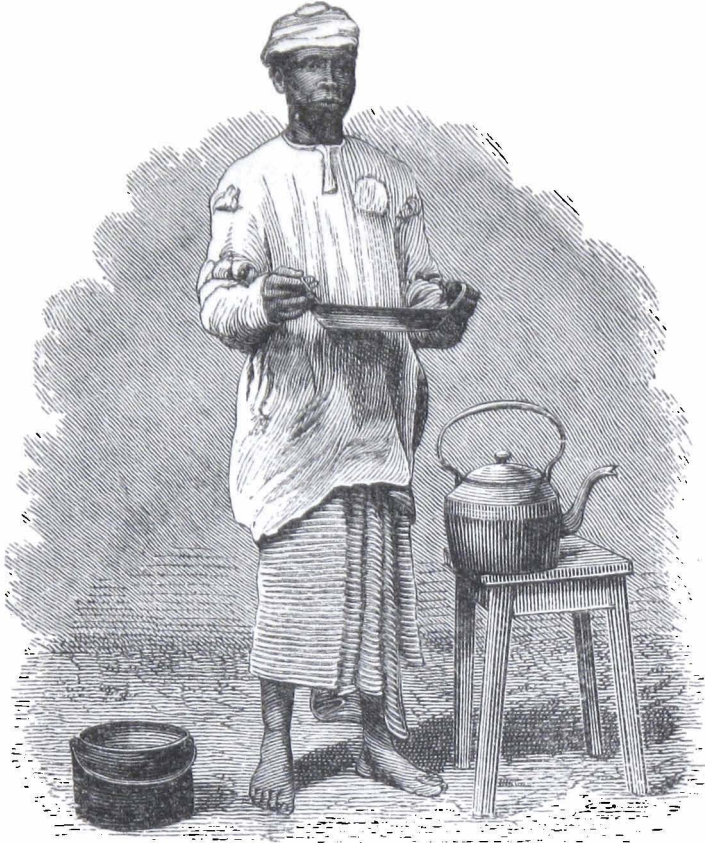
characteristic is most marked among the dwellers in the mountainous region, where, broken up into small parties, they live in hourly danger of attack from their neighbours, or from the slave-hunting tribes around them. This fact, together with the hardships of their lot, and their entire isolation from all communication with traders, probably explains the annoying trait.

Even the existence of the white man was entirely unknown to them, and the first acquaintance with their peculiarities was sufficiently alarming. I was marching along in front, with only my gun-bearer, through an open grassy valley, my thirty men being some distance behind, when suddenly a clear, startling cry rang through the air from some unseen person. As I stopped in surprise, another and another cry was uttered from different peaks, till the country echoed and re-echoed with the unwonted sounds. Then on all sides people were seen congregated on the mountain tops and running from place to place. It was clear that we had heard the Marungu war-cry. Soon from the heights the warriors came dashing down at headlong speed, brandishing their spears, and still filling the startled air with cries, as if in great agony. My followers, seeing what was coming, began to hurry up to my assistance ; but before

they arrived, one party headed by a warrior, apparently in the maddest excitement, came dashing down, evidently intending to make short work with me. I did not move : but, opening my arms to show that I had no weapons about me, I shouted out the customary salutation and declared ourselves friends. The leader of the band, now within a few feet of me, let drop his uplifted axe in amazement. He clearly had not observed my appearance before, and as I stood there apparently unconscious of danger, and without weapons of any description, they seemed quite astounded, and doubtless concluded I was something unearthly. My men now arrived in great anxiety for my safety, and preparing to use their guns. But I at once ordered them to put the boxes, &c., in a ring and sit down—to keep cool and quiet, but to be ready for any emergency.

The natives now began to gather round us in hundreds, declaring that we were come to fight and make slaves of them. With the most demoniac faces they yelled and shook their spears and bows and arrows. Dancing round about us with the wildest gestures, they incited each other to the attack. It almost seemed as if they were on red-hot plates of iron, so much did they writhe and wriggle like men in torture. Now and then some

of them would go rushing away for some distance, and, dashing themselves down on the ground, would roll about and bite the earth in the agonies of their frightful passion.



My Cook.

As it would evidently be some time before they were sufficiently calm to be spoken to, I told my cook to make some coffee to console myself in the interim, and we all affected the utmost coolness

and unconcern. At last we got a word in, and asked them if they had never seen or heard of the white man before. We came to make friends with them, and not to fight and get slaves. Did people come with boxes and bales when they wanted to fight? If war was our intention, why were we now sitting peaceably amongst them? And more to the same effect. However, it was only after two hours' wrangling that friendship was established—the finishing coup being the sight of my white skin, where it had not been browned by African heats and damps. We then adjourned to the village, where we were hospitably treated.

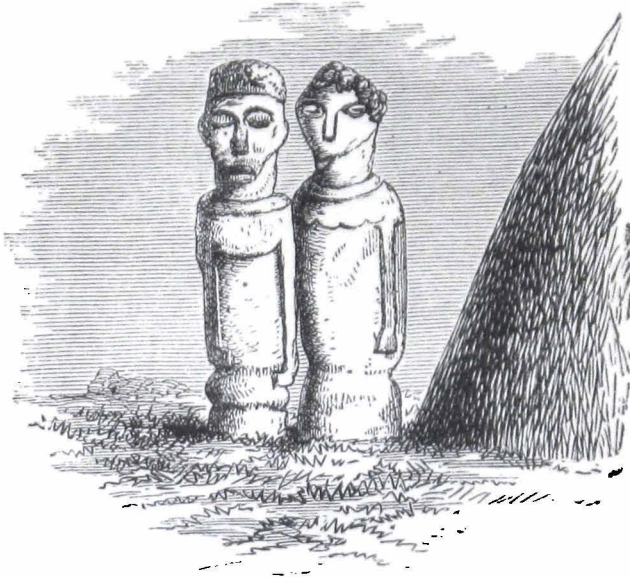
In all their actions they showed the same excitability, always rushing to extremes. Their conversation was usually one continued scream at the pitch of their voices. On one occasion, when I was irritable through an attack of fever, they made such an infernal din that, unable to get them removed by mild means, I scattered them by throwing my camp-stool among them.

In all our marches through Marungu I found it was necessary for our safety that I should be at the head of my men. My appearance usually so amazed the natives that we got an opportunity of talking to them, when, if I had been behind and out of sight, they would have attacked us without

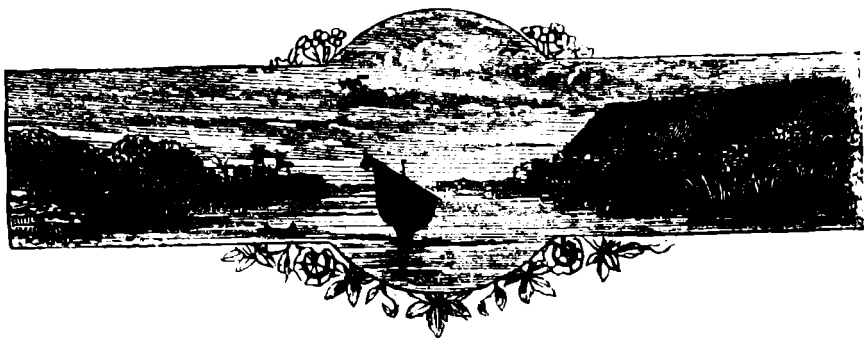
parley. I found also here, as indeed with all the tribes, that my strong point was to show complete confidence in the natives, and never to appear suspicious. It may seem paradoxical when I say that my immunity from personal attack arose from my habit of walking about alone and without arms. This might be highly dangerous in a half-civilised country, but not so in a savage one. As they are ever at mortal feud with each other, and in constant fear of attack, they are compelled on all occasions to carry arms as an absolute necessity. Consequently, when they saw me walking about unarmed, sometimes actually miles from my men, they concluded that there was something uncanny about me, and that I had better be left alone. And then the entire mystery which surrounded the white man, with his seemingly boundless riches and his astonishing instruments, could not but awe the superstitious natives.

During this journey I had an extremely nasty attack of fever, brought on by the severe strain, the constant drenchings, and other hardships, producing an entire disorganization of the system. Its worst symptoms were frightful headaches, which left me neither night nor day, till I was so ill and reduced that I could have walked into the lake with the most philosophical resignation. Still,

with dogged perseverance, I pushed onward, letting no amount of agony or weakness stop my daily marches. But I went like an automaton. I had worked up my machinery to convey me to the Lukuga, and mechanically I moved towards it.



Idols.



CHAPTER III.

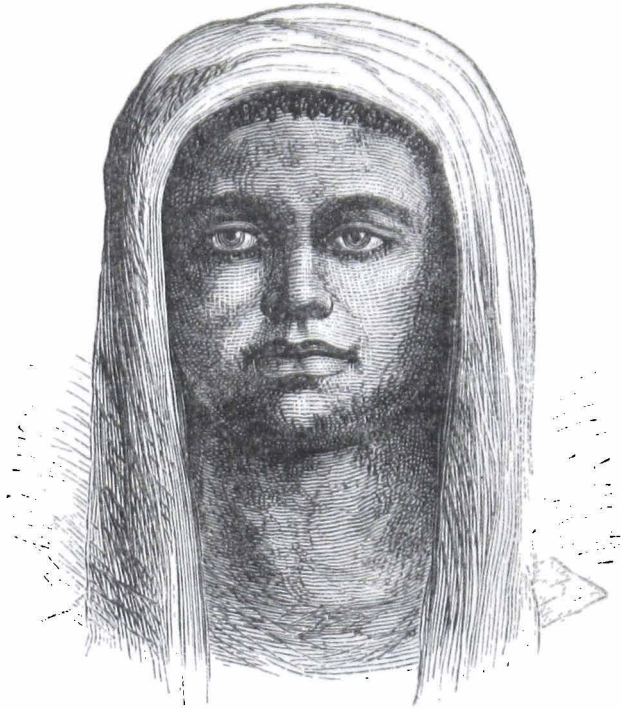
THE TASK COMPLETED.



WE left Marungu, with its untamed barbarians, and descended into the lower and richer region of Uguha, the people of which, with their comfortable huts, neat appearance, and peculiar hair-dressing, made a wonderful contrast to the people we had just left.

A few days' march through Uguha, and then, on Christmas morning, an hour's journey after our frugal breakfast of cassava and a little honey brought us to the banks of the Lukuga—the goal I had set before me. It was to this place Cameron had come, and, after much careful observation, arrived at the conclusion that he saw straws moving towards the west, indicating a current setting out from Lake Tanganyika; that, in fact, it was the lake's

outlet. A few months later, and Stanley stood at the same place, and where Cameron had seen a current, however slow, he saw a complete barrier,



Uguha Woman.

and declared that the existence of a current was impossible.

With these conflicting accounts in my mind my astonishment may be imagined, when I beheld there before me a noble river, sweeping in rapid, swirling eddies, between high tree-covered banks, away towards the Congo and the Atlantic. It needed no straws to prove that; and Stanley's

“barrier” was clearly a thing of the past. I expected to see reedy and papyrus-covered swamps, the quiet haunt of the hippopotamus and the crocodile, and I found a mighty torrent which no canoe could stem, and which could be crossed only with difficulty. I thought I had been the first to settle finally the question of the lake’s out-



The Lukuga.

let, but it afterwards appeared that Mr. Hore, a lay missionary stationed at Ujiji, had preceded me by two or three months. The sight, however, was a great Christmas feast to me.

On my way north I had heard that there were some Europeans a day’s march from the Lukuga, at Mtowa or Kasengè. To this place I therefore

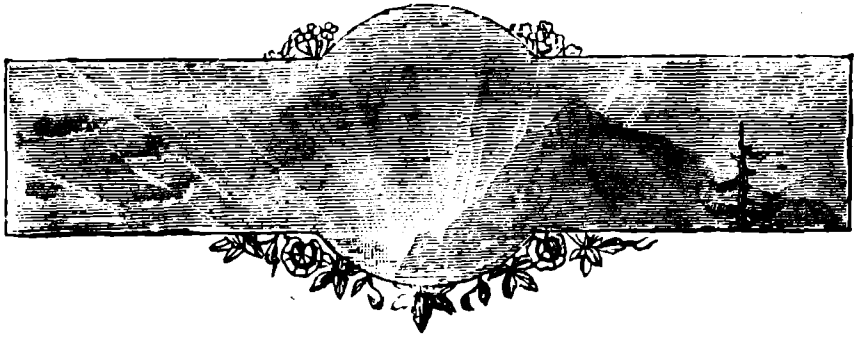
directed my steps. Leaving my caravan outside the village, I marched up alone to the house occupied by the white men, and, taking them unawares, was received with intense wonderment. When their first speechless surprise was over, they greeted me most hospitably. They afterwards informed me that they thought they had realised that dream of some newspapers, and actually "found" Stanley fresh from the West Coast.

That day I luxuriated on the remains of a Christmas pudding which they had contrived to make, and on New Year's Day the first letters I had received since I left the sea-coast arrived, and gave me a great treat.

Let me conclude by saying that it was five months before I was able to return to my camp at Iendwe. And yet, during that long period, my men under Chumah remained faithful to their charge, though they had for weeks given me up as lost. When at last we did meet, there was not a man missing, and not an article had been stolen, though all my goods were entirely in their hands. Surely this speaks volumes in favour of the native porters, who have hitherto been so reviled!



CLIMBING THE HIMALAYAS.

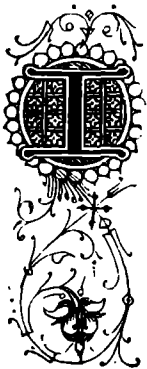


CLIMBING THE HIMALAYAS.

BY W. W. GRAHAM.

CHAPTER I.

GETTING READY.



T was in June, 1883, that I started for this expedition. Sixty hours' continuous travelling by rail and carriage took me from Calcutta to Ranibagh, at the foot of the hills, and sixty hours' travelling in the hot weather is no joke.

Then comes a delightful change. The green luxuriant foliage of the hills is not more unlike the parched, burnt plains, than is the mental state in which one views them respectively. The path now winds in zigzags up the steep hill-side; on the top is a small bazaar; we turn a corner, a

glittering green lake, circled with towering hills, bursts upon the view, and we are in Naini Tal.

The suddenness of the change and the rare beauty of the scene reminded me forcibly of my first glimpse of Grasmere from the top of Red Scar. Yet beautiful as is our own lakeland, it must yield to its Indian rival. Nestling in its long drowned-out crater, hills rising steeply for 2,000 feet from the water's edge, yet wooded to their very summit with all the luxuriance of a tropical forest, no wonder that Naini Tal has been chosen as one of the most favoured hill stations. Alas! beneath all its smiling beauty is hid an ever-present danger; those hills encircling the emerald lake and threatening almost to fall into it, may, at any time, carry out their threat; nay, they have already done so in one instance, and awful was the ensuing catastrophe.

Here I proposed to wait till my companions arrived, and perhaps I should say a few words about them. First and foremost was Emil Boss, one of the best mountaineers living, extremely well educated, speaking seven languages equally fluently; a captain in the Swiss army, he is a splendid companion, and I deemed myself fortunate to have his company. He was bringing with him Ulrich Kauffmann, of Grindelwald, a first-rate



Naini Tal.

guide, though, perhaps, not so well known as some others.

The next morning we rose early and proceeded to climb Chini, which rises some 3,000 feet above the lake. After a long pull we reached the top, and, like good little boys, received the reward of our labours in our first view of the Himalayas. Far, far away, floating in a sea of golden mist, their snowy summits flashing back a welcome to the rising sun, as far on either hand as the eye could reach, till shape and hue were alike lost and blended with the eastern sky, ran the Snows, the abodes of the Indian gods. Right north towered up the huge Trisuli, whose three rocky peaks, on this side at least, no mountaineer will ever scale. Black and threatening as night, they rise, one huge scarped rock face; here and there bordered and touched with snow, they stand like mail-clad warriors around their queen. Within their iron ring rises Nanda Devi, surely the most beautiful peak in the chain, as she is the highest. A grey granite obelisk, robed in a right royal ermine of snow, her height towering above her consorts, she is set off by her more immediate companion, Dabi Kote. Over the shoulder of Trisuli peeps the noble peak of Dunagiri, and far away to the north even of these, towers the mighty Kamet. West-

wards, again, rises the gigantic wall of the Gangoetri range with its many peaks ; here is the abode, *par excellence*, of the gods. The Rudru Himaleh towers above the rest as a citadel within its battlemented wall. Eastwards run peak upon peak, chain behind chain, far into the unknown regions of Nepaul, terminating in an enormous misty mass, which is probably the giant Dhaolagiri. But glorious as the view was, it only increased my desire to be near them and among them, and great was my delight to receive a telegram from Boss, announcing the arrival of himself and Kauffmann, and that they were coming up from Bombay. On Saturday, the 23rd, they arrived, and we immediately set about packing up and preparing for a start on the morrow. Thirty-five coolies sufficed to carry our baggage, &c., not that we had any superfluities, but the Kumaon coolie is a very inferior beast of burden ; about thirty pounds is as much as he cares to carry, and even then he does nothing but grumble. Four annas per diem is the Government regulation, but as I was going off the beaten tracks, and naturally they as well as we would have to undergo some amount of hardship, I agreed to give them six, conditional on good behaviour. A cook—at least, he professed to be such—was also engaged, while

four stout ponies were to carry us until we reached the actual scene of action.

We started on the 24th, accompanied by M. Dècle, a French member of the Alpine Club. As for a few days we were on a comparatively beaten track, I will hurry over our preliminary marches. Khyrna, Kanikhet, Dourahst, Rawari, Narambagas, Nandak Ganga, Ramni camp, Pana, were our successive halts. The rains were just beginning, and we were much troubled by that awful Indian plague, the hill-leech; in length about an inch, and about the thickness of a knitting-needle, the blood-thirstiness of this tiny pest is horrible; it is no uncommon occurrence to find twenty at one time on one's legs, and nothing keeps them out.

A more serious difficulty was in obtaining provisions. The recognised method is as follows: Travellers obtain from the Commissioner, a chuprassie (courier) with a purwannah (order) directing the head-men of each village to supply coolies and provisions at a fixed tariff. This is an excellent plan were it not for the inherent corruption of the genus chuprassie. No matter what the affair be, whatever passes through its hands leaves a considerable portion sticking there. The result is that villages plead poverty, inability, &c., and great is

the difficulty of obtaining supplies. On our return we relied on the almighty dollar instead of the "purwannah," and never had the slightest trouble.

Well, at Pana, Dècle was fairly done up with our various troubles, and decided to return; so next morning, we divided our goods and separated.

It was exactly the parting of Abraham and Lot over again. Dècle was returning to the flesh-pots of Egypt, so to speak; *i.e.* to the dances, polo, and flirtations of Naini Tal. I was on my way to a land, neither promised nor promising, from a comfortable point of view at any rate. We rode up the hill and they went down it; the last view that I had was that of two men staggering along under Dècle's tent, always a heavy one, and now doubly so, being soaked with water. For a wonder the weather was fine, and we had a perfect banquet of strawberries, which grew in great profusion. Here we first met the traders from Tibet, bringing in salt and borax; all this is carried on sheep and goats. They are beautiful animals, the goats at any rate, with long silky hair and finely twisted horns, and seem to make nothing of a load of thirty to forty pounds, which is packed saddlewise on their backs. Independent they are too, and imagine that they have a sole right to the path, and consequently make not the slightest attempt

to get out of your way. For the next two days



Emil Boss.

we met them constantly, and I imagine that the trade, all of which is brought over the Niti Pass.

must be very considerable. After crossing the ridge we dropped a little and then passed one of the most exquisite falls I have ever seen. The Pirigudh, a tributary of the Bireh Ganga, dashes violently down the steep slope of the west of Trisul, then plunges into a cavern and falls some 400 feet to the path below. It is a most singular fall, emerging through a perfect hollow channel, probably worked by a huge stone in an eddy, for there are still traces where the former bed ran over the roof of the channel.

We hoped to cross the Kuari Pass this day, but the road was very bad, and the leeches gave the coolies a good deal of trouble, so we finally went into camp some 300 feet below the pass. The actual height of the pass is 12,400 feet, but as this is below the limit of trees it was neither cold nor unpleasant, but deliciously bracing.

Next morning I had intended to go to Rini, where I proposed to have a permanent camp, it being some fifteen miles from the Snows. I did not then know the tremendous difficulty of the ground in the side valleys. Boss, however, had not been very well, and as there was a doctor at Joshimath, we decided to lose a day and take that route.

We reached Joshimath early, passing through a

beautiful forest nearly all the way down, and found, to our delight, a *dāk* bungalow,* of which we promptly took possession.

Joshimath is a quaint little village,—in fact, a town in this province, and is considered to be very sacred by the Hindoos. We made arrangements here with the *bunniah* † for a supply of flour, and went on our way up the valley. All along it were traces of gigantic glacier action ; gigantic blocks of gneiss strewed on the slopes at least 1,000 feet above the river. One lay across the path, and made a perfect tunnel. This block was 84 feet through in its narrowest part, and what its weight in tons must be I was afraid to conjecture. About two miles up we saw on the left a valley running due north. This is the pilgrim route to Badrinath, the Mecca of the Ganges pilgrimage. On its east the rocks rose sheer to some 13,000 or 14,000 feet, making the most superb aiguilles, quite as impossible-looking as the well-known Chamounix range, and twice their height, whilst the dazzling white snow-peaks of Gangootri formed the background. At Tapobane we found several singular tombs ; they are in shape like the Buddhist temples, with a single dark chamber within.

* *Dāk* means a system of relays, either of men or horses, &c. *Bungalow* is a house. The phrase, therefore, means a station house.

† Local merchant.

A little farther up we came to some hot sulphur springs, and enjoyed a bath in their bubbling waters.

As we advanced up the valley the hills drew closer together, finally rising in sheer cliffs from the river, which was thundering down at twenty miles an hour between them. I now began to see that reaching the peaks would be as difficult as the actual climbing them. Even here the track was entirely artificial, being made of planks supported on beams driven into the rock. Suddenly in a very dark place, the rock overhanging many feet, the path descended to the water, and apparently stopped. I at first supposed that it had been carried away by the stream, now in full flood, and so indeed most of it had. One plank was left, however, about a foot under water, and the crossing it was rather a delicate matter for the laden coolies. After this, about an hour's march brought us to Rini, our destination. Here two violent glacier streams, the one fed by the Nanda Devi group, the other flowing from the foot of Kamet, meet and mingle their waters with a tremendous roar. The valley is very narrow, with almost precipitous cliffs on every side, and right ahead rose a black peak 17,000 ft., which fell to the stream in one sheer precipice of about 7,000 ft., and seemed to block further approach to the valley.



CHAPTER II.

AT THE FOOT OF THE GREAT GIANTS.

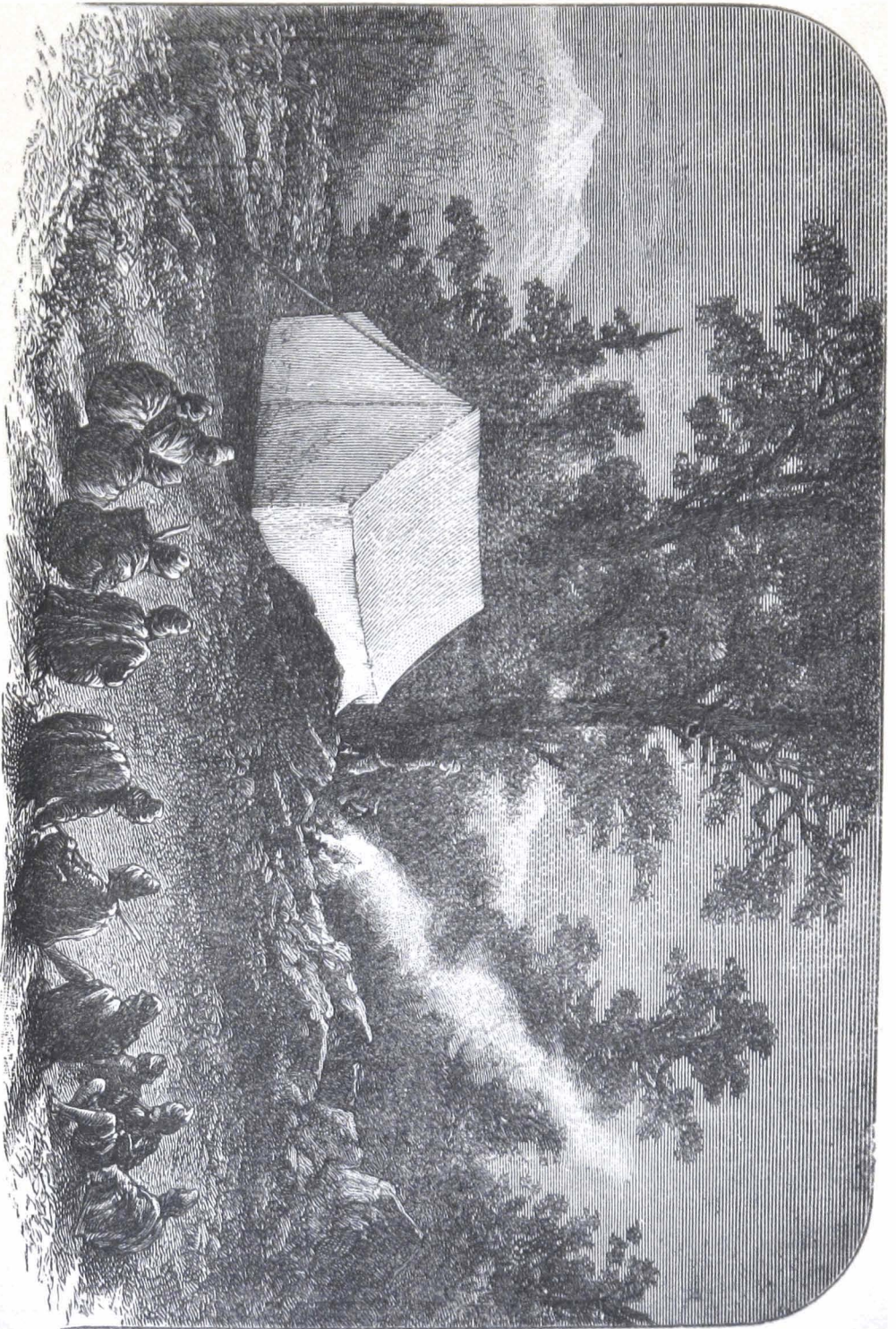


THE next day, July 6th, we wished to start for Nanda Devi. As the crow flies it is some twenty miles, but, seeing the nature of the ground, we decided to allow at least a week to reach the foot of the peak. On inquiring for a guide we were told that the valley was impassable, no sahib had ever been up it, &c., &c. We believed only as much of this as we chose, but found, alas! that it was only too true. After getting up some four miles we came to an unexpected obstacle. A glacier had once run due north from Trisul to the river; it has now retreated, leaving a bed with sheer perpendicular walls some 400 feet in depth. We tried up and down to find a place where we could cross.

Below, it fell sheer some 1,500 feet into the river; above, the bed only got deeper and deeper. It was a mighty moat of Nature's own digging to guard her virgin fortresses. We gave it up, and returned rather disconsolately to Rini. That night we held a council of war, and finally decided that as Nanda Devi seemed rather a tough nut we would be modest and attack Dunagiri first.

Accordingly we selected the seven best coolies, and taking ten days' provisions we started. The route lay up the north branch of the Dhauli River for some 6 miles. This is a regular traders' track, and in fine condition. Half-way up we noticed a spring bubbling out, and on tasting it found it to be true seltzer water and very good, so we promptly passed the word for a "peg." We now turned off the track, up a valley to the east, and, of course, the "going" was much deteriorated. One village lay before us, Tolam, a beautiful little spot embowered in wild fruit-trees—apricot, peach, and plum, and supporting more bees to the square foot than any place I ever saw. The inhabitants live chiefly on their honey. After this the path as a path ceased, though there were still occasional traces of a kind of foot-track along the precipices which overhung the stream. We encamped on a beautiful little ledge some 7 feet wide, a cliff above

Our Encampment.



and a cliff below ; here the gorge was not more than 40 yards in width, and the stream descended some 500 feet in a few bounds.

Hitherto we had followed as well as we could the course of the water ; now an immense rocky rib came down in front of us, falling sheer into the water, and apparently quite impassable. We considered it so, and toiled up the mountain side, intending to take to the ridge and work up along it. Towards our left the ridge broke out into a succession of aiguilles* of the most formidable description ; towards the east, in the direction of the peak, it looked easier, and though I felt uncertain about it, it was the only possible route that we could see. We worked up for six or seven hours ; then leaving the coolies we went on to the top, rather over 17,000 feet. Here we found ourselves cut off by a deep gulley, and had accordingly to descend again. I was in great distress about my feet. When swimming at Khyrna I had made an awkward cut on my right foot against a sharp rock, and had foolishly neglected it, hoping that it would heal up. The exceedingly rough ground over which we had to pass was most detrimental to this process, and the result was a nasty ulcer, and walking became very painful. I sat down at the top to rest and enjoy the view,

* Spires of rock.

while Kauffmann and Boss proceeded to stalk a couple of *thar*,* which we saw at some distance in the rocks. Kauffmann unfortunately had a touch of fever on him, and made a brace of most unaccountable misses at not more than 60 yards. We then crossed the aforesaid rocky rib, and descended the ridge on the other side.

While going ahead to find out the way, Boss suddenly grasped my hand and said, "A tiger!" I knew, of course, that no tiger could be at that height, but there certainly was a large animal crouched behind a rock, and evidently watching us. As we stopped to fire it turned and fled, only to receive its *coup de grâce* from Boss, who made the most magnificent shot with a 12 smooth-bore. The shell took it behind the shoulder, and it fell about 100 feet and lay motionless. On pacing the distance we found it to be 150 yards, and the animal was many feet above us. It proved to be a magnificent female snow leopard, measuring 7 feet 4 inches as it lay, one of the rarest animals in India. The fur is a beautiful white, on which are black markings exactly like the common leopard; but the tail differs much, being bushy like that of a Persian cat. We skinned our prize, and descended again to the river, to find to our disgust that we had

* A sort of antelope.

only gained about a quarter of a mile in actual distance, though we had had a most fatiguing and prolonged day. Just as we were camping we heard a shout, and saw a little man leaping down the rocks like a chamois. He proved to be a shikari* from Tokam, who had heard that we were up this way, and followed us in hopes of a job. We at once closed with his offer to take us to Dunagiri, and a most fortunate meeting it proved to be. Next day we started afresh, once more up the gully, and this time turning eastwards up a very narrow crack which had escaped our notice. The route was worse than ever; in many places a most broken slope of rock and grass, with a precipice above and another below; places where we had to hang on all we knew, and where the coolies had the greatest possible difficulty.

We again crossed the ridge rather over 17,400 feet, and were moving gaily over a grassy slope, when the shikari who was leading suddenly dropped, and we saw some 500 yards off a large herd of "thar," headed by one jet-black. A stalk was immediately organized, but man proposes and the weather disposes. A dense mist swept across just as we were in range, and when it cleared the herd had disappeared. We were much disgusted,—for

* A messenger.

one doesn't get a black "thar" every day,—but went on to our camp, which we pitched just below the Dunagiri glacier. The next morning we had intended to rest, and go up to our sleeping-place in the afternoon, but on rising the coolies came with great apologies and groans, and informed me that they had nothing to eat. I had taken ten days' rations, a seer, 2lbs., per man per diem, and had laid in more at Tolam, and here they were all eaten in four days. I swore at and threatened them, but that was no use ; we couldn't take them up the mountain without food, but fortunately the shikari came to the rescue. He knew of a village inhabited in the summer on the other side of the great ridge ; they would be able to reach that to-day and return to-morrow. We retained two and sent off the others ; then sending down for wood, we proceeded to load ourselves and start for the peak.

We started for the foot of the glacier at eleven, and I could not help admiring the way in which the shikari led us. A little thick-set man, with a strongly Tibetan cast of features, he went up the steep hill with little short quick steps, carrying his load like a feather. As Boss said admiringly, he went like a chamois. At last we got on the ice, and what a change immediately came over

him ! It was as if the legs were cut away from under him ; he slipped, panted, and finally implored us not to go farther. At 4 P.M. we reached the height of 18,500 feet. Here the two *arêtes** of the peak swept down, enclosing the head of the glacier which formed our guide. Right in front of us rose the western face of the peak like a wall, alternate bands of black cliff and snow slopes. Here the serious climbing was to begin, and here we decided to halt for the night. The natives didn't like it at all, and their faces brightened when we told them that they might go down, only to fall again when we added that they must come up again to meet us the next day. We found a beautiful hole under a stone about 5 feet square and 2 high. With stones and snow we walled it in, and when spread with our blankets, it looked quite a luxurious chamber. After a good dinner, we sat and smoked, and drank in the glorious view in silence. I don't think we looked much at our peak. There was obviously only one route up, by the south-west *arête*, and this, though steep and requiring plenty of step-cutting, was not discouraging. But to the north and west what a glorious panorama was spread before us ! Some twenty-five miles to north, the mighty wall of Kamet

* Sloping ridges.

rose into the air, its grey granite precipices shining like gold in the setting sun. Round it were set at least a dozen aiguilles, not one of which was less than 20,000 feet, and whose precipitous, snowless sides no animal even could scale. Due west towered the Gangootri peaks, prominent amongst them the gigantic Rudru Himaleh. Pure ice are these, but ice lying at such an angle as none of us had imagined possible. Here, again, came the rock aiguilles, all second-class peaks as compared with their giant neighbours, all equally black and all equally impossible. I know from my limited experience that "impossible" is a strong word, but the powers of man are limited, while the forces of nature are hardly so. In Switzerland even the aiguilles, which rarely give more than 1,000 feet of hard climbing, long resisted the assaults of the most experienced and daring climbers, and only yielded after a long day's attack. What then shall be said of these rock turrets which are at least equally steep, and beside which the Matterhorn itself would stand a mockery and a dwarf? Surely for the present race of men the word "impossible" may be still retained in the Alpine dictionary. As I sat and gazed on the view, a strange medley of thoughts passed through my mind. In the intense silence of this height, there

was something which almost appalled, and which forbade speech. We were at last where I had so ardently desired to be, at the foot of the great giants against whom I had so long desired to measure myself, and yet all sorts of uncomfortable feelings intruded themselves. Would the cold of the night, sleeping as we were, perhaps, as high as ever man has slept—would this cold overpower us? Would the so-much-discussed rarity of the air drive us back, or worse? We would see. Meanwhile prevention is better than cure, so wrapping ourselves in extra clothing till we resembled a band of Esquimaux out on the loose, we rolled ourselves in our blanket bags, and squeezing into our hole, slept the sleep of the just.





CHAPTER III.

OUR FIRST CLIMB AND BACK AGAIN.



N the morning of the 11th July—18,500 feet high—we woke early, having had a capital night's rest.

It was a lovely morning, though I did not like the wind, which blew cold and clear. There had been a hard frost in the night, and our breath hung in icicles on our chins and bags. Still I was much surprised at the comparative warmth of the weather, having suffered greater cold at some of the recognised Alpine *gites*.* Owing to the breeze we had some difficulty in lighting a fire, and the result was that we did not get fairly under way until nearly 5 A.M., a delay which ultimately proved fatal. I may remark *en passant* that the

* Ledges, or resting-places where a lodgment may be made by climbers.

extreme shortness of the days, there not being at most fifteen hours of light, say from 4.15 A.M. to 7.14 P.M., is the most serious drawback and will probably prove a great obstacle to the climbing of these enormous peaks.

Well, we started up a snow-slope, Kauffmann leading, and in half an hour reached the foot of the spur up which we meant to climb. For some two hours there was no particular difficulty, though the general slope was rather steeper than is usual. The way led up over very large loose blocks of gneiss, which required great care to avoid dislodging, mingled now and then with a short slope of *névé*.* After mounting some distance the rocks disappeared, and a steep snow-slope took its place. The spur, too, gradually narrowed into a broken arête, and at last an immense projection stopped the way. Down and around this the axe had to be called into play, and we now found ourselves on the north side of the arête. Here we made our first mistake. The top of the arête was formed of loose snow piled up very steeply, and we decided to go along its side instead of climbing to the top. The snow was too soft to cut steps that would bear, and every footing had to be kicked out and patted into something like consistency. Meanwhile the

* Soft snow.

sun had come out, and now beat upon us with a furnace heat. The reflection from the snow was very painful ; we literally panted for breath, and I thought I was going to faint. At last we gained the ridge, and fell fairly exhausted on the snow, it having taken us more than an hour to rise about one hundred feet. Our hands and faces rose in great blisters, as though seared with hot iron, owing to the intense reverberated heat.

We now worked up a little higher, and sat down to breakfast in the shade of an overhanging rock. Up to this point I had felt confident of success, but an entirely unexpected obstacle presented itself. Kauffmann had been in difficulty for some time, and now, quite overcome by the heat, he found himself unable to proceed. He had felt rather feverish at the start, but had foolishly said nothing, hoping that it would work off, and that the climb would do him good. We consulted. I was very reluctant to leave him, and almost equally reluctant to abandon the ascent. Finally we put him comfortably in the shade, left our provisions and whisky, and Boss and I went on for the peak, which was now less than two hundred feet above us.

The slopes became very steep, certainly as steep as the so-called wall on the Strahleck, which I

believe to be about 50° . Boss cut away at a great pace, whilst I hacked out each step into a kind of bucket, for I must admit I was reflecting with some concern that we had to come down again. Clouds had been gathering and we were now in a thick mist, but the slope guided us, and for three hours we went steadily upwards. Suddenly the sun burst through the fog, and we were immediately made aware of the great height to which we had attained. Right above us were some black rocks which we knew formed the top, whilst towards the south-east a splendid peak, *a* 21, which is by the Trigonometrical Survey 22,516 feet, lay well below us, as we were able to see a third peak, *a* 22, which is 21,001 feet, over its summit. We were at the elevation of at least 22,700 feet, and the summit looked quite close. "In an hour," cried Boss, "we shall be there," and we redoubled our exertions accordingly. But it was not to be.

Down came the mist again, wrapping us in darkness like a cold shroud. Unlike the Iron Duke at Waterloo, I would have given anything for another hour of daylight. Worse than ever, it began to snow and hail very fast, whilst a wind rose that chilled us to the marrow. We halted and held a council of war. There was no question

as to the possibility of reaching the top ; there it was straight ahead of us, as we had seen a few moments before ; the question was, if we go on shall we ever get down again ?

It was past two P.M., and hard though it was to have victory snatched from our very grasp, still it was a case of victory and death, and no Westminster Abbey to follow, and accordingly we were obliged to turn. How we came down those ice slopes I shall never know. It was a place where no single man could have helped up another, and I was moving mechanically, like a man in a dream, almost crying with vexation and disappointment ; nor do I think Boss was in much more cheerful mood.

We reached Kauffmann, tied him on again, and putting a little life into our frozen bodies by the rest of the whisky, started anew for the descent. The snow and hail were worse than ever, almost blinding us, and in crossing a small ice couloir* I missed a step. Down I went ; Boss's foothold gave way, and he followed with a crash on to me ; and had not a small rock caught me in the ribs, I think we should have gone to the glacier below in about the quickest time on record. My axe flew out of my hand and lodged some hundreds of feet below,

* Deep channel or gully in a mountain side.

of course in the most awkward place it could find. I wanted to abandon it, but they wouldn't hear of it, and we finally paid Kauffmann out with a double rope of 120 feet and recovered it. This little accident naturally made us lose our way. We found ourselves suddenly on the brink of a terrific void, nothing visible below, and had to retrace our steps. Fortunately we came across a jersey of Boss's which he had left on a rock, it being too warm, and knew that we were right again. Finally, after many slips and mistakes, we reached our hole, stumbling over the boulders in the dark, very tired and wet, and, if the truth must be told, in a very bad temper. Here a new trial awaited us. The snow above had been sleet below, and it had drifted into every hole, and our blankets, clothes, firewood, everything was soaked. I wanted to go further down, but Boss very properly wouldn't hear of that, and we had to stay where we were.

I had taken the precaution of carrying a few matches in a waterproof box, and we tried to light a fire with paper, sticks, &c., soaked in kerosene from the lamps. The wind was very high, and the sleet lashed us like a whip, so where we would, and one by one the matches failed to strike or the wood to catch. Finally we came to the last match. I could not help thinking what a

picture we should have made then, cowering in a little hole, and dependent on one tiny piece of wood for food, comfort, and perhaps life itself. It burnt, and the kerosene caught fire. Every countenance lightened as did the match ; at least we should get something warm to face the night. But short-lived was our joy ; the day was doomed to be one of disappointment. A worse blast of wind howled round the corner, and scattered our last hope far and wide. There was nothing but raw flour and rawer whisky ; water was not to be had at these frozen heights ; and wet and hungry we had to slink into our wringing blankets. To make matters worse, Kauffmann chose to take offence at some reproof of Boss, and took himself off in the darkness, to sleep by himself—a proceeding which would have been fatal to most men in his state. We called and shouted for him to return ; no answer. It was impossible to find him in the dark, so we had to leave him to his own devices and turn in ourselves. I was very tired, but Boss wouldn't let me sleep, and kept stirring me up ; for which, though I was very angry at the time, I was afterwards very thankful, as I really believe that sleep in that weather at that height would have been “the sleep that knows no waking.”

Oh, how slowly the hours passed ! how I longed for daylight ! At last it broke over the eastern peaks. We hurried out, packed up the swag, and stiff and hungry though we were, rushed down the glacier. Half-way down we met the shikari and the coolies coming up to look for us. The little man showed a delight which was as genuine as it was ludicrous. He rushed at me, kissed my hands, and explained that he thought " Dhup " * had taken us ; " We were his father and his mother," etc. We promptly transferred our loads, and made on for the lower camp. Once there, what a feed we did make ! Was ever cold meat so tender and juicy ? were chupatties † ever so hot and muffiny ? I really think that our voracity astonished even the coolies, and it takes a big performance in the matter of eating to do that.

Not till now did we have time calmly to discuss our late failure. Defeated we were, but, I trust, not disgraced. We had overcome all the difficulties of the peak, and half an hour, or, at most, an hour of fine weather was all that was needed to have made the first great ascent in the Himalayas. But man proposes and the weather disposes. At any rate we had set at rest, as regards ourselves at

* A demon of superstition.

† Bread-cakes.

least, the vexed question about the rarity of the air. And here, perhaps, it may be of some interest to describe our feelings.

I had never believed in the impossibility of breathing at these great heights, else I should not have been foolish enough ever to attempt them ; but when one reads so many accounts of bleeding at the nose, panting for breath, &c., one is obliged to pay some credence to them. Now the first thing that struck me was this : Read any old account of the ascents even of Mont Blanc or Monte Rosa ; the traveller always dwells on the rarefied air which caused this, that, and the other symptoms. Yet in these later days these peaks are mere highways, ascended by young and old, male and female, the blind if not the halt ; and, strange to say, without any inconvenience worth mentioning. Why is this ? Surely the air cannot have become less rare, nor can the race of man have become endowed with better lungs. There are probably two reasons : first, the public believed in distress from rarefied air, and looked to have it satisfied accordingly. Thus men, finding that they were distressed at the end of a long climb, put it down to the effects of a rarefied atmosphere, forgetting that if they had to do the same amount of exertion even at sea level, on a treadmill, say,

they would be quite as much harassed for want of breath.

Secondly, dietary and pace are so much better understood. Nowadays a man understands that he must start with a satisfied stomach, a thing not always easy to do when the very air seems to feed you ; also guides understand pace so much better, and do not now start as if walking for a wager. I cannot do better than quote here a few lines from Mr. Whympers's delightful work which have a bearing on the subject. "As a rule, amateurs and particularly novices, *will not* keep their mouths shut. They attempt to 'force the pace,' they go faster than they can go without being compelled to open their mouths to breathe, they pant, their throats and tongues become parched, they drink and perspire copiously, and becoming exhausted declare that the dryness of the air, or the rarefaction of the air (*everything is laid upon the air*) is in fault."

I should perhaps add that both Boss and myself found it impossible to go with our mouths shut, and that we are therefore of the "puffing Billy" order. As, however, we only open that useful organ to expire and respire through the nostrils, we have always escaped the other above distressing symptoms. Now, as regards our own

feelings. Kauffmann's sickness was due to starting out of sorts, and not to any effect of the air. Boss and I ascended certainly to 22,700 feet, and neither there nor at any point of the ascent, did we feel any inconvenience other than the natural loss of breath consequent on every ascent. Nor was the ascent a mere up-hill walk; on the contrary, it presented quite as many difficulties as any ordinary Alpine peak, and on the rock occasionally demanded very great exertions. It is my deliberate opinion that any man in sound health and fair training, may work and be capable of great muscular exertion with no more inconvenience when the barometer stands at 13" than when it marks 30". At any rate, we could not detect any difference, whilst all such symptoms as nausea, bleeding at the nose, loss of sight, &c., were conspicuous only by their absence. One organ, and one only, appeared to be in trouble, and that was curiously enough the heart, not the lungs.

The beating of the heart became very perceptible, and when we attained a great height, quite audible. It was also slightly increased in pace, though not enough to cause any great disquietude. For this reason, I would recommend any one desirous of reaching great heights, to undergo a preliminary medical examination, a precaution

which I took myself. Finally, I do not believe, given the data of a healthy man in training, that the rarefied air will cause any insuperable obstacle to the ascent of even the highest peak in the world, provided the actual difficulties are superable.

To return to our travels. We started on the back track and reached our previous camp in the day, the coolies being lightly loaded. I was in great pain from my foot, which was now so swollen that I could not force it into my boot. Accordingly I had to walk in a thin pair of sambur skin slippers, tied on sandal fashion, and the scrambling along the very narrow, dangerous ledges gave me intense pain. When we reached camp, Boss and the shikari went out after some thar which we had noticed in a very precipitous place. Darkness fell and they did not return, and we got very anxious about them. At last I heard their voices, and presently Boss turned up. He had been having a very lively time of it. The climb had been longer than they expected, and when they reached a place above the thar they were benighted. It would have been better to stay where they were, but he feared that we should be anxious, and accordingly descended the cliff. The way the shikari had come down had increased

Boss's admiration immensely. "Climbed like a goat," he said. Of course he had the advantage of knowing the ground, and on a subsequent occasion when they met on equal terms, it was soon seen who was the better man. We passed under the place next day, and a more awkward climb, even in daylight, I should not care to attempt. We travelled down to Rini, and right glad was I to see headquarters again. We decided to rest a day or two, to give my foot some chance of healing, and I lay about in the tent, and appreciated for the first time what the Egyptians suffered from the plague of flies. Boss took some of the coolies down to Joshimath to bring up flour, the merchant having of course neglected to send any up as he had promised. Next day he returned heavily laden.





CHAPTER IV.

ANOTHER ATTEMPT FOR NANDA DEVI.



E started for Nanda Devi, July 15th. This time, we made up the northern side of the Rishi Ganga. The way was sufficiently steep, there being no road, and we had pouring rain the whole time. On the evening of the second day, we reached a lovely little tableland called Dunassau. The last day's route had been extremely wild, running along the southern face of the ridge, sometimes with a sheer drop to the river below, some 7,000 to 8,000 feet. Such wild rocks and broken gulleys I had never met with before, and they reminded me forcibly of certain illustrations to Dante's "Inferno," by that weirdest of all artists, Gustave Doré. Dunassau is surrounded on all sides except the north by a rocky ridge topped with occasional peaks. The highest of

these is rather over 17,000 feet, and the elevation of the plateau about 15,800. Yet great as is this height, it is used as a summer pasturage, and here we found a great herd of sheep and goats tended by two exceedingly unclean shepherds. On the next day, the 19th, it snowed heavily, and we were confined to the tent; but on going out towards evening, we found that ten of the coolies had run away. I suppose the weather was too much for them. We climbed the ridge and had a lovely sunset. Now we saw the north side of Nanda Devi, the distance being only some twelve miles as the crow flies. Inaccessible as the peak looks, and probably is from east, west, and south, we were delighted to see that here it looked feasible, at any rate, for a very long way. The last 1,500 or 2,000 feet still looked black and threatening, but a splendid spur ran up to an elevation of nearly 25,000 feet, and did not appear to offer any insuperable difficulties.

Next morning we sent off the government chuprassi* with money to fetch more coolies, we ourselves intending to proceed meantime. However, the spirit of dissatisfaction was, I suppose, catching, for he never returned, and to his desertion, more than anything else, must be ascribed our

* See page 59.



Nanda Devi.

failure on Nanda Devi. We got some sheep from the shepherds and swagged all our things up to the ridge, then down to a steep ravine through which a stream was dashing, which gave us some trouble to cross. This stream is marked on the map as a glacier, one of those many mistakes which are unpardonable in a survey scale one inch to the mile. Our progress was very slow, partly owing to our having to work double stages, there being fifteen loads for nine of us all told, and partly owing to the nature of the ground, which was not only very broken and precipitous, but quite *terra incognita* to the whole party. We finally camped at a place called Debritigurh, on the southern spur of the range running south from Dunagiri. Of course there are no villages or anything of that sort here. I suppose it is some shepherd's name. Just as we were starting next day, we were overtaken by a hill man who had been very kindly sent after us by a fellow-sportsman we met below. He had been the guide of the surveyor who is responsible for the map of these regions, and professed to know all about it, with what truth shortly appeared.

We went along the spur, here a very steep grass slope strewn with moraine boulders, and shortly came to a steep gully of which no trace appeared

in the map. Crossing this occupied some time. On the other side the guide appeared confused, and on being questioned, said he didn't know any more. The surveyor sahib had turned back from here. I had been suspecting this for some time, but I had not imagined that a man would map a really large sheet of country entirely out of his own head. Yet this is the case.

The whole of the map, No. 21, comprised between the latitude of $30^{\circ} 15'$ to $30^{\circ} 25'$, and longitude $79^{\circ} 45'$ to 80° , an area of over 150 square miles, and containing no less than nine summits of the first rank, from 20,842 to 25,669 feet, is utterly imaginary in its main features, and has only been filled in by what can be seen from the ridge north of the Rishi Ganga. One whole ridge of mountains has been suppressed, gullies half a mile wide, and 1,000 feet deep, are omitted, glaciers are put in where no glaciers ever did exist, and where are trees three hundred years old. In short, the map is a very pretty picture, but of no account from the map point of view.

The guide thus failing us was dismissed, and Boss took up the lead as guide. Guiding in its strict Alpine sense was wanted here ; sharp rocky ridges ran down from the peaks to our north, and fell with high precipices sheer into the stream,

some 5,000 feet below. Occasionally, we had to hang on by a tuft of grass or a bunch of Alpine roses, and I do not exaggerate when I say that for half the total day's work, handhold was as necessary as foothold.

By nightfall, after twelve hours' work, we had gained some three miles in absolute distance, and this perhaps better than anything will give an idea of the labour involved in working along these slopes. We camped on a little space, the only one we could find, which was not quite so steep as the rest, and after building a wall of stones to prevent us rolling into the river, turned in. I found, however, that sleeping at an angle of 30° is not conducive to comfort. Time after time did I dream that I was rolling over the precipice, and woke to find myself at the bottom of the tent on the top of Boss, or *vice versâ* (we took it in turns in a most impartial manner to roll down first and make a bed for the other who speedily followed).

On the morrow Kauffmann took the coolies back to bring up the other load, and Boss went forward to explore the route. I lay an interesting invalid in the tent, my foot giving me great pain still, and being quite unable to wear a boot. In fact I had been walking in stockings with a wisp of straw rolled round my feet, ever since we

started. During the morning, I wrote letters, my journal, &c., and pottered about collecting firewood (our only fuel was Alpine rose and rhododendron, we being considerably above tree level, which is here some 14,500 feet), and botanising. Great was my delight to find some beautiful edelweiss, of a size that I had never seen, in its wild state, though in gardens it attains a great size. I was the more pleased as I had not known before that it inhabited this great chain. Curious is the effect which this little white fuzzy flower produces; what memories of exciting scrambles and Alpine bivouacs does it not recall! "Noble and white," no wonder it is the national flower of that gallant race of freemen, who nestle neath the mighty peaks of which it is no unfitting emblem, and yet strange to say, it produces almost an equal enthusiasm in the breast of the alien mountaineer. Certainly to myself it always is a kind of moral tonic, a visual ozone.

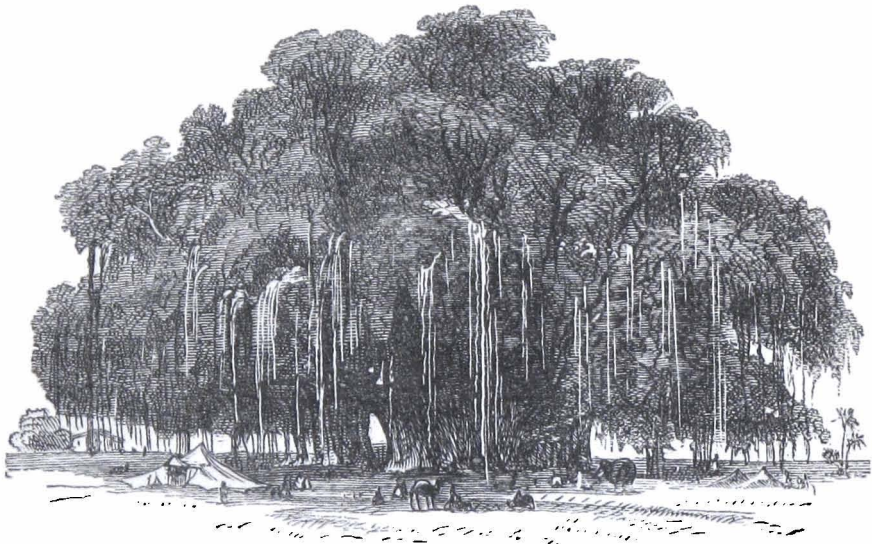
Next day, we worked along the spur, following Boss, who had seen a place where he thought we could cross the river. When above this, we descended to it, the hill being very steep and covered with thorny jungle. Rain began again, and we found ourselves on the banks of the stream shivering and waiting for Boss, who had gone

after some pheasants. This little delay effectually settled our chance of crossing. The stream rose some feet in an hour, and though we tried very hard to bridge the flood, everything was washed away as soon as laid in position. Boss stood up to his knees on a slippery rock, with the water rushing by at some twenty miles an hour, and worked like a horse, but it was of no avail. Once, indeed, I thought he was gone as he slipped and nearly fell. Needless to say that to fall into that torrent would have been certain death, to be battered to pieces against the tremendous rocks that blocked the way. At last, soaked to the skin and very tired, we gave it up and pitched under an overhanging boulder.

Next day Kauffmann and the coolies returned to fetch up the rest of the provisions, whilst Boss and I worked along the river to see if we could find a crossing. About half a mile up, we came to a most magnificent gorge, one of the finest specimens of water erosion to be seen. Two hundred feet above, the rocks nearly met, their black, smooth, shiny sides overhanging considerably. Through this tunnel roared and raved the torrent, here pent in, in very narrow limits, and raging with a sound of thunder. Yet in this fearful din and turmoil we saw a curious thing.

On a tiny ledge, just above the dashing waves, a pigeon had built her nest, and there lay the two white shining eggs in perfect security ; no enemy could touch them there.

We carefully examined the stream up to the point where it descended the cliff in a grand fall, and found that nowhere in its present state could a crossing be effected. It was provoking : we were halted right under the great cliffs of Nanda Devi, which rose almost perpendicularly above us, and we could see, so near and yet so far, the spur by which we had hoped to climb. To cross, however, was out of the question with our limited appliances, and we reluctantly decided to return.





CHAPTER V.

THE END OF OUR FIRST TRIP.



E were engaged in cooking—we did all our own cooking now—and I managed to make a fair hand at chupatties. These are a kind of damper, *i.e.* flour and water baked on an iron plate, and require a peculiar knack to roll them into a true thin circle. Suddenly enter on the scene Kauffmann and the shikari.

“ Well, Kauffmann, when are the others coming? ”

“ Hélas, monsieur, ils sont tous partis. ”

It was only too true ; the coolies had evidently planned the affair, and as soon as they had got out of sight of camp had fairly bolted. Kauffmann's face was so lugubrious, that, serious as the matter was, I couldn't help bursting out in laughter. However, this settled what we had previously almost decided ; so we abandoned

everything that wasn't absolutely necessary and managed in a couple of days to swag back to Debritigurh. The weather now cleared, and we determined to have a little more climbing. Meanwhile, we sent the shikari back to find some more coolies. He vowed to bring them back in three days, and offered us his heavy silver bracelet, his most prized possession, as a pledge for his return; and here I cannot resist saying a word or two about this little fellow. To say that he was far and away the best native I met in India, would be comparatively small praise. The way he stuck to us when abandoned by every one else, and we absolute strangers to him, was splendid; always cheerful, ever ready to help in cooking, to carry any burden, however heavy, to show game, etc., always encouraging the coolies, he proved a true friend in need. I think he felt a real friendship for us, as we certainly did for him, and sorry indeed were we all when the time came to part. It is only in times of adversity like these that the true metal in a man comes out.

Meanwhile we started to ascend a very noble peak, nameless unfortunately, and only known by a number (α 21), as if it were a convict. The peak is south-east of Dunagiri and is of a very curious shape, but one fairly common in the

Himalayas. It is built just like a wedge with a level top, perhaps a quarter of a mile long, whilst the eastern and western sides are slopes of 60° to 70° , and of course utterly inaccessible. During the ascent to our sleeping-place, some 18,000 feet above the sea, we put up a great many of the beautiful snow-pheasant called "monal" in India, and Impryan pheasant in England; so many were there that we called our peak Mount Monal. The ascent from the south-eastern arête presented no difficulties, and we reached the top, 22,516 feet, again with perfect freedom from any unusual distress. This was the highest ascent on record up to date, though we ourselves passed it by some 1,500 feet when we ascended Kabru some ten weeks later. Almost due east, lay yet a third peak (*a* 22), one of the very finest aiguilles I have ever seen. I could not suppose that it would be possible, but as it was the only one within reach, I thought we might at least have a try.

We accordingly swagged up our things, meaning to sleep in a cavern whose mouth we saw some 4,000 feet above us; we reached its mouth and Boss entered to explore. He had gone in some way when we were startled to see him suddenly sliding out on his back at railway speed. The floor of the cavern was pure ice, and on examina-

tion I found it to be a most singular place, a true subterranean glacier. The ice rose and the roof fell, meeting about 100 feet from the entrance ; but the smoothed planed rocks and the little perpetual stream from the foot, to say nothing of two or three little crevasses, left no doubt as to its true character. It was quite delightful to see this little glacier, about a hundred feet by twenty, exhibiting in miniature all the phenomena of its larger brethren. We slept well, though, owing to the neighbourhood of the ice, it was very cold. However, we started very early next morning, as I wished to investigate the cause of the glacier below. About 800 feet of steep, loose moraine was passed, and then we reached the top of the arête and immediately the peak stood before us, rising more than 2,000 feet above, with not a line or trace of snow. Where the arête joined the peak it flattened out, and here very deep snow was lying, for which there was no visible outlet, so that I was forced to come to the conclusion that it was connected with the underground glacier, which thus formed, as it were, the waste-pipe of the basin. The whole presented a very curious phenomenon, and I could not at all understand how the excavation could have been produced through full 800 feet. Well, we looked at our peak, and the more we looked

the less we liked it. Certainly, on our side, there was no ascending ; but on the other eastern spur it looked possible, so we decided to cross the face. To do this we had to descend the other side of the arête on which we stood, and then cross a long and difficult bit of broken rock.

Three hours saw us on the eastern arête, and just about as high as we had been before. Kauffmann led up a really difficult bit of rock, getting steeper and smoother every moment. We were within one thousand feet of the top, and only some one hundred and fifty feet of difficulty intervened between us and a snow ridge in which the arête terminated, when Kauffmann suddenly stopped. I asked the matter, and he said that he could get no farther. The ledge on which he stood was too narrow for two, and straight above him the rock rose eight or nine feet, quite impossible without help. There was nothing for it but to return, which we did, with some considerable difficulty. While doing this Boss discovered a magnificent ibex, who was watching us intently, probably never having seen a human being before. He was a splendid fellow, as large as a pony, with huge horns curling back to his stern, and as he stood on a ledge, with his grey coat against the black rock, he looked just like a noble marble statue of

nature's own handiwork. It was too late to try any more, so we returned, Kauffmann bringing the sleeping bags, whilst Boss and I tried a short cut to camp. Like all short cuts it proved rather long, as we suddenly found ourselves in full view of the tent, but with a ravine yawning between us, to pass which demanded from us two hours' hard work. Being naturally very hungry, we finished all our provisions, as we expected the shikari to turn up every minute ; but no such luck.

Next morning we were almost like "the three sailors of Bristol citee, who had but one split pea," for we had but one chupatty, which was amicably divided for breakfast. We then divided our forces, Kauffmann returning to our last stage to fetch up some meat tins which we had abandoned, Boss going forward to find the shepherds at Dunassau, and I up the hill again to get monal for supper. However, I had no luck ; the birds seemed to know that I was on the war-path. Yesterday we could almost have stoned them ; to-day, when I had a gun, every bird rose more than one hundred yards off. Kauffmann returned with some provisions, and we made a great dinner ready. Boss, however, didn't turn up, and we began to get anxious. At last we heard shouts across the ravine, and in about two hours he and the shikari

turned up soaking wet. The stream which flowed from the Dunagiri glacier had risen so much that it was above Boss's waist, and much too strong for the little hill-men, who are less than five feet in height. Added to this was the pleasant intelligence that he thought one of the coolies must be dead, as the fellow had fallen down the rocks, and he could hear nothing of him. Next morning, however, the stream abated, and they were enabled to cross early, bringing with them the man whom we supposed defunct. He had had a marvellous escape, as he had fallen or bounded more than one hundred feet, and only received a few scratches and been stunned. He had been carrying half a sheep on his back, which broke his fall, and on which he collapsed.

We proceeded to pack and start on the back trail, the forward coolies getting over the stream again. Then out came the sun, and the water rose so fast that three coolies with our blankets and tent were cut off and left on the other side. We went on to Dunassau, thoroughly drenched, and took up our quarters in the goat-herd's hut, where we were hospitably, I might almost say, ravenously received by its numerous inmates. In short, a hut eight feet square and five high, with a fire which, contrary to the old adage, is all smoke—we being

drenched to the skin and almost eaten up by fleas—does not exactly form a place in which to spend a happy day, or night either. Everything comes to the man who can wait; and morning came to us, and a lovely dawn it was. We bathed, and dried in the sun, and were soon joined by the rearguard; and then all took to the steep little path again which led over the mountain to inhabited parts once more.

This completed our mountaineering trip in Kumaon; and we now joined the pilgrim track, and returned by easy stages from Joshimath. Our route lay past Chamoli, Nanda Prayag, Karam Prayag—all very sacred spots—to Lobah. The road is always beautiful, the hills being very steep, yet covered with trees, principally wild olive. From Lobah we returned by our previous route to Naini Tal, which we reached on August 12th, after a very pleasant, though somewhat unlucky, trip.





CHAPTER VI.

FROM CALCUTTA TO DARJILING.



IT had always been my intention to make an expedition into Sikhim from Darjiling, that being the most eligible starting point in India, and shortly after the completion of our Kumaon trip, we made our arrangements and left Calcutta on August 21st.

The journey is comparatively short—twenty-five hours—is undertaken by many tourists, and should be by all who visit India ; the result being that the one train a day is usually crowded to excess. As we roll out of the station, the scene changes as almost by a miracle. No more bazaars swarming with native life, no more of the dirty bustees (villages) which seem to be the chief components of the self-styled City of Palaces ; we pass into what seems almost primeval jungle, dense

groups of palms and bamboos with their shining polished trunks and delicate feathery foliage, while now and then we pass a little tank reflecting the forest glories in its mirrored surface. Soon Dum Dum is passed, once a thriving military station, now doomed to extinction. Here stand really magnificent houses with statued and terraced gardens, once the possession and pride of those old Anglo-Indians, who lived *in* the country, and not *on it*; now, alas! fallen into the hands of the ubiquitous Baboo,* who, Gallio-like, cares for none of these things. A little farther and the scene becomes one vast flat paddy-field, without fence, ditch, or tree; the level only broken here and there by a few mud huts, nestling together on an artificial mound.

This lasts more than one hundred miles, till the Ganges is reached at Damookdea. A steamer takes passengers to the station on the other side, about four miles, and an awkward crossing it is. The leads are constantly going in the shallow water, for this fickle river has a playful knack of changing its channel so often as seems good in its eyes so to do, to the great tribulation of our captain. On the other side, the Northern Bengal Railway lies in wait for the unfortunate traveller. Built

* Native gentleman.

on the narrow mètre gauge, that greatest mistake amongst the many errors of Indian railway policy, a single coupling to each carriage, and that as long as possible, the occupant of one of these man-traps has a pretty lively time of it, the whole desire and object of the line being apparently to afford the maximum of oscillation compatible with the minimum of speed. However, the terminus, Siliguri, is reached at last, and after due sustenance of the inner man, we seat ourselves in the wonderful hill railway, which is to carry us up to Darjiling, seven thousand feet above.

With the tiny engine and two-foot gauge, it is almost like a toy railway, but rattles off at a great pace when started. The first eight miles are level, and just as we are asking ourselves how the first hills are to be passed, the train swings to the right and begins to climb without any hesitation or slackening of pace. The track follows the east road, swings round very sharp curves till the train looks like a snake, rushes along the edge of ravines and precipices, all this time ascending a slope varying from 1 in 17 to 1 in 25. Presently Agony Point is reached, a sharp corner over a high precipice and no guard rail. It is rather startling at first, and one is inclined to ask one's self what would happen if the train ran off the line. We soon had a prac-

tical answer, as a truck suddenly left the rails. The engine was immediately stopped, literally in its own length, a lever taken from it (the officials are evidently accustomed to these little trifles), the truck lifted on again, and a fresh start made in a few minutes. The devices for rising are very ingenious. In one place, the line makes a complete loop of some forty to fifty yards radius ; in others, are shunting stations, where the train is shunted up a zigzag, at each siding gaining a rise of eight, ten, or twelve feet. Finally, just before reaching Kurseong, it is rather provoking to see the section of line which was passed an hour before, lying immediately beneath. After Kurseong, the slope decreases, though the train passes along the brink of some tremendous ravines, and Darjiling is finally reached in about seven hours, the distance being some fifty miles.

Darjiling claims, not without reason, to be one of the prettiest hill-stations in India. From the transverse mass of Senchal and Goom a narrow spur shoots almost due north, the sides marked with roads as steep as possible, consistent with locomotion. Here and there rises a shining white bungalow, while the whole hillside is covered with short deep-green bushes ; for Darjiling is the headquarters of tea-planting, the Olympus of tea-

drinkers, where the best Pekoe in the world is produced. There are nearly two hundred planters in the district, and many thousands of sturdy Bhooteas are on coolie work to supply the ever-growing demand for best Indian tea.

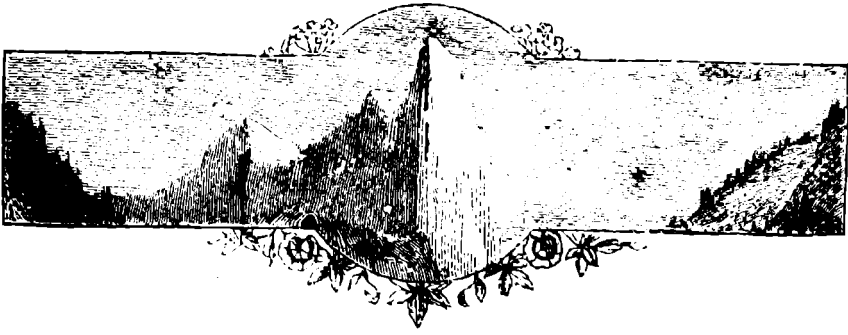
On the extreme top of the ridge is Jellapahar, the military cantonment. It is a curious fact that in India the military department, like the monks of old, always gets possession of the best sites. Below, and north of Jellapahar, the ridge steadily sinks, crowded with tiny little bungalows, for space is valuable. There are, a rather fine church, club, and various buildings used for government purposes when the rulers of the land take refuge in the hills. North still, and we come to the Mall, *the* promenade of Darjiling; and on the other side of this is a comparatively large demesne, with a very pretty Gothic building. This is Government House and grounds, wherein the king *pro tem.* of Bengal delighteth to wander. Little trouble is it that it occupies a quarter of the total available building space.

From the town the view is magnificent; but mount Senchal, or Tiger Hill, and it is even finer. From your very feet the ground falls almost precipitously for five thousand feet to the Rangeet and Rammam; the eye ranges over a succession of

wooded ranges, till it rests, at forty-five miles' distance, on the Snowy Ranges, the greatest peaks in the world. From north-west to north-east, through more than one hundred degrees, runs the mighty chain. That cluster of peaks in the north-west is Mount Everest (29,000 ft.) with its attendants, the highest measured peak on the globe. Then the range falls, only to rise again due north in the superb mountains Junnoo (25,300 ft.), Kabru (24,000 ft.), and the mighty double-topped wall of Kangchinjanga (28,150 ft.). Eastwards they run, peak upon peak, chain upon chain, till they end in the far north-east in the snowy cone of Chumulari.

I despair of describing the delight with which I gazed on this superb panorama. Yet there was one drop of bitterness in the cup, such as any mountaineer who looks on peaks with somewhat a professional eye may feel. The magnificent flowing curves of the *couloir*, the hacked and battlemented front of the ice-wall, the spiked and broken glacier with its towers and moats of a translucent blue, the dark frowning precipices fill the mind with a sense of beauty mixed with awe. There is ever present some such sensation when we behold a grand and venerable cathedral, save in so far as we recognise the eternal and overwhelming superiority

of the works of Nature to those of man. But to the mountaineer the sight conveys something more. Those lovely curves sweeping down the *couloir*, which from their very mathematical precision of form impress the mind with some such truly æsthetic feelings, as does the exquisite grace of a Greek statue or an Etruscan vase, are yet the tracks down which sweep volleys of stones, the climber's deadliest enemy. Those dark transverse arcs across the glacier tell him of huge chasms yawning for the unwary footstep; those scarcely visible bands of purest white warn him of the more treacherous foe, the covered crevasse. The frowning ice-wall and broken séracs alike menace difficulty and danger; this enfilades the easiest line of ascent, that prepares him for many an hour of toil and danger. Nay, even the crowning Alpine glory, the cloud-banner, flung out proudly from the topmost peak, has its own significance. It means that on the height is a raging wind threatening defeat, and possibly destruction. In short, a hundred phenomena, to the average spectator only so many added glories, to the mountaineer are written symbols. They constitute a book whose characters he alone can read, and in whose every syllable lies a warning and a threat.



CHAPTER VII.

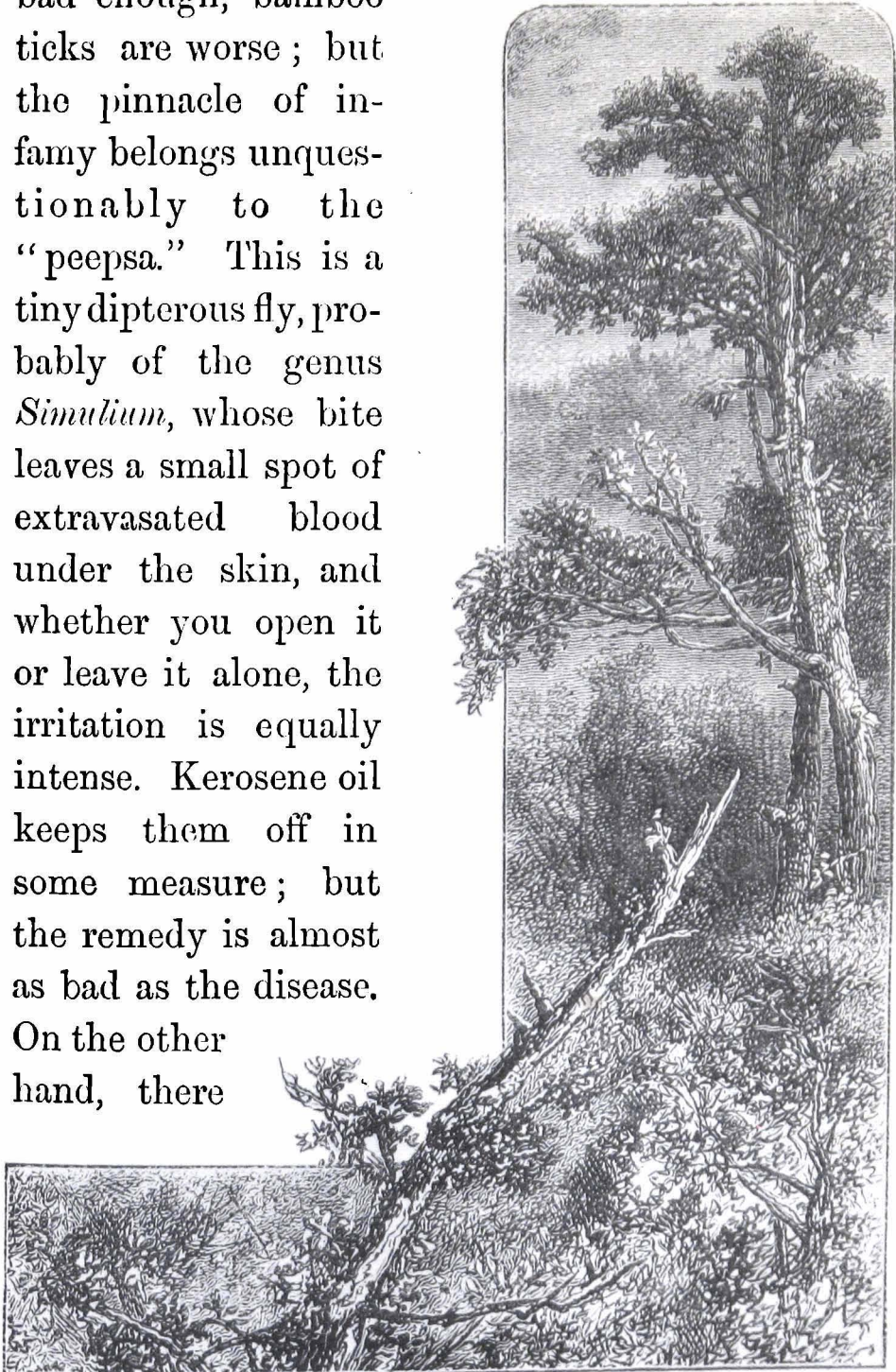
ON THE WAY TO KARM.



OUR preparations were soon made, and we started from Darjiling on the 25th. The caravan consisted of our three selves, Gaga, our sirdar,* a sturdy, honest Tibetan, who had the additional advantage of speaking Hindustani and a little English, a merry little Bhootea cook, and twenty powerful coolies, who made light of the 70 lbs. a man they carried. These Indo-Chinese are rather intractable at the best of times, and Gaga had very little control over our men, who dawdled and halted at their own sweet will. The hill tracks were very bad—owing to the constant rains—and leeches were in swarms. The extraordinary number of insects and their aggressiveness is one of the greatest drawbacks to travelling in Sikhim. Mosquitoes are

* Attendant.

bad enough, bamboo ticks are worse ; but the pinnacle of infamy belongs unquestionably to the "peepsa." This is a tiny dipterous fly, probably of the genus *Simulium*, whose bite leaves a small spot of extravasated blood under the skin, and whether you open it or leave it alone, the irritation is equally intense. Kerosene oil keeps them off in some measure ; but the remedy is almost as bad as the disease. On the other hand, there

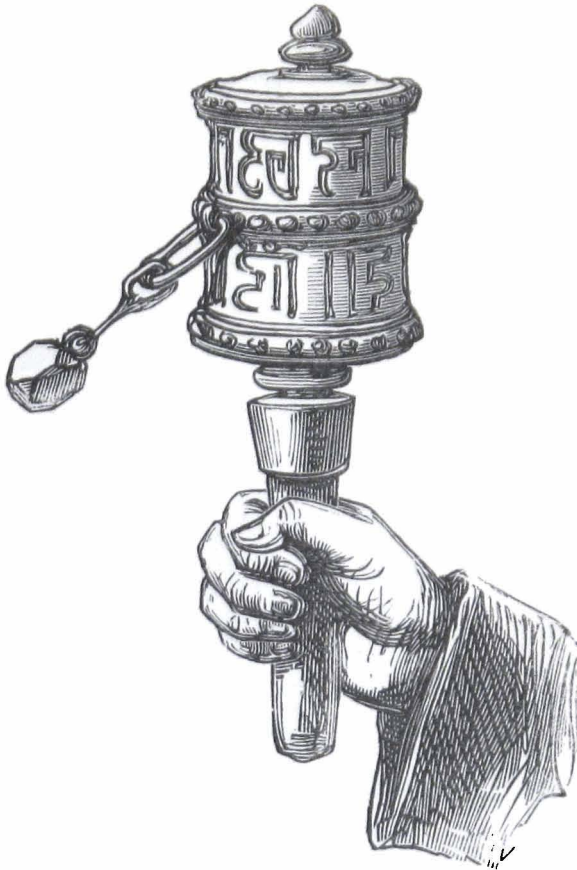


was something to make up for these little troubles. The jungle was magnificent—creepers, orchids, and the most superb magnolias; while the size and variety of the moths and butterflies are almost beyond description. We amassed a little collection of over two hundred varieties, and a German collector living at Darjiling caught in one year, within a radius of thirty miles, upwards of eight hundred varieties, nearly one half of which were butterflies, and more than one hundred absolutely new to science.

Our progress was necessarily slow, and we did not reach Bora, at the foot of the true mountains, till the seventh day. The distance is about thirty-five miles, but the path traverses at least double this distance, and crosses no less than five distinct mountain ranges. Some idea of the road may be formed from the fact that it involves ascents and descents amounting to 23,000 and 16,000 feet respectively. The country is thinly inhabited, but is remarkable for a large number of those singular monastic institutions, for which Tibetan Buddhism is so famous. The largest of these, Permiangtse, we visited.

It occupies a commanding position on the extreme summit of a ridge, and is about 8,000 feet above the sea. It consists of a large chapel sur-

rounded with detached buildings, tombs, praying-stones, etc., and gives shelter to about one hundred monks. By the courtesy of the prior we attended at the service. The monks entered in procession,



Small Praying-wheel.

the superior orders in yellow, the inferior in red gowns, every man with a rosary and a small praying-wheel. Prayers were chanted and responses made in almost Gregorian tones. Incense was burnt and

oblations of tea made to the three images of Buddha which are seated over the altar, and the service closed with the reading of a homily by the superior. I could not help being struck with the strong outward resemblance to the Roman Catholic ritual, and well might the first Jesuit missionaries exclaim that some one must have preceded them in their mission.

Outside, one cannot but remark the extraordinary variety of appliances for praying, which the Tibetans have formed almost into a mechanical science. The praying-wheel is universal, and perhaps merits a description. It consists of a cylinder turning on an axis and containing a roll of paper on which is written as often as possible the one universal, all-sufficient Buddhist prayer, "Om mani padmi hom" ("O God, the jewel in the lotus"). Volumes have been written on the significance and symbolism of this mystic sentence, in which is summed up the prayers and thanksgivings, the future hopes and fears of the largest religion in the world. These cylinders vary from two or three inches in height to eight feet, containing millions of repetitions of this phrase, and every revolution means the repetition of their contents. Many are placed in a stream so that they may be constantly turning. Prayers are printed on flags which fly

from a forest of tall bamboo poles ; they are engraved



Burning Incense to Brahma.

on paving-stones and walls, so as to benefit the passer-by. In short, if this vicarious praying be

of any account, the Tibetans must be quite the most religious people in the world.

From Bora to Jongri, the way is very difficult and quite impassable for beasts of burden. The successive belts of vegetation are very interesting. During the six thousand feet ascent, one passes from tropical bamboos and creepers, through walnuts, beeches, &c., belonging to temperate climes, then through the firs and pines, and lastly passing the limit of trees, into a dense impervious jungle of rhododendrons. Finally, the ridge flattens out into a rolling tableland, some fourteen thousand feet above sea-level, and here stands a solitary little stone hut, the habitation of the herdsmen in summer. We found the hut occupied by a goitrous old woman and her grandson, the joint guardians of the herd of yak which are annually sent up to the high pastures. A few presents made them readily allow us to share the house, which was certainly better than tents. As a general rule, September is fairly fine in the mountains, but 1883 was very abnormal, and, to our horror, the rains set in worse than ever. There was nothing for it but to wait, so I dismissed most of the coolies, retaining just sufficient to act as porters for excursions.

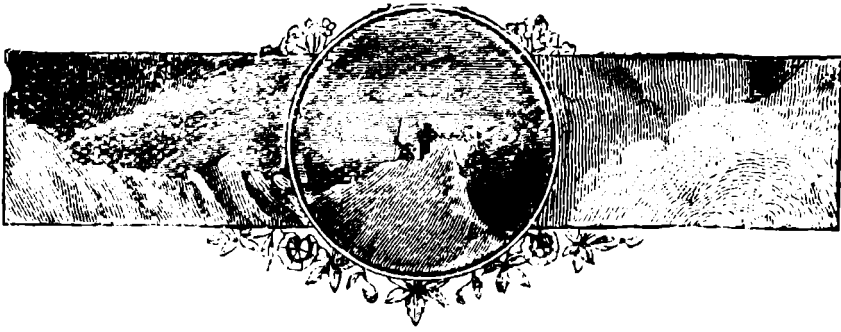
On the 4th and 5th September, we explored the

west side of Kabru and followed the great glacier which descends from Kangchinjanga. Then for a fortnight came blinding rains and snowstorms, and with the exception of a little shooting and some employment in botanizing and geology, we were almost confined to the hut. I shall never look back to that time without thinking what a splendid companion Emil Boss was. Ever cheerful and ready, full of anecdote and resource, he was the life and soul of our little party, and it was due to him and to him only that we did not weary of our enforced confinement. On the 23rd we crossed the Guicho La, 16,500 feet ("La" means Pass), purposing to attack Pandim from the north, but found it impracticable. I do not know of any more formidable peak. On the west side, it drops sheer, whilst the other three are guarded by the most extraordinary overhanging glaciers, which quite forbid any attempt.

We returned on the 26th, the weather being consistently bad. However, on the morning of the 29th, I was awoke by an unusual cold. I looked at my watch, 4 A.M., at the thermometer, 22° inside the hut. There was a sharp frost, the air as clear as possible, while the stars shone with no indecisive twinkle, as in our northern climes, but with a steady, fixed burn. The moon was hidden behind

the western ridge, but yielded just enough light to make the glaciers glow with a pale unearthly, bluish glare. Right at the head of the valley, Kangchinjanga shone as though armour-clad, whilst the vast range of Pandim and his attendant peaks shone with an almost phosphorescent glow. Over the head of Jubonu hung Orion, flashing as no regal diadem can; due north glittered the Great Bear, the Sat Rishi of the Hindoos, their quiet steady flame-like eyes watching the sleeping earth below. Well might the mystic feel that they were the eyes of some all-seeing, impassive being, gazing over the crowd of human animalculæ below, bringing happiness to some and caring not, misery to some and feeling not, without pity and without change. The biting cold soon dispelled such reflections, and I turned in again, with the certainty of fine weather coming at last.





CHAPTER VIII.

OUR HIGHEST ASCENT.



EARLY on September 30th we started for Jubonu, which lay immediately east and above our camp. At 2 P.M. we reached a suitable camping place, well above snow-line, and pitched there, our altitude being rather over eighteen thousand feet.

At earliest dawn next day we started, leaving the coolies behind. The snow was in good order, and Kauffmann led the way at a great pace. He is generally admitted to be one of the fastest step-cutters living, and this day he fairly surpassed himself. The glacier was crowned with steep rocks, the edge of a noble amphitheatre formed by Jubonu and Nursingh. From these, we proceeded to cut steps up a steep snow *couloir*. This got steeper and steeper, and at length we were forced to take to the rocks at the side. One place,

greatly resembling the celebrated chimney on the Breil side of the Matterhorn, gave a good deal of trouble, but at length we reached the little platform at the foot of the final crags, which rose some three hundred feet clear above us. Fortunately, there was a small crack between the cliff's face and the glacier, which here fell at quite an angle of 70° for several hundred feet. Along this we passed to the north side of the peak, whence a short but exceedingly steep slope led us to the summit.

This was incomparably the hardest ascent we had in the Himalayas, owing to the great steepness of the glacier, which exceeded anything I am acquainted with in the Swiss Alps. The height of the peak is 21,300 or 21,400 feet according to divergent G.T.S. measurements. At these elevations the sun is felt more than is generally supposed, and we were considerably inconvenienced by the heat reflected from the snow during our descent.

On the 3rd we carefully examined the eastern side of Kabru, and decided on an assault from this quarter. An attempt on this mountain, one of the most beautiful and renowned peaks of this mighty chain, had long formed part of our projects, and a short description of its appearance may not be out of place. As seen from Darjiling it is in the foreground of the chain, and rising to the height of

24,015 feet, is, next to Kangechinjanga itself, the most conspicuous summit in the group. Three arêtes, all equally difficult, abut on its southern face, which presents a huge wall of glacier and rock, above 10,000 feet in height. Above this rampart rise two more peaks, the one to the north-west, being some hundreds of feet the higher, the two being connected by a narrow arête forming the most perfect chain-like connection.

We started on the 6th from Ahluthang, and made our way due north, till we reached the flank-ing moraines of Pandim. Here the Praig River, a strong ice-cold stream, had to be crossed waist deep, and a hard passage it was for the coolies. We were all heavily laden, having taken extra clothing and five days' provisions. We now turned due west, and made our way up the eastern glacier of Kabru. On its banks we met with immense quantities of edelweiss, the climber's flower, and success was prophesied accordingly. We then had to scale the highest moraine I have ever seen, fully 800 feet, and this led us to the foot of the eastern cliff of Kabru, which falls here in the most superb precipice. Snow fell heavily, and we pitched our mountain tents here, the elevation being some 16,500 feet.

Early next morning we were on our route up-

wards, intending to strike the summit of the south-east ridge. Our progress was very slow, owing to the new snow. We made for the base of a great rock buttress which fell from the ridge; and when



arrived there a discussion arose as to our best route. I was for trying to ascend under its northern face, though the way seemed barred by a very threatening ice-wall; Boss voted for the southern face, up which an easy *couloir* led to the very top.

Kauffmann, though a splendid man of action, is a man of few words and fewer opinions, so that we were equally divided. However, I yielded to superior experience, and after two and a half hours' scrambling we reached the top, considerably over nineteen thousand feet. Here my worst fears were realised, as we found ourselves on the top of a detached mountain, cut off from the arête by a precipice of three hundred or four hundred feet.

Kauffmann scrambled over the edge, to see if a descent was possible, and whilst he was gone a great crash of rocks falling six thousand feet to the glacier below aroused our worst fears, which were not allayed till his shout came echoing back in answer to our anxious calls. He came scrambling back, quietly mentioning that the rock he had stood on had given way, and was just as cool as though he had not just escaped by the skin of his teeth. There was nothing for it but to try my route, so we descended, met the coolies, and turned up the northern face, finding, at last, a narrow ledge just wide enough to accommodate the Whympers tents.

This was the highest elevation at which we slept, being certainly 18,500 feet; the night, however, was mild, and the coolies, who were very tired, preferred to stay up with us. I had always sent

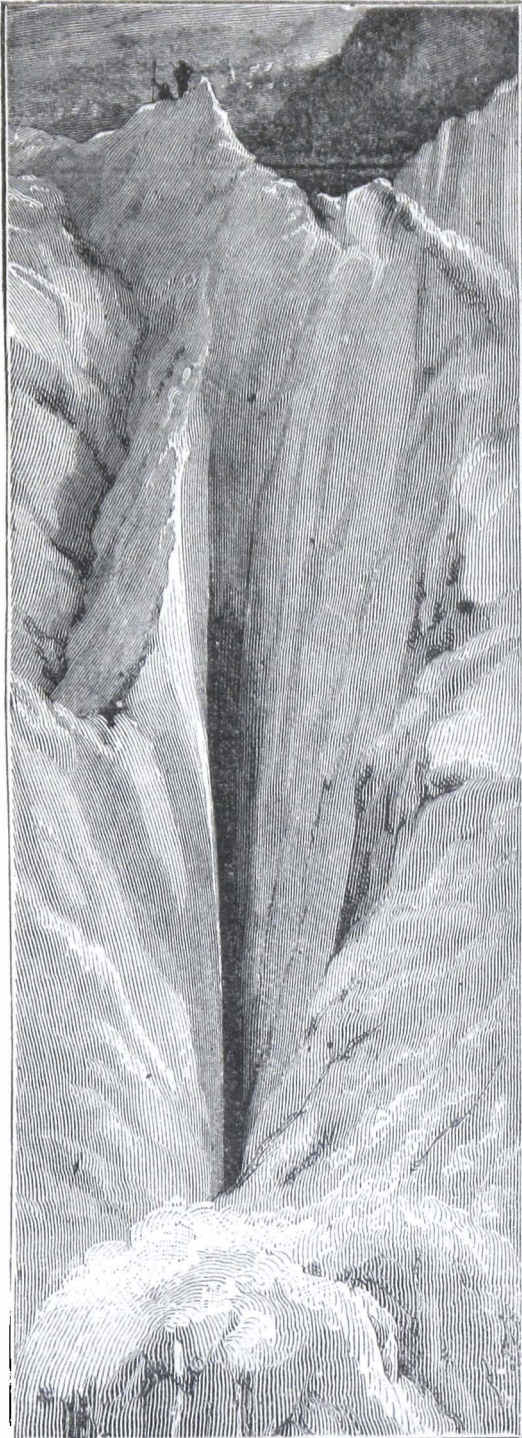
them down on previous occasions, to avoid exposing them more than necessary. At 4.30 the next morning we three started, roped together, for the difficulties began at once. A long *couloir*, like a half funnel, had to be crossed in a slanting direction. On it the snow was lying loose, just ready to slide, and the greatest care had to be taken to avoid starting an avalanche. Then came two hours step-cutting up the steep slope before mentioned, and we reached a long snow incline which led us to the foot of the true peak. Here we found a ridge of rocks cropping through the snow, and up these we went as fast as possible, for time was precious.

After nearly 1,000 feet rise, at 10 A.M. we reached the top of the ridge, and not more than 1,500 feet above us rose the eastern summit. A short halt for food and then came the tug of war. All this last slope is pure ice, at an angle of from 45° up to 60° . Under ordinary circumstances, step-cutting up this would have occupied many hours. Owing, however, to the recent heavy snow and the subsequent cold, it was coated three or four inches deep with frozen snow, and up this we cut notches for the feet. Kauffmann led all the way and at 12.15 we reached the lower summit of Kabru, at least 23,700 feet above sea.

The glories of the view were beyond all compare. North-west, less than seventy miles, lay Mount Everest, and I pointed it out to Boss as the highest mountain in the world. "That it cannot be," he replied; "those are higher," pointing to two peaks which towered far above the second and more distant range and showed over the slope of Mount Everest, at a rough guess some eighty to one hundred miles farther north. We were all agreed that in our judgment the unknown peaks, one rock and one snow, were loftier.

Looking from such a height, objects appear in their true proportions, and we could distinguish perfectly between the peaks of known measurements, however slight the differences. I learnt afterwards that these peaks had been observed by Sir Joseph Hooker, the famous botanist, during his explorations in Sikhim, and also by the famous pundit, A—— K——, during his wonderful journeys in Tibet.

However, we had short time for the view, for the actual summit was connected with ours by a short arête, and rose by about three hundred feet of the steepest ice I have seen. Soon the ridge narrowed to a wall of ice. From my left hand I could have dropped a pebble down the most terrific slopes to the glacier ten thousand feet below; from



my right down a steep slope for a hundred feet, and then over what we had seen from below to be a rock cliff of many thousand feet. The ice was so hard that it took us an hour and a half more before we reached our wished-for goal, 24,000 feet above sea.

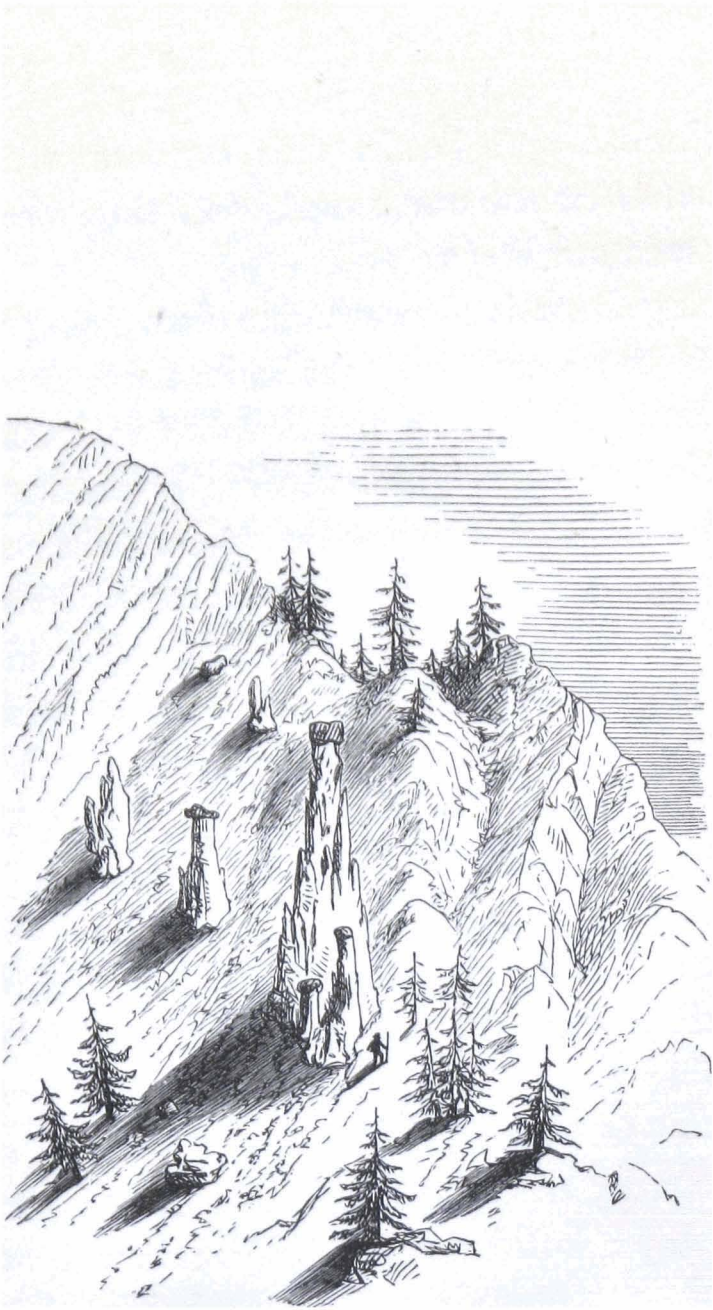
The summit — at length reached — was exactly like a great ice wave cut about thirty feet deep by threegashes. Into one of these

we climbed. A bottle with our names was left to commemorate our ascent, and then we turned to retrace our steps.

Going down is always worse than going up, and we had to proceed backwards, just like descending a ladder. At last we reached the rocks, and had a glorious meal, heightened alike by keen appetites and a delightful sense of an undertaking successfully accomplished. We fixed a large Bhootea flag to a smooth slab of rock, and then hastened downwards, the latter part of the descent being performed in the dark, till the moon rose and lighted us into camp. This we reached about 10 P.M., having been nineteen and a half hours on foot.

As this was the highest of our ascents, so was it the most dangerous. The last three hundred feet were the hardest of any, yet no more difficulty in breathing was noticed than if they had been ten thousand feet below.

Of course, there must be some limit where man must stop; but I do not believe it will ever be reached in mountaineering. Emboldened by our success, we thought of attempting something even more formidable, and carefully examined Junnoo, 25,300 feet, but came to the conclusion that it was too late to attempt such an ascent.



ON THE ROAD TO THE POLE.



ON THE ROAD TO THE POLE.

BY CAPTAIN ALBERT HASTINGS MARKHAM, R.N.

CHAPTER I.

FROM PORTSMOUTH TO LADY FRANKLIN SOUND.



OUR two ships, *Alert* and *Discovery*, were commissioned early in the year, and April and May were busy, not to say harassing, months for all those associated with the expedition. The various incidental duties connected with the preparations for such an enterprise kept them fully occupied. Great care was exercised in the selection of the men. None were appointed until they had undergone a searching medical examination as to their fitness for Arctic service, and several were rejected who had the appearance of being fine and eligible young fellows. Social

and moral qualifications were as strictly inquired into as were the physical conditions of the men, and those of a happy and genial disposition were selected in preference to others who appeared more morose and taciturn.

“Can you sing a good song?” or, “Can you do anything for the amusement of others?” were questions not unfrequently addressed to candidates for Arctic service by the board of officers appointed to select from the numerous volunteers who presented themselves.

The clothing and provisions supplied to the ships were regulated by the scales on which preceding expeditions had been fitted out.

Through the kindness and generosity of our friends, and of those who more especially interested themselves in Arctic work, we were presented with many useful and valuable gifts; and numerous were the donations that arrived from poor and unknown well-wishers to our undertaking. Her Majesty and the members of the Royal Family testified, in a substantial manner, the deep interest they took in the expedition; nor must the name of the Empress Eugénie be omitted from the list of our friends and well-wishers, her kind and thoughtful present, consisting of a fine woollen cap for each individual, contributing materially to

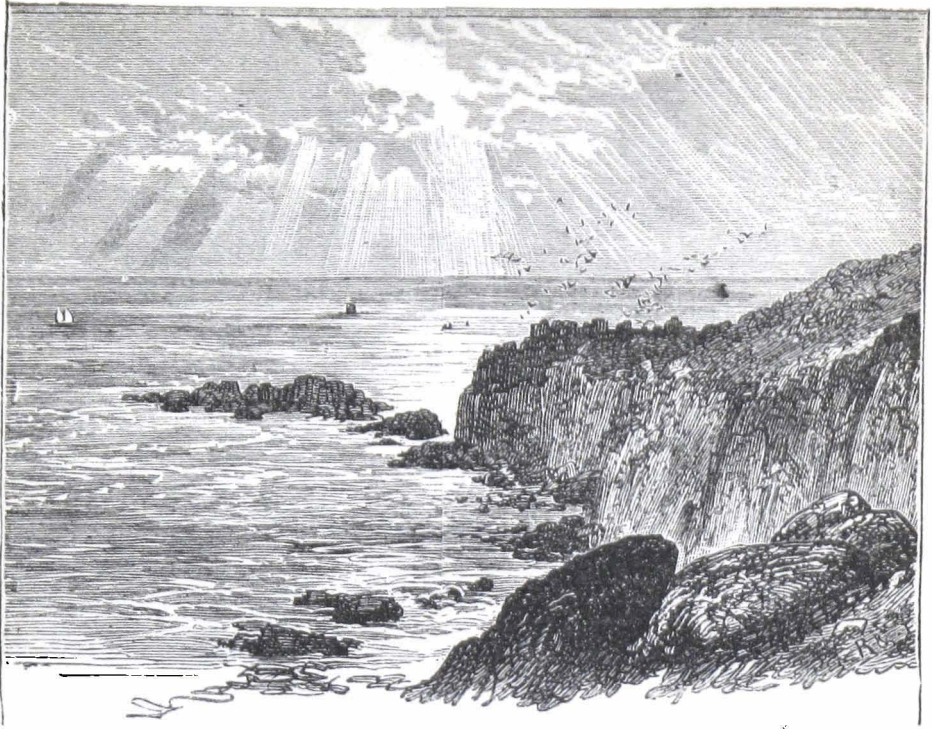
our comfort whilst employed in the onerous duties of sledging.

At length all preparations were completed, and when the 29th of May, the day originally assigned for the sailing of the expedition, dawned grey and misty, with dashes of rain falling and lying in little pools on our newly-painted deck, we were still in the bustle of the last inspection.

At four o'clock in the afternoon, to the very minute named, the ships cast off from the dockyard jetty; and as they steamed out of Portsmouth Harbour, all clouds cleared away and the sun shone brightly—a good omen for the coming voyage.

Thousands congregated along the sea-face extending from the dockyard to Southsea Castle, and on the opposite shore of Gosport, to witness our departure, and cheer after cheer pealed forth from the assembled multitude as we slowly threaded our way amongst the numerous yachts and pleasure-boats that had collected to bid us God-speed.

Our feelings seemed to be reflected in the changes of the weather on that, to us, memorable day. The rain and mist in the morning were suited to the sorrow of parting; while, when the sun burst forth bright and joyous in the afternoon,



“Bright and joyous afternoon.”

we all felt assured that the work we had in hand would be achieved, and that the enterprise begun under such bright auspices would end as well and happily.

Our passage across the Atlantic was very rough, and we were enabled to form a most favourable judgment of the sea-going capabilities of our vessels.

As we approached Davis' Straits, speculations were rife as to when and where we should meet our first ice; all on board evinced an anxiety to become acquainted, without delay, with the enemy

whose stronghold we were preparing to assault, and from the attack on which we hoped to return victorious.

On the 27th of June, a falling temperature gave us timely warning that we were in the vicinity of icebergs, and as the weather was thick and foggy, extra precautions were adopted in order to guard against collisions with these beautiful but dangerous foes. At three P.M. the first ice was sighted; and an hour afterwards we were steaming through loose detached fragments of heavy floe-ice.

For most of us it was the first introduction to that icy world in which we afterwards lived for fifteen months.

Our initiation was, to say the least of it, a rough one, but the novelty of course gave rise to no small amount of interest and excitement.

On the 28th, we sighted the high, bold, and snow-capped hills in the neighbourhood of Cape Desolation. This land was so named by that sturdy navigator, brave old John Davis, during his third voyage of discovery in the year 1587. In his quaint way he describes "the land being very high and full of mightie mountaines all covered with snowe, no viewe of wood, grasse or earth to be seene, and the shore two leages of into the sea so full of yce as that no shipping cold by

any meanes come neare the same. The lothsome viewe of the shore, and irksome noyse of the yce was such as that it bred strange conceipts among us, so that we supposed the place to be wast and voyd of any sencible or vegitable creatures, where-upon I called the same Desolation."

Whales, of different kinds, were now frequently observed, and gave rise to discussions among us, as to whether the upturned tail or "distant" spout belonged to a *rorqual*, or a *finner*. The final appeal was usually to one of the ice-quarter-masters, who had the reputation of being experienced whale-fishers.

Seals were also seen basking lazily and dreamily on the ice, or following for a short distance in the wake of the ship, staring at us with their large round eyes and faces, that bear so strong a resemblance to those of human beings. Birds also hovered around us, many following us for days together, and breaking the solitude with their joyous presence.

On the 4th of July we crossed the Arctic circle, and two days subsequently the expedition was at anchor off the little Danish settlement of Godhavn, the most important establishment in the Inspectorate of North Greenland.

Here the ships were completed with provisions,

stores, and coal, obtained from a third ship sent out from England for this purpose.

The officers were employed in various scientific pursuits, and all enjoyed a scramble over the lofty volcanic cliffs which overlie the gneiss in this part of the island of Disco.

The difficulty of the ascent of the Lyngenmark-fjeld, a range of hills about two thousand feet in height, was amply compensated for by the view from its summit. Emerging from the rather dense, though stunted vegetation at the base of these hills, the way led over almost precipitous basaltic cliffs, until, by dint of hard climbing, the snow-clad summit was reached. The climb was both arduous and perilous, in consequence of the action of the frost on the rocks composing the cliffs, which, on being touched, often broke away in large masses, rolling with a mass of débris many hundreds of feet to the bottom.

From the top a glorious scene was revealed to us. The Whale-fish Island, a group in Disco Bay, lay spread out as it were on a map. The mainland of Greenland was distinctly brought to our view, whilst immediately at our feet was the little picturesque settlement of Godhavn, and the three vessels, resembling miniature toy ships, lying at anchor in the harbour. Hundreds of icebergs

dotted the placid sea ; and beyond them we could plainly discern the great ice-fiord of Jacobshavn, with its gigantic discharging glacier behind, and the mouth of its fiord almost choked with icebergs, children of that same glacier. At brief intervals a noise resembling thunder or distant artillery announced the disruption, or creation, of one of these wonderful islands of ice.

We were not, however, allowed to enjoy this scene in quietness. Our pleasure was marred by the attacks of swarms of mosquitoes. These irritating insects assailed us on first landing, and persecuted us incessantly until we were again afloat.

Having embarked a number of Eskimo dogs, and a couple of natives to act as dog-drivers, hunters, and interpreters, we left Disco on the 15th.

Passing through the Waigat, a strait separating the island of Disco from the mainland of Greenland, we bade farewell to our last connecting link with home, and pursued our solitary course northwards.

Numerous icebergs of many fantastic forms rendered the passage through this strait one of no little difficulty, though they materially added to the beauties of the scene. On one side were the

high snow-covered hills of Disco, intersected by deep and narrow ravines, whilst on the opposite side was a bold and lofty coast with precipitous headlands ending in needle-shaped peaks, and separated by glaciers and fiords.

It was usual for us when delayed by fog, or otherwise, to make the ships fast to some protecting iceberg, in order to wait for an opportunity to advance ; but our confidence was occasionally misplaced, as the following instance will show. Being unable, on account of thick weather, to make any progress, it was decided to make the ship fast to an adjacent berg until a more favourable opportunity of advancing should occur. Accordingly a boat was despatched, containing three men with the necessary implements, such as an ice-drill and anchor, for securing the ship. At the first blow of the drill, to our horror, the berg split in two with a loud report, one half, with one of the men on it, toppling completely over, whilst the remaining half was rocked and agitated in a most alarming manner. On this latter piece was another man, who was, immediately after the catastrophe, observed "heels uppermost," having been precipitated head foremost into a rent or small crevasse.

The water alongside was a mass of seething foam and spray ; but the boat, however, with the

third man escaped. They were all quickly rescued from their perilous positions and brought on board, sustaining no further harm than that inflicted by a cold plunge.

On the 21st of July we were off a remarkable headland named "Sanderson, his hope." It was so called by old John Davis in 1587, after his friend and patron Mr. W. Sanderson, and was the extreme northern point reached by him.

It is a famous place for *looms*, as those white-breasted guillemots are termed, which are considered such rare delicacies on an Arctic table. Of course so good an opportunity of procuring fresh food was not to be disregarded ; the ships were stopped, and the boats, crammed with eager sportsmen, despatched for the purpose of shooting for the "pot." Myriads of these birds were congregated on the steep precipitous cliffs, in some places almost overhanging, which rose abruptly to an altitude of from eight hundred to one thousand feet. Owing, however, to the unsteadiness of the boats, caused by the roughness of the sea, our "bag" did not realise our anticipations. Many of the birds that were shot remained on the inaccessible ledges of the rocks, and were, therefore, lost to us, and many fell into the sea beyond, and were no more seen.

The midnight sun was shining brightly during this *battue*, and we returned to the ship, after a couple of hours' sport, the richer by one hundred and seventy birds, each equal in weight to a fair-sized duck.

Upernivik, the most northern Danish settlement in Greenland of any importance, was left on the following evening.

Avoiding the ordinary passage through Melville Bay, that once dreaded and still dangerous locality, so famous in the annals of whaling disasters, the ships were boldly pushed through what is generally termed the "middle ice." To our great surprise, and no less gratification, we encountered little or no obstruction. The ice consisted of what is called a "loose pack," through which we experienced little difficulty in making progress.

It is as well here to state, that long ere this, all the necessary precautions for an unsuccessful combat with the ice had been taken.

Provisions and clothes were so arranged along the upper deck that they could easily and readily be thrown out on the ice at a moment's notice. Knapsacks were packed and placed in readiness for any sudden emergency.

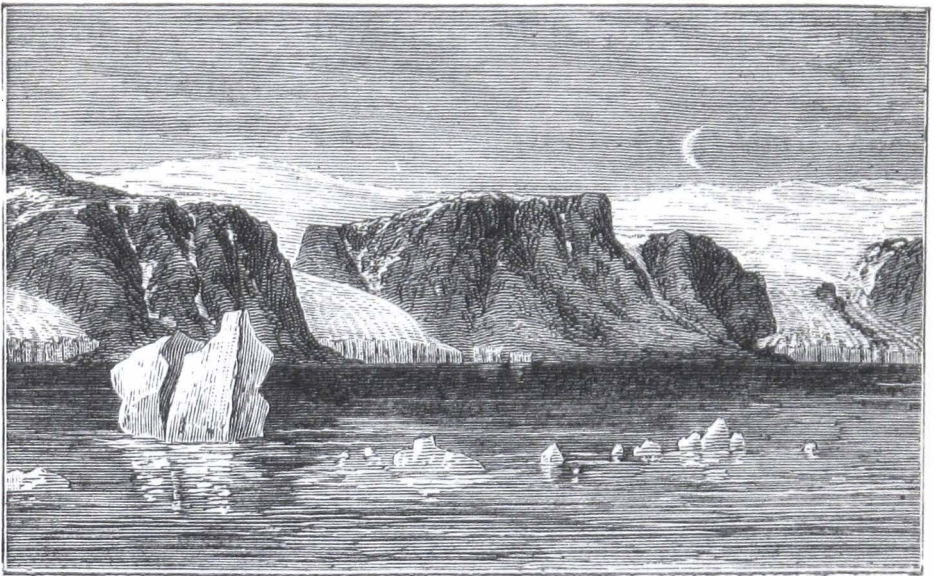
The boats were prepared for immediate service, and all had their allotted stations, so that little or

no confusion would ensue if it became necessary to abandon the ships, an event which was by no means improbable.

On the 24th our first and only bear was seen, and great was the excitement it caused. Bears' skins were certainly that day at a premium. All were eager and anxious to become the fortunate possessor of its coat. Master Bruin, however, evinced an equal anxiety to retain it. The engines were immediately stopped, and the boats crowded with volunteer hunters. These, landing on the ice, advanced upon their quarry, while the ship, steaming round to the opposite side of the floe, endeavoured to cut off its retreat. All was ineffectual, and, although many rounds of ammunition were fired away, in the faint hope that a lucky shot might bring him down, Bruin made off and effected his escape.

To this day there are many who seriously believe that he carried away with him the bullets they so lavishly expended. So keen were some in the ardour of the chase, that they rushed on heedless of the rotten and treacherous ice until an immersion in the cold water brought them round to a sense of their danger, and compelled them to seek refuge on board their ship wet, cold, and uncomfortable.

After an unprecedented passage, the “north water” was reached on the 25th. Melville Bay with all its terrors was behind us; a beautifully smooth, unruffled sea, clear of ice, was in front; everything pointed to success, and the hearts of all in the expedition beat high with joy and delight



Beverley Cliffs.

at the prospect of attaining the utmost realization of their hopes.

Large icebergs were around us in every direction; but what cared we then for icebergs! We had continuous day, the north water had been reached, our way lay northwards. On sped the good ships—on past the Crimson Cliffs of Beverley;

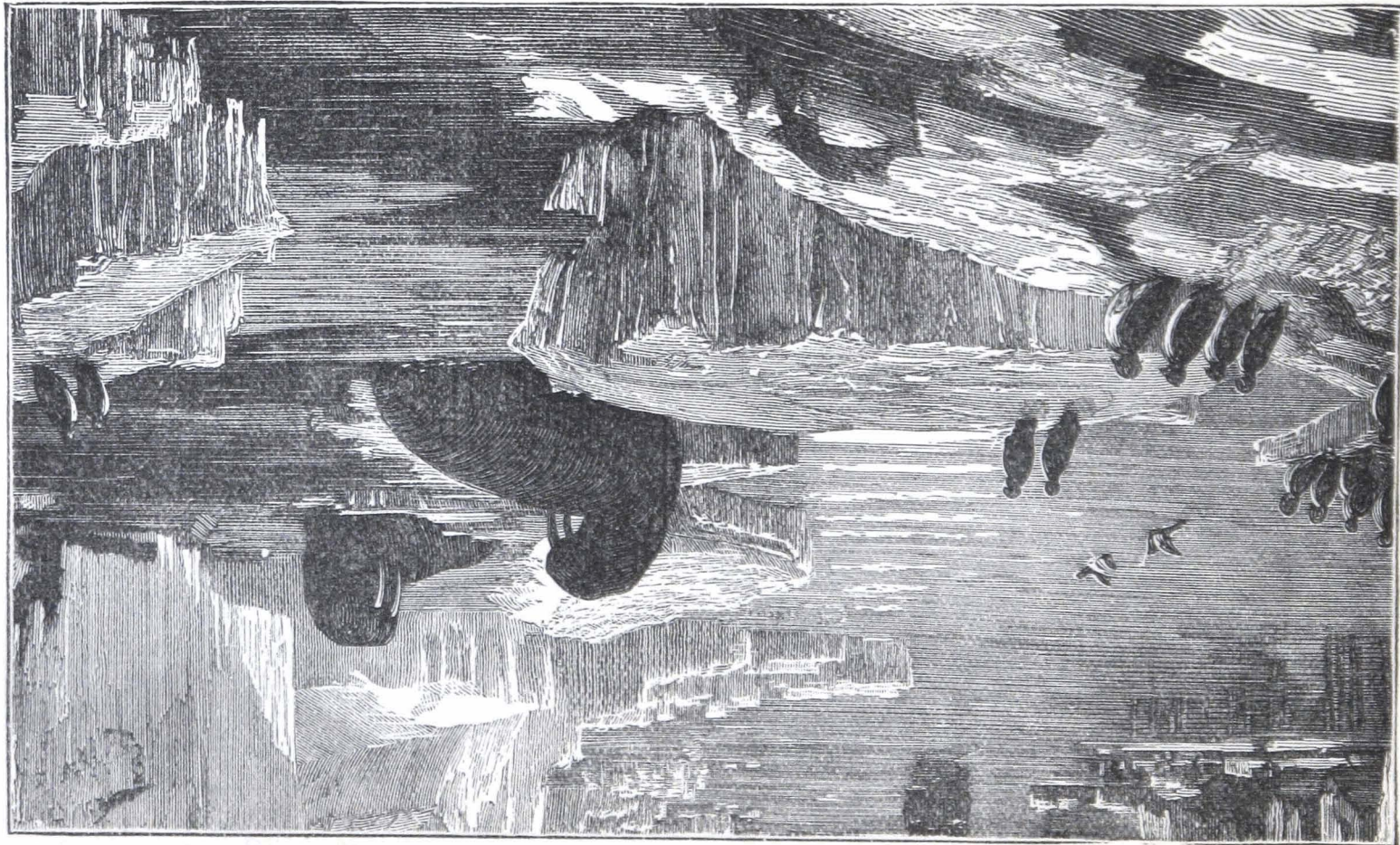
past Cape Dudley Digges, threading their way through clusters of huge icebergs, within a short distance of the great glacier of Petowik, the span of whose mouth is about seven miles, on to the Cary Islands.

Here we were detained for a few hours landing a large depôt of provisions, sufficient for the subsistence of sixty men for sixty days; and here, also, we landed the last home letters destined to be received by our friends until after our own arrival in England.

Thence, crossing over to the eastward, we steamed along on that beautiful clear day within a short distance of the western shores of Greenland. It was indeed a glorious sight as we passed close to this little-known land opening out to our view. As we proceeded its many and large glaciers glittered white and radiant in the sunshine, growing, as it were, out of the clouds, and rolling down grandly towards the sea, until the opaque mass plunged sullenly and silently into the deep blue water.

Animal life, so far as the feathered tribes were concerned, appeared in abundance. The lively little rotges were seen in frequent clusters diving quickly under water as the ship approached. Looms, dovebies, and eider ducks, alarmed at our

“Basking in the golden sunshine.”



appearance, rose in long flights and circled around us, uttering discordant cries. The glaucous gull and the pretty kittiwake soared above our heads, and occasionally a graceful ivory gull flapped its way leisurely along, its snowy wings brought prominently forward by a background of clear blue sky. Here and there, on small fragments of floating ice, were seen huge walruses basking in the golden sunshine.

Amid such scenes the two ships wended their way towards the entrance of Smith Sound, all elated with the fair prospect, so full of promise for the future. Alas! little did we dream of the vagaries of our capricious enemy!

The morning of the 28th saw us anchored in Port Foulke, the harbour in which Dr. Hayes wintered in 1860.

No sooner were the ships secured than they were almost deserted by their officers. Some went for a scramble over the neighbouring glacier, named by Dr. Kane "My brother John's glacier," some went to collect specimens, others to take various scientific observations, and others to hunt and shoot.

A cairn was erected on the most conspicuous point in Littleton Island, and a few letters for England were deposited there. On the following

day, leaving Port Foulke, we crossed over to the west side and erected a similar cairn on the summit of Cape Isabella, about one thousand feet above the level of the sea. Records were left in each of these cairns, detailing the movements and prospects of the expedition, with instructions concerning letters that might be carried thus far by any adventurous and enterprising explorer.

From this date our troubles commenced.

Ice, apparently impenetrable, was seen the next morning stretching across from Cape Sabine to the eastward.

Adhering to the west side of the Sound, and working our way along close to the shore, we took advantage of every opening in the ice, and gradually, but surely, made progress northward. It was however slow, sometimes only a few hundred yards during the day, and occasionally we were detained for several days together. Every movement of the ice was closely watched, the tides and currents were studied, and the influence of the wind on the pack ascertained. So inch by inch the expedition slowly advanced until it gained the portals of the unknown region.

These encounters with the ice were not without their danger. On one occasion we narrowly escaped destruction in consequence of being help-

lessly driven by the ice towards a large grounded berg. To be squeezed between the two would be fatal. Yet we, on board, were powerless to avert the catastrophe. Every precaution to insure the safety of the crew was taken, and we could only look on and silently witness, as we thought, the destroying powers of the Ice King.

Nearer and swiftly were we hurried towards the grim and motionless berg up whose side the floe, as it came into contact with it, was seen to be literally walking and forcing its way, crumbling and falling into shapeless masses at its base.

Escape appeared impossible. It seemed hard at the very commencement of our voyage thus to lose our vessels and with them all hopes of success.

Suddenly the floe swerved slightly, in consequence of one of its extremities impinging on the berg, and sent us clear. We were saved!

Sometimes it was necessary, for the preservation of the ships, to construct a dock in which they could be securely and safely berthed. This is only done when the ice is closing and ships in danger of being nipped between two floes. Ice-saw crews had previously been organized, and, as it is necessary to expedite the work, the whole of the officers and ships' company were so stationed as to take an active part in the operations. Three

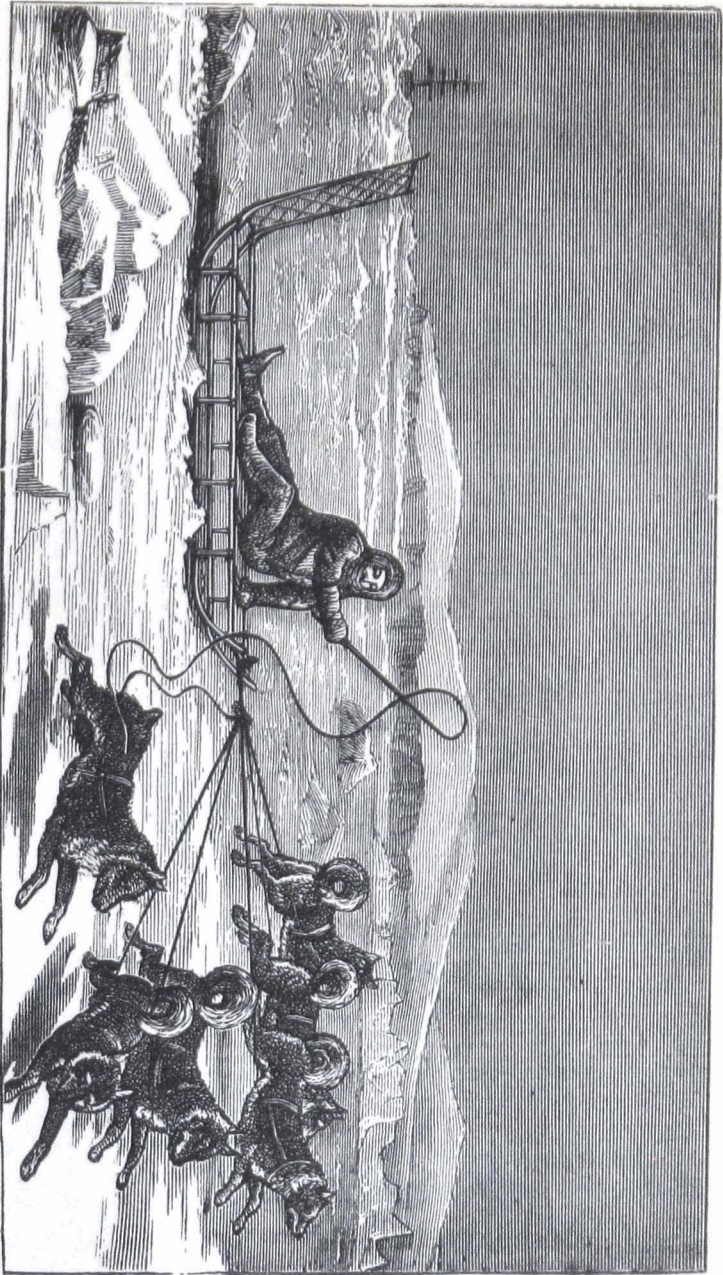
persons only are left on board the ship, namely, one officer in charge, the engineer at the engines, and a man at the helm.

The order "All hands cut dock" is followed by a most animated scene. Triangles are quickly erected, saws placed in position, the dock marked out by boarding pikes at the several corners, and every one working as if their lives depended upon their own individual exertions.

During the temporary delays in the ice we used to have rare fun.

Footballs would be produced, and a game kept up with great spirit, though with an utter disregard of all orthodox rules. Men and officers would alike mingle in the game, every one bent upon the one grand object, namely, that of enjoying themselves. Skating and sliding on the ice were also accomplishments that afforded much pleasure and amusement. Sometimes the dogs would be harnessed, some would-be dog-drivers tearing along round the floe, regardless of weak ice and pools of water, at the rate of ten miles an hour.

When dragging a sledge the dogs are always harnessed in line abreast, never in tandem fashion. The outside ones, as a rule, get more than their fair share of the whip, with which they are solely



Out with the Dogs.

guided, and it is amusing to witness the cunning displayed by them in dodging under the lines of the other dogs, emerging somewhere in the middle of the team.

There is something very exhilarating and exciting about dog-sledging, so long as the weather is fine, temperature at, or about, zero, smooth level ice to travel on, and a light sledge to drag. But let all these various conditions be reversed, let the weather be thick and foggy, or a gale of wind with a blinding snow-drift, a temperature 50 degrees below zero, rough hummocky ice to travel over, and a heavily-laden sledge, then dog-sledging cannot be regarded as either a comfortable or desirable amusement.

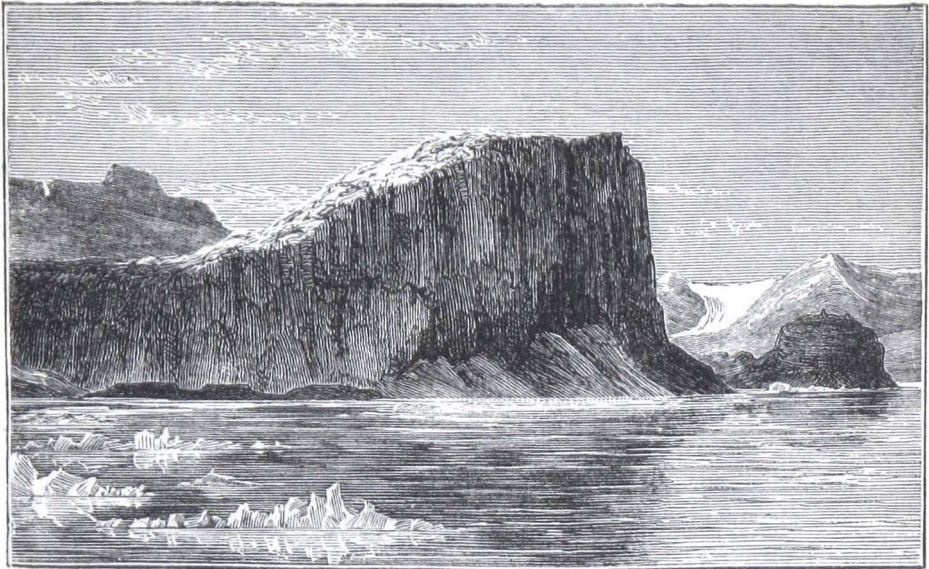
Immediately the sledge receives the slightest check, the dogs will instantly stop and lie down in the most provoking manner. Not all the flogging with which they are assailed will compel them to advance, nor will they commence work again until the sledge has been carried over the difficulties that had retarded its progress.

On the 12th of July we landed another large depôt of provisions—similar to the one established at the Cary Islands—in Dobbin Bay. At the southern termination of this bay is Cape Hawks, a magnificent promontory, which has, with a certain

amount of truth, been likened to the Rock of Gibraltar.

It was a beautiful calm night when we rounded it, the water so still and unruffled that it was actually used as an artificial horizon for the purpose of taking an astronomical observation.

The Cape itself, towering over our heads as we

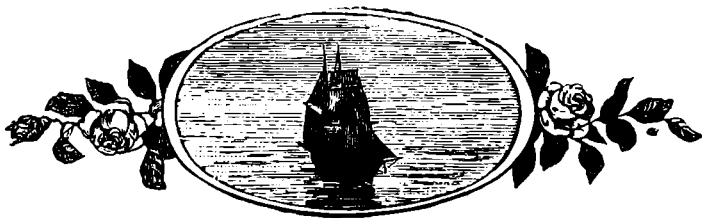


Cape Hawks.

steamed past it, being reflected in the clear still water close alongside, whilst deep ravines stretched away, apparently for miles, into the interior. A large glacier at the head of the bay showed out prominently as it glistened in the light of a bright midnight sun, the bay itself being covered with an

icy sheet broken only by the presence of a few long low bergs, generated in all probability from the self-same glacier. The few clouds that appeared in the almost cloudless sky presented an iridescence rarely witnessed, showing clearly-defined bright colours extending in a horizontal direction, the reflection from which in the clear smooth water materially enhanced the beauties of the landscape. Such a scene could not be equalled, even in sunny Italy.

As we proceeded northward the ice appeared to get heavier, and animal life seemed to be getting more scarce. Occasionally the head of an inquisitive seal would be protruded out of a water-hole, but would be immediately withdrawn on being saluted by half-a-dozen bullets from the rifles of our keen and enthusiastic sportsmen, unless it was so unfortunate as to pay the penalty of its life for its curiosity. With these few exceptions, little animal life was seen after passing the 80th parallel.





CHAPTER II.

GETTING INTO WINTER QUARTERS.



ON the 25th of August the *Discovery* was securely placed in snug and comfortable winter quarters on the northern side of Lady Franklin Sound, the *Alert* proceeding on her solitary journey northwards.

On the 29th the 82nd parallel of latitude was crossed; but here the ice assumed a totally different character, being infinitely more ponderous and heavy than anything we had hitherto experienced. The thickness of the floes was estimated at from eighty to a hundred feet.

To contend with this massive ice required the greatest judgment and care. On one occasion the ship was completely beset in it, and placed in a very critical position, but fortunately escaped with no greater injury than a damaged rudder.

The region of icebergs had been passed, and in

their place were substituted large masses of ice, from twenty to fifty feet high, fragments of the floes by which we were surrounded, that had been broken off by collisions with each other or by coming into contact with the land. These large pieces received from us the name of "floebergs," the term being intended to convey the idea of a mass of ice more bulky than an ordinary hummock, and formed in a different way.

On the 1st of September, a strong south-west gale having cleared a narrow passage for us along the coast, we had the extreme gratification of displaying the British colours in a higher latitude than had ever yet been reached by ship. All were desirous of participating in this act. Never was an ensign hoisted by such a number of eager and willing hands. Every one was joyous and elated when all assembled round the ward-room table at noon to drink success to their flag in a glass of Madeira, issued by their generous wine caterer, to celebrate the event. But Arctic navigation is of too uncertain a nature to allow any one to indulge in bright hopes for the future for any long period. One short hour after our ensign had fluttered out so gaily before the breeze, we were stopped by a barrier of ice of great thickness, through which there was no prospect of penetrating. We were

therefore reluctantly compelled to secure the ship inside some grounded floebergs that promised to afford protection from the irresistible onslaughts of the polar pack.

We were within one hundred yards of a low undulating coast, trending to the north-west, and completely covered with snow. In this exposed, and apparently unsafe position we were doomed to spend the succeeding eleven months. It was not, however, without some difficulty and danger that the ship was permanently secured.

On the following day a violent squall struck us, the line parted, and the vessel was blown out from the harbour of refuge. Shortly afterwards the wind shifted suddenly. We were then in imminent danger. The pack was fast driving towards us; to be caught between it and the floebergs would be certain destruction; to escape to the southward was quite out of the question, and to steam into the pack would be fatal. Our only hope of safety was to avail ourselves again of the protection of our friendly floebergs. By dint of hard work we succeeded in hauling the ship into security, and not a moment too soon. We had scarcely got inside before the whole body of the pack came against the bergs, scrunching and squeezing in a most unpleasant manner, and serving to illustrate

the dreadful fate that awaited us, had we not been fortunate enough to escape from its insatiable clutches.

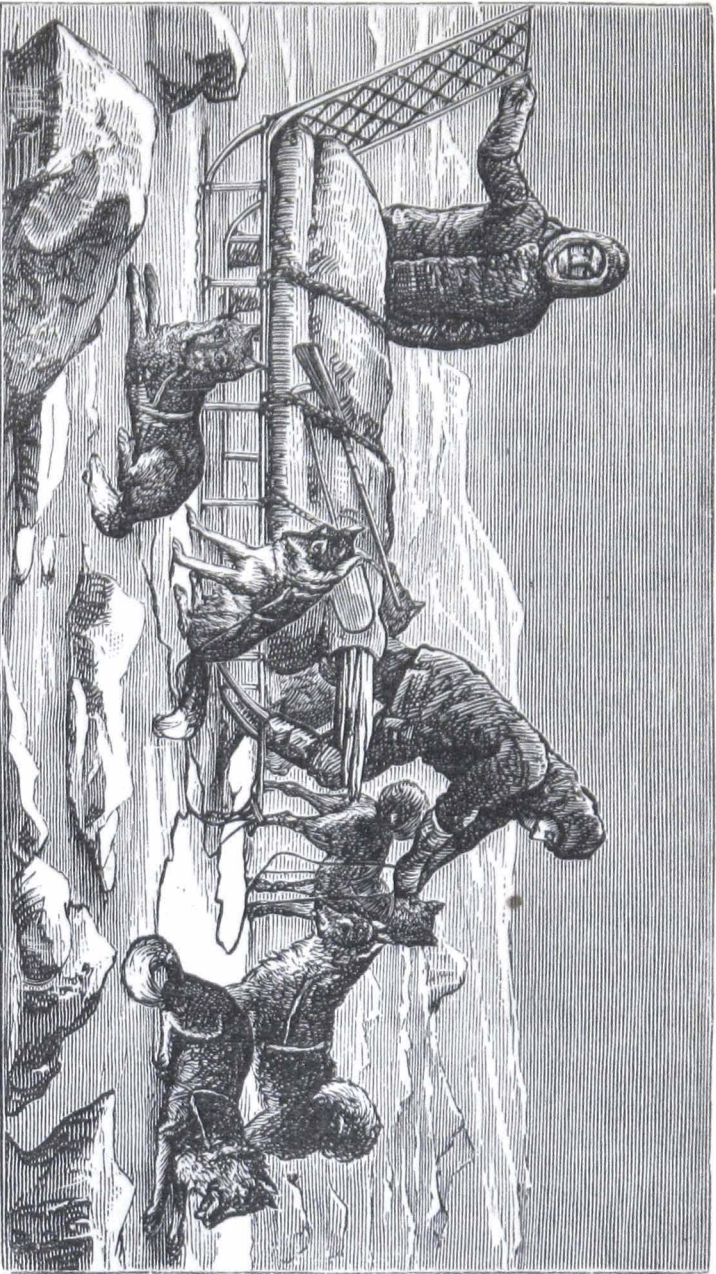
Providence had already guarded and favoured us, almost beyond our most sanguine expectations, and it was with a deep feeling of relief and thankfulness that we received the official announcement that this position had been decided upon for our winter quarters. By the third week in September the ship was completely frozen in; and here we remained until released the following summer.

It must not be supposed, because further progress in the ship had become an impossibility, that our labours were in any way lessened; on the contrary, our real work was about to commence; a work in which we were all about to take part in a greater or less degree, and a work the accomplishment of which had been our sole engrossing thought since leaving England.

The land in the vicinity of our winter quarters was naturally a subject of special interest to us. Speculations were rife regarding its extent and formation. The possibility of obtaining game of any description, was a matter of much importance to us who were doomed to pass so many months in these icy solitudes. Alas! any hopes which we had cherished in this respect were soon found to be

fallacious. The land for the succeeding eight months proved to be as devoid of life as its appearance was desolate and sterile. It had already assumed its wintry garb; everything was white, solemn, and motionless around us; no voice of bird or beast was heard to disturb the silence that reigned supreme. All was as still and silent as the tomb—a silence that, until then, had never been broken by the presence of man. Without a harbour, or projecting headland of any description to protect her from the ice, the ship lay, apparently, in a vast frozen ocean, having the land on one side, and bounded on the others by the chaotic and illimitable polar pack.

Although up to this period we had experienced no great cold, the falling of the temperature and the formation of young ice alongside the ship were decided indications that the navigable season had expired. So rapidly did the ice make, that on the day following the one on which the ship had been secured behind her protecting floebergs, we were actually able to walk on shore. Preparations were immediately made for as extensive an exploration of the land to the northward as the duration of light would admit. Preliminary sledging parties were despatched to survey the surrounding country, and, if possible, to discover a more suitable and



Getting Ready.

better protected position for the ship to pass her winter in than the one she then occupied. In this we were unsuccessful. True, a few harbours and land-locked bays were discovered to the north-west, but they were quite unapproachable for a ship, in consequence of their waters being, apparently, permanently frozen.

From the moment it was decided that we could make no further progress, the winter appeared to advance with rapid strides, eager to seize us in its icy grasp, and the ship, in unison with her surroundings, assumed a wintry aspect. From the accumulation of frost rime the spars and rigging seemed more than double their ordinary thickness, making our good ship present much the same appearance as those miniature vessels so frequently seen on the top of "twelfth-cakes."

On the 11th of September a party of three officers and eighteen men was despatched for the purpose of advancing a couple of boats to the northward; these it was thought might prove useful during the future sledging operations of the expedition. They returned in four days, having successfully accomplished their mission. On their return journey they encountered a furious gale of wind, which broke up the ice along the coast-line, and compelled them to drag their sledges over the

land. During a short halt that was made for lunch under the lee of a high hummock, they narrowly escaped destruction. Without their observing it, the ice commenced breaking up, and it was only by strenuous exertions that they succeeded in reaching the shore in safety, whence they observed the ice on which they had recently been encamped drifting out in small fragments to seaward. One of the party, failing from sheer exhaustion, had to be placed on a sledge and carried. This seriously added to their difficulties; and it was with no slight feeling of relief that the wearied sledgers arrived alongside their ship after an arduous march of eighteen hours in the face of a hurricane. The severity of this march entailed much suffering on the men, untrained as they were, some few of whom were placed, on their return, under the doctor's care.

Meanwhile those remaining on board, but few in number, spent an anxious and trying time. The young ice by which the ship had been surrounded had completely broken up and disappeared, and had it not been for the protecting grounded floebergs, small mercy would have been shown to the good ship *Alert* at the hands of "the thick-ribb'd ice." Small fragments of the pack, large enough, however, to be unpleasant and disagreeable neigh-

hours, would occasionally get through the hummocks and drift about in our immediate vicinity. These it was our object to secure as speedily as possible, otherwise their continued movement would break up the young ice, or prevent it from forming. The ominous grinding noise of the pack, as it swayed too and fro in the channel, and the terrible war that appeared to be raging between the floes, as they came into furious contact with each other, pulverising their sides or rending huge fragments from their edges, were a sound and sight that struck us with wonder and awe.

By the 25th of September the ice had again formed around the vessel, and was of sufficient thickness to bear heavy weights. On that day a strong party, consisting of three officers with twenty-one men and three sledges, left the ship, provisioned for an absence of twenty days. Their orders were to advance as far to the northward, along the land, as possible, and at their extreme position to establish a large depôt of provisions in readiness for the use of the main exploring parties that would be despatched in that direction during the ensuing spring. A preliminary party, consisting of an officer with three men and a couple of dog-sledges, had been despatched a few days previously.

Perhaps there are many of my readers who, like the majority of my friends, imagine that the work of sledging in the Arctic regions entails little or no physical labour or hardship—that, in fact, we take our seats on the sledges, and, comfortably wrapped up in furs and shawls, are dragged along at a rapid pace by dogs or reindeer ;—that when we halt we build up a large fire, and having some deer, salmon, or other products of the chase, proceed to cook and discuss a sumptuous meal, retiring to sleep, when this is concluded, in a nice warm snow-house or wooden hut. This would no doubt be very delightful, but unfortunately it is the very reverse of sledge life on the shores of the Polar Ocean. There climatic hardships of a very severe nature have to be endured ; no change or variety of any description can be made in the fare, and only a certain allowance can be allotted to each individual.

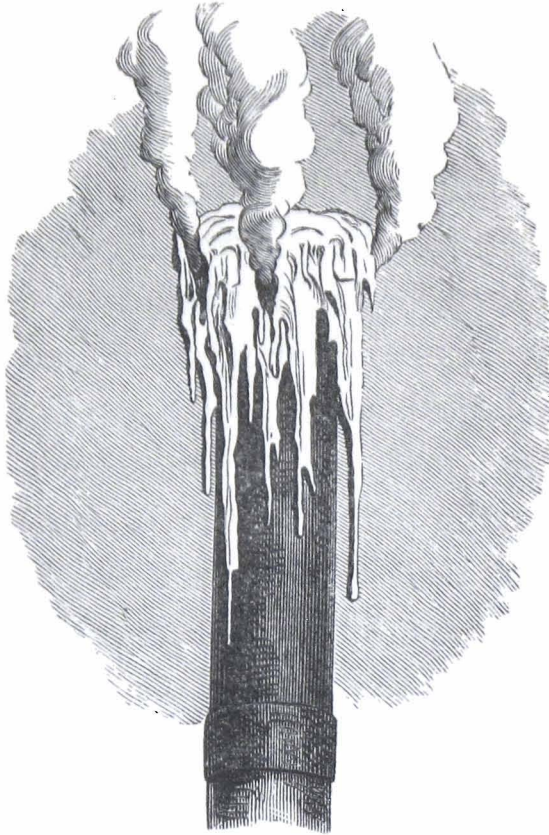
When that is consumed, hunger must be borne with patience until the time has arrived for the next meal. A light tent is all the covering to shelter the traveller from the furious onslaughts of a biting wind, accompanied always by a blinding snowdrift, so searching as to find its way, in spite of all efforts to the contrary, into the tent, whilst the hard-frozen sea is all the couch that the

wearied sledge has, on which to rest his aching and frost-bitten limbs. Fire there is none. Even if the materials for making one were available, under such circumstances as I have related it would be an impossibility. It could not be lighted in the tent, and outside would be quite out of the question.

The results of this autumn campaign were completely successful. A large depôt of provisions was established some forty miles to the northward of the ship ; practical experience had been gained which we hoped would bear good fruit in the coming year ; and we had succeeded in reaching and passing the highest latitude attained by that distinguished Arctic navigator, Sir Edward Parry, forty-eight years before, during his memorable journey towards the North Pole.

By the 15th of October all the sledge travellers had returned to their ship, and the necessary preparations were made for passing the winter. Warm garments were issued, consisting principally of a complete seal-skin suit, including cap, carpet boots having cork soles an inch thick, and warm woollen guernseys. Let it not be supposed that our seal-skins were the same as those soft fur jackets so much in vogue with the fair ones at home. Ours were obtained from the ordinary

Greenland seal, whose skins are covered with coarse bristly hairs. They were nevertheless quite as warm.



The Frozen Chimney.

The ship was "housed in" by a complete set of awnings made of tilt cloth, and so fitted with curtains that they could easily and readily be opened for purposes of ventilation. The upper deck was covered with snow to about a foot in depth, whilst an embankment of the same substance

enclosed the ship on the outside. All skylights and hatchways not in use were snowed up, two only of the latter being kept for the means of egress and ingress, and these so constructed with double porches and snow walls as to exclude as much as possible the cold outer air. Stoves, our only means of heating the ship, were placed in assigned positions, and stringent regulations were issued regarding the economical consumption of fuel and to guard against all accidents from fire. The question of ventilation between decks was carefully considered, together with all those various indispensable matters connected with the interior fittings of a ship to provide against the rigours of an Arctic winter. Provisions in large quantities were landed, in case any unforeseen event should, during the winter, destroy our ship, and so at one fell swoop deprive us both of home and supplies. Out of the casks and cases so landed a spacious house was constructed, capable, if necessary, of affording a moderate amount of accommodation to the entire party. This house was used as a receptacle for sails, rope, sledge gear, and all articles that could not be stowed under hatches on board.

Snow-houses were erected on shore for the several magnetic instruments, and these latter were securely fixed by being firmly frozen on snow

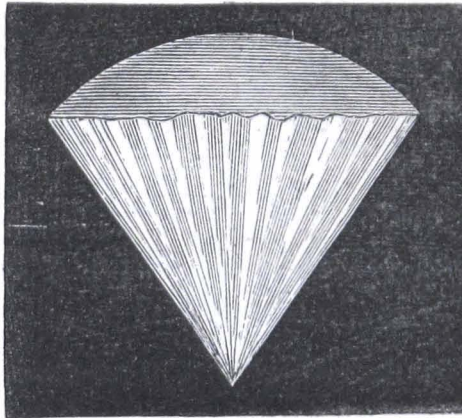
pedestals. The whole establishment, which was called Kew, was most complete, and reflected great

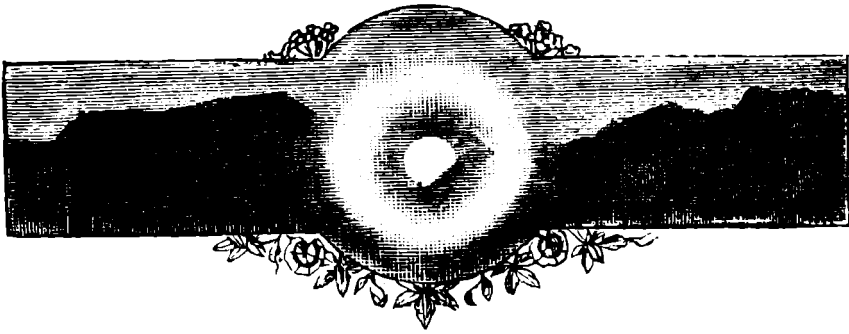


The Observatory.

credit upon its architect. It consisted of three houses, connected by sub-glacial passages, one being no less than one hundred and twenty feet in

length. A wooden observatory brought from England for the purpose was also set up for the Transit instrument. This went by the name of Greenwich. A snow-house was built for the reception of our powder, which was called Woolwich, whilst other snow-houses, in which were placed salt beef and other provisions, went by the name of Deptford. Several more edifices were constructed for various purposes. Altogether the neighbourhood of our winter quarters had the appearance of a young settlement rapidly springing into maturity, rendering what would otherwise have been a barren and desolate scene one of cheerful life.





CHAPTER III.

A LONG NIGHT.



THE sun took its final departure on the 11th of October. From this date darkness gradually settled upon the little band of exiles, reaching its greatest intensity on the 21st of December. For a fortnight on each side of that date the difference between noon and midnight was almost imperceptible. Occasionally at mid-day a faint luminous band might be observed along the southern horizon, but this was all the indication of the difference between day and night.

During the lunations of the moon we sometimes enjoyed bright clear days, which were not inappropriately called “moony” ones,—

“ Rising in clouded majesty, at length
The moon unveiled her peerless light,
And o’er the dark her silver mantle threw.”

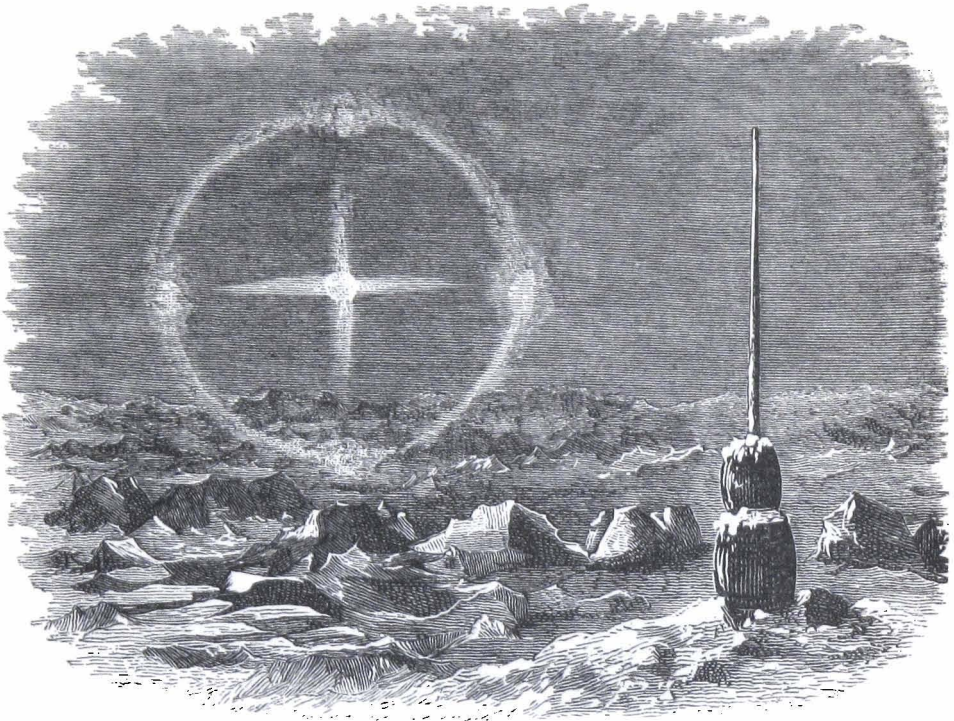
These bright star and moon-light days were periods gladly welcomed, contrasting so forcibly as they did with the darkness that generally prevailed. Advantage used to be taken of these comparatively bright days, as affording greater facilities for scientific observations, in which the officers were unceasingly engaged in their respective departments.

These included those in astronomy, magnetism, meteorology, spectrum analysis, electricity, observations for the detection of the polarisation of light, chlorine and specific gravity estimations, and others. The pursuit of these investigations was at times matter of great difficulty and extreme personal discomfort. It is no easy matter, with a temperature from forty to sixty degrees below zero, to handle delicate instruments, the manipulation of which, even in a warm climate, requires the utmost care and caution. The breath, freezing on the arcs and verniers of the instruments as they were used, added seriously to the difficulties ; whilst the unequal contraction of metals rendered some totally useless during intensely cold weather.

Paraselenæ, or mock moons, and auroræ * were of frequent occurrence, but none of the latter sufficiently bright to call for special attention. These phenomena were always carefully examined, and

* Northern lights.

the results recorded. As a rule, the auroræ consisted of faint coruscations darting across the heavens through our zenith, sometimes in the form of an irregular arch terminating on the horizon, and generally accompanied by various small luminous patches.



Paraselenæ.

By the first week in November we had regularly settled down to a steady winter routine. In order to give useful occupation to the men during the long evenings, a school was instituted, and classes formed under the direct superintendence of the

officers, at which nearly the whole ship's company attended. Reading, writing, arithmetic, navigation, and history were the principal subjects in which the pupils were instructed.

Never was seen such an orderly and well-conducted school, and it was a pleasure to the masters to devote their time to classes that evinced such an earnest desire of acquiring knowledge and gaining instruction as those on board the *Alert*. Here might be seen a staid old seaman, whose great brawny hand appeared more fitted to wield the marline-spike than the pen, vainly endeavouring, with his head close to the table and his tongue protruding, to add two and two together.

As a contrast to this, at the opposite table might be seen a smart young sailor who had distanced all his competitors in arithmetic, asking abstruse questions in mensuration that were sufficient even to make his tutor feel uncomfortable. After the schools were dismissed, the men enjoyed an uninterrupted evening to themselves. The smokers betook themselves to a place between decks specially appointed for that purpose. The studious ones devoted themselves to books, whilst others, and they were many, occupied the interval before going to bed in writing their journals.

Games of various descriptions, such as chess,

bagatelle, draughts, cribbage, &c., were provided for our amusement. Even gambling came into vogue, the stakes being enormous, as much as one lucifer match (a very precious article) per game! One man was so rash as to wager a candle upon the result of a game, but this was a stake of such magnitude that no one was sporting enough to accept it. Thursday evenings were always devoted to dramatic entertainments, magic-lantern exhibitions, instructive lectures, or music, both vocal and instrumental. These entertainments were kept up with the same spirit, and without a break, during the whole winter. They were usually called our "Thursday Pops," and afforded much pleasure and amusement.

Birthdays amongst the officers were invariably celebrated by the best dinner that our caterers could provide, accompanied, as a great indulgence, by a glass of port wine. The following is a specimen of a bill of fare on one of these occasions :—

MENU.

POTAGES.

Mulligatawny.

POISSONS.

Pégouse à la Couverture de laine. *

* Blanket wrappers were articles of wearing apparel.

ENTRÉES.

Petits pâtés d'Homard à la Chasse. *
Rognons à la pain rôti.

RELEVÉS.

Mouton rôti à l'Anglais. Tongues on gimbals.

ENTREMETS.

Pouding aux raisins.
Blanc-manger à la Hummock.
Petits pâtés d'Hahis à la Place d'Eccleston.

DESSERT.

Pouding glacé à la Hyperborean.
Figues. Noix.
Gâteau à l'Irlandais.
Café et Liqueur à la Jesson.

Sometimes, as the following effusion, detailing our cheer on Christmas Day, will show, we indulged in composition of a higher and more classic order :—

H.M.S. "ALERT."

A la Julienne soup is the *potage* we favour,
And soles fried *au naturel* serve us for fish ;
We have cutlets and green peas of elegant flavour—
Beef garnished with mushrooms—a true English dish.
Then a mountain of beef from our cold Greenland valleys,
Overshadowing proudly boiled mutton hard by,
Till our appetite waning, just playfully dallies
With a small slice of ham—then gives in with a sigh.
For lo ! a real British plum-pudding doth greet us,
And a crest of bright holly adorns its bold brow ;
While the choicest mince-pies are yet waiting to meet us ;
Alas ! are we equal to meeting them now ?

* Hunt was the name of the ward-room cook.

So we drink to our Queen, and we drink to the maiden,
 The wife or the mother, that holds us most dear ;
 And may we and our consort sail home richly laden
 With the spoils of success, ere December next year.

The composition of these *menus* was always a subject of anxious care and forethought on the part of those entrusted with this important duty, and long and earnest was the consultation and many the references to the French dictionary before they were submitted to the printer's hands, for printed they invariably were. In fact, the chief use of our printing-press, and the most important occupation of the "printing establishment," was the production of these "bills of fare" and the programmes for the "Thursday Pops." The latter were announced to the general Arctic public by the following notice, which was widely circulated :—

"On Thursday, the 11th of November, will commence a weekly series of Popular Entertainments, that will consist of lectures, readings, recitations, and music, both vocal and instrumental, &c. No trouble or expense has been spared in obtaining the services of a great number of the most talented men of the day. The entertainment will be given in the airy and commodious hall situated in Funnel Row.

No Encores.

God Save the Queen.

Doors open at 7.30. Sledges may be ordered at 9 o'clock."

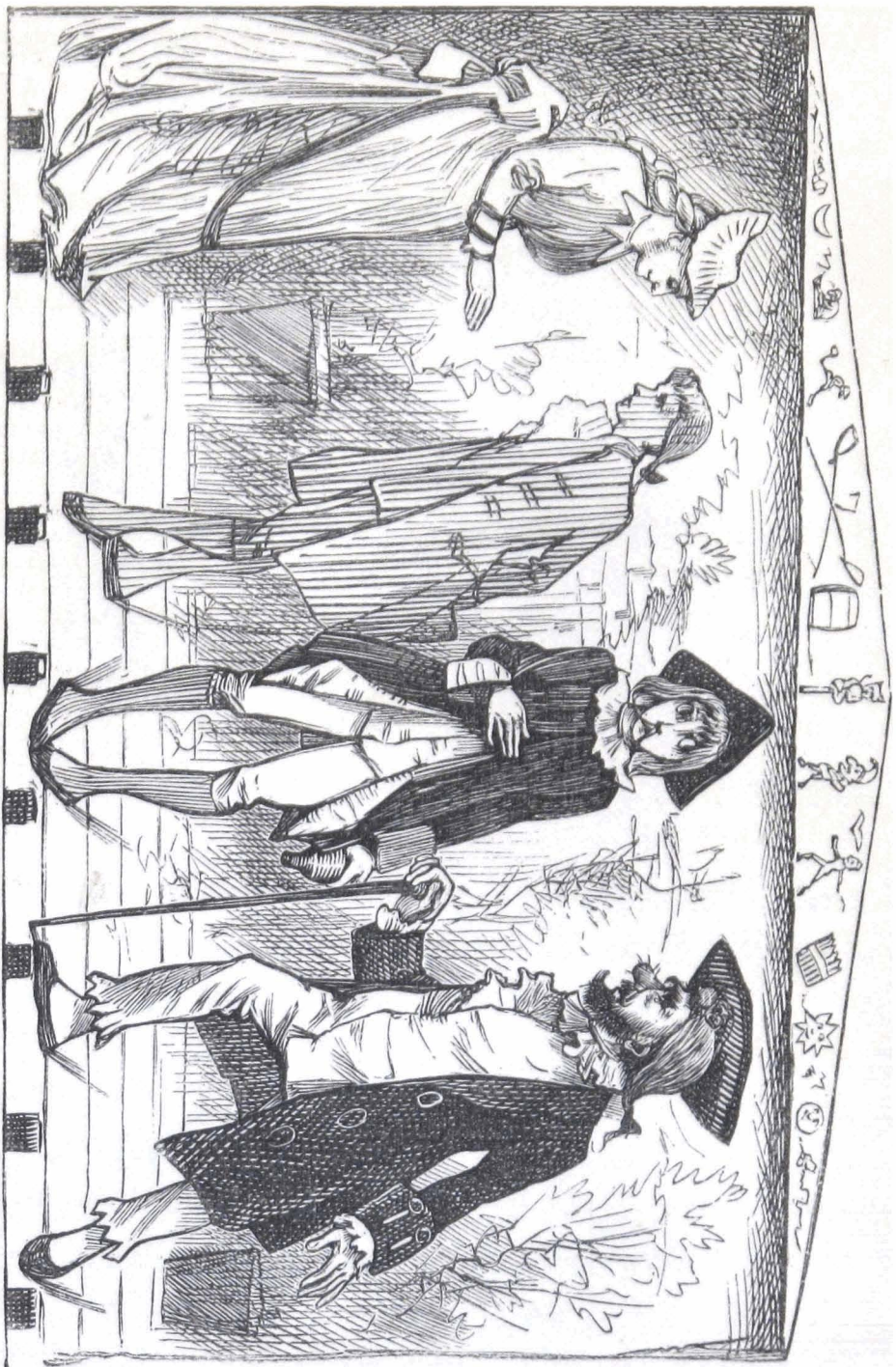
Except on the evenings exclusively devoted to the legitimate drama, the entertainments were

always preceded by a lecture from one of the officers ; astronomy, light, geology, meteorology, or some other interesting and instructive subject, adapted to the knowledge and intelligence of the audience, would be selected. These were eagerly listened to, and afforded as much pleasure as the readings and songs that followed. Among the many gifts showered upon us by kind and generous friends at home was a piano, and, as good fortune would have it, among our officers was a very talented musician, to whose good nature and willing efforts much of the success of these evenings was due. These entertainments were always held below on a spacious part of the deck generally allotted to the smokers. We did not in consequence suffer from the cold in the same manner as our consort, her want of space necessitating the construction of an *ice* theatre on the floe. In this it was difficult to raise the temperature above the zero point. The ladies were, therefore, unable to indulge in low dresses, and a close observer might have detected under-clothing composed of seal skins beneath their otherwise gorgeous dresses of silk and muslin.

The costumes were, of course, a subject of great discussion and deep interest. The making up of dresses, and the manufacture of wigs from musk-

ox skins and oakum, employed minds and fingers that until then had been strangers to such occupations. Many were the needles broken and many were the fingers pricked, before our ideal costumes were realised. Eider-down quilts were converted into the robes of a lovely Oriental princess ; old uniform coats were beautified with spangles and tinsel, and appeared as the fashionable habiliments of a dandy of the seventeenth century ; whilst a wicked magician of the Hebrew persuasion appeared in a coat of unmistakable clerical cut. Officers and men equally devoted themselves to the amusement of their shipmates, and if their histrionic abilities were not of the highest order, the zeal and energy of the actors fully compensated for the deficiency.

We enjoyed a rare freedom from all newspaper reporters and harsh uncompromising critics. All that visited the Royal Arctic Theatre came with a desire and firm resolve to please or be pleased. Acting upon this resolution, our entertainments were bound to be successful. Occasionally we were agreeably startled by the announcement of an entire change of programme, such as a visit from "the only and veritable Wizard of the North," who condescended to honour the *Alert* with his presence "for one night only," on his way to "his hyper-



The Royal Arctic Theatre.

borean domicile ;” or a notice to the effect that “the original and only true Pale-o-Christy Minstrels,” a “*troupe* that never sings in London,” the members of which rejoiced in the names of Sheepskin, Breaddust, Pendulum, Bones, Beeswax, Pemicanface, and Screamer, would delight the Arctic world by one of their celebrated and inimitable representations.

Although the mention of these amusements may be considered light and frivolous for men engaged in such a serious undertaking as that upon which we were embarked, still they all tended to one point, namely, the successful issue of the enterprise. It was all-important during the long dreary winter through which the men had to pass that their mental, as well as their physical energies, should be kept continually employed. It was necessary to banish despondency, and to prevent any undue brooding over their lonely situation.

The encouragement of these entertainments added largely to the general well-being and satisfactory sanitary condition of the expedition during the long night of nearly one hundred and fifty days.

So rapidly did the time pass that Christmas stole upon us almost unawares, and we were half

surprised when a strong odour of cooking good things that pervaded the whole ship warned us that preparations for its celebration were actually in hand. It was a day looked forward to by all, not only in the light of a festival, but because it was regarded as the turning-point of the winter; every day would bring us nearer to the sun, whose bright face we all so ardently wished to welcome once more. Moreover, Christmas Day, to a community situated as we were, "away from the busy haunts of men," is always regarded as an epoch, a day looked forward to, and, when passed, a day from which many events are dated.

The men had for the two previous days been engaged in making the necessary preparations for passing that day as happily and as socially as if they were in a more genial climate. The lower deck was beautifully and tastefully decorated with tinsel-paper, artificial flowers, and flags, and the mess-tables were literally groaning under the weight of good cheer that adorned each one. Musk-ox beef and good English mutton were issued, and these dishes, supplemented as they were by real home-made plum-pudding and mince-pies, gave the tables a cheerful and comfortable appearance; whilst the radiant healthy-looking faces that so cordially and heartily greeted

us with the compliments of the season left little to be desired. In no region of the world could this Christmas Day have been spent with more mirth and more genuine fellowship than it was by the little band of explorers, so far removed from all home ties and associations, who were celebrating that day, so dear to all, in a latitude further north than man, to our knowledge, had ever before penetrated.



Head of Musk Ox.



CHAPTER IV.

THE RETURN OF THE SUN.

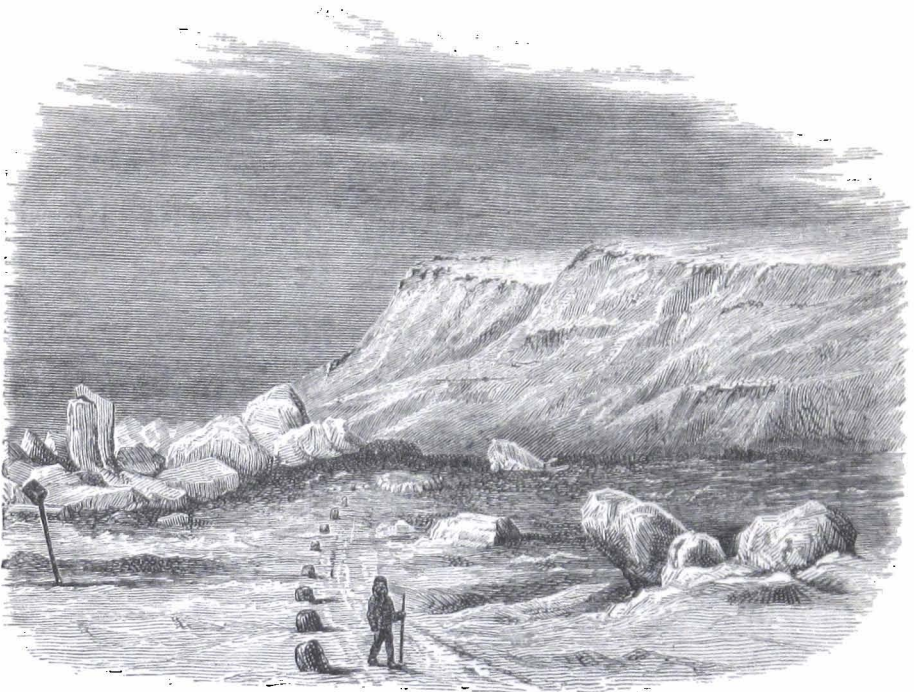


THE New Year was ushered in with every demonstration of joy, gratitude, and hope, by our little party in the *Alert*; joyful, because it had dawned upon us in undiminished numbers; grateful for the many dangers through which we had been so mercifully carried during the past year; and hopeful regarding our future prospects.

Hitherto we had experienced, for those regions, unexceptionable weather. The cold had not been so severe as we anticipated, and, save in one instance, we enjoyed a remarkable immunity from gales of wind or bad weather of any description. On no single occasion had the regularity of our open-air exercise been disturbed. To ensure this very necessary aid towards the preservation of health, a walk, called "the Lady's Mile," had been

constructed along the floe for a distance of half a mile from the ship, marked, at every two or three yards, by small heaps of preserved meat tins, so as to enable us to take exercise even on the darkest days.

The New Year brought with it very changeable



The Lady's Mile.

weather. The cold was of greater severity, whilst the temperature fluctuated in an extraordinary manner. Sharp squalls of wind, generally from the south-west, were prevalent, and snow fell more or less at intervals. All our out-door establishments were completely covered with snow, the

result of drift, compelling us to dig down for the purpose of effecting an entrance into the various observatories. The accumulation of drift outside the ship took the form of a perfectly solid snow-wreath. This was caused by the eddying wind driving the snow from the side of the vessel to a distance of about four or five feet, where it settled, resembling a great frozen wave, whose curling crest was fully seven feet in height.

During tempestuous weather, the pack, although stationary, moaned and groaned weirdly, as though unhappy gnomes, imprisoned in the cold, cold grasp of the frozen sea, were bewailing their hard fate and pleading for release from their icy fetters.

“It cracked and growled, and roared and howled,
Like noises in a swound.”

The young ice, in the vicinity of the ship, cracked in an alarming manner, leaving great fissures, and an uneven and rugged surface. The ship also was exposed to great pressure from this latter cause, and was listed over several degrees.

The most intense cold that we experienced was during the first week of March—strange to say, immediately after the return of the sun. The lowest temperature recorded was -74° , or 106° below freezing-point. During this very severe cold, several experiments were tried by exposing

different substances to its influence. Among others were rum and whisky, which froze so hard that we were able to break off portions and eat them. We have since been, in consequence, very naturally accused of hard drinking,—an accusation we are unable to refute.

Owing to the severity of the cold, superficial frost-bites were of constant occurrence, noses and cheek-bones being the parts most affected. Solitary walks were prohibited; none were supposed to leave the ship without a companion, whose duty it was carefully to watch his comrade's face in order to detect quickly any frost-bite, and restore circulation before permanent injury could be sustained. Face covers were occasionally worn, but were not in great favour. They not only had the disadvantage of freezing to the face, but they also concealed it so as to prevent anybody from seeing and reporting a frost-bite.

This cold, though very intense, was by no means unpleasant, so long as the body was kept in constant motion, although exposure to it for many hours would, in all probability, prove fatal. On first emerging into the open air a slight difficulty of breathing was experienced, and the tears would be forcibly brought to the eyes, where they immediately froze and were extracted as small nodules

of ice. This is not to be wondered at when it is remembered that we had to undergo a transition of temperature from our living deck of $+ 50^{\circ}$, to the air $- 70^{\circ}$, a difference of 120° .

Apropos of frost-bites, it is related that one of the members of the expedition, on rising one morning, to his horror, observed one of his toes and a portion of his foot perfectly black. Concluding it was severely frost-bitten, and wishing to assure himself of the fact, he seized a pin and made a furious dig at the supposed injured part. He quickly found that, although discoloured, it was not deprived of all sensation, and eventually discovered that his servant, on the previous day, having patched up one of his socks with a piece of fearnought, had, in order to assimilate the colour, inked it over: this, staining his foot, fully accounted for the terrible frost-bite.

The hair, especially that growing on the face, was always kept close. In spite of this precaution, however, it was impossible to prevent the breath from freezing on the short stubbly beard and moustache, which were soon converted into a sheet of ice, making it decidedly unpleasant and uncomfortable. Frequently were the cap, comforter, and collar of the coat frozen into one solid mass.

The first indication we had of returning light

was towards the end of January, when, on a bright clear day at noon, a faint tinge of red appeared, blended with a silvery streak of twilight, along the southern horizon. Anxiously were these bright harbingers of returning light watched, and gladly



Frozen Beard.

were they welcomed as they assumed a more decided appearance. The monotony of the long dark night was beginning to be felt, which produced, from its impenetrable darkness and the solemn stillness that reigned supreme, varied and curious sensations ; and the time when the rays

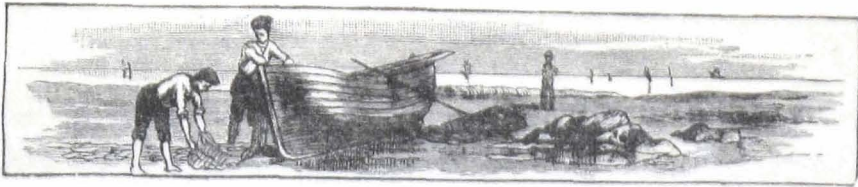
from our bright, though long-absent, sun should again light up the summits of the distant hills was eagerly looked forward to.

The 29th of February was the day on which, according to astronomical rules, the reappearance of the glorious luminary was to rejoice the hearts and gladden the eyes of our little party. Longingly was it looked forward to by the sledge travellers, because its return would bring light and heat to cheer and sustain them on their lonesome and arduous journeys. The sportsman regarded it as the precursor of game, whilst all hailed with delight the symbol of returning day, and the assurance of the termination of their long dark night.

Shortly before noon on that day, little knots of men assembled on the summits of the adjacent hills in order to obtain a glimpse of the rising sun; but it was feared at the outset, as there was no clear sea horizon to the southward, we should fail in seeing it rise above the distant land: these fears proved only too true. The anxiety, however, was intense, as shortly before noon a bright ray shot up vertically from the sun's position and illumined the tips of the surrounding ranges, whilst a bright lustrous light was shed around. Hopes grew high as noon rapidly drew near, but we were doomed to disappointment, and compelled to

return to the ship, defeated in our object of welcoming back the "prodigal sun."

The next day was cloudy, but on the following one we had the satisfaction, on going aloft, of announcing that about one-third of the sun's disc was visible, as it crept slowly along the southern horizon. In colour it was of a deep orange-red, and its shape so distorted by refraction that it resembled more a truncated cone than a spherical body. All assembled to greet the fiery orb after its long absence, scrambling up the rigging with elephantine agility, looking more like animated bales of furs than human beings. Although so little of it could be seen, still that little was bright and *appeared* warm. The summit of the hills, the "misty mountain tops," were bathed in its glorious rays, whilst its luminous beams danced and glimmered along the distant ice-floes. It was a bright and glorious sight, and we remained long looking at and revelling in its rays—in fact, until warned by a peculiar sensation in our feet that the temperature was actually 100° below freezing-point; and however ecstatic we might feel at the reappearance of the sun, Jack Frost still reigned supreme, exacting implicit obedience to his will, making those who disregarded his injunctions suffer for their heedlessness.



CHAPTER V.

PREPARING FOR THE SPRING CAMPAIGN.



THE preparations for the spring campaign and the organization of the sledge parties were very carefully thought over and matured during the long dark hours of the winter. Nothing was omitted that could in any way conduce to the success of the enterprise, and everything was considered that could possibly add to the health and comfort of those to be employed on work of such an arduous nature. Although the whole of the available force on board the *Alert* was engaged in the sledging operations of the spring, only two what are called "extended" parties could be despatched for any length of time. The rest of the men and sledges were required to act as supporting or auxiliary parties to the advanced ones. It was determined that

one of the extended parties should be employed in continuing the discoveries of the autumn, by exploring along the coast line to the westward, whilst the other, and larger, party was to push across the rugged Polar pack, and endeavour to reach as high a northern latitude as possible.

The difficulties to be overcome, and the obstacles to be encountered, in this latter journey, were well and fully understood. None were so rash as to indulge in any extravagant ideas of successfully reaching a very high position. The parallel of 84° , or perhaps 85° by the more sanguine, was regarded as the utmost that could possibly be attained.

It was a well-known fact, before the ship went into winter quarters, that the Polar pack, composed of extraordinarily heavy ice, was in motion at that season. This motion, or perhaps a general disruption, would occur, it was calculated, in about July or August. It was, therefore, not only a matter of prudence, but one of absolute necessity, that the party destined to travel over this frozen ocean should be provided with the means of safety, should such an occurrence take place at an earlier period than was anticipated. Two boats, therefore, capable of conveying the men from one floe to another, formed part of the necessary equipment of the northern division.

The only attempt that had hitherto been made of a like description, for a lengthened period, was Sir Edward Parry's memorable journey towards the North Pole in 1827. He was provided with a couple of large boats, of sufficient size to be used for navigating purposes, in which he pulled and sailed in lanes and pools of water for many miles.

The system of sledging, where there is a coast line to follow, has been brought to a very perfect state by Sir Leopold McClintock, who stands, without a rival, at the very top of the list of Arctic sledge travellers. He was the first to adopt the practice of advancing and establishing depôts of provisions during the autumn for the use of the extended parties of the spring, thereby enabling them to remain out for a much longer period than they otherwise could have done.

In consequence of the movement of the pack, it was, of course, quite out of the question for those engaged in the northern line of exploration to adopt the same system. The disruption of the ice, or the misfortune of wandering off the outward bound track during their return journey, would deprive the travellers of any chance of finding their supplies. Absolute starvation would be the inevitable result.

It therefore became a paramount necessity that

the northern party should carry with them sufficient provisions to last for the entire time of anticipated absence. This, and the necessity for taking boats, obliged the two sledge crews employed on this duty to have a third sledge, so that under the most favourable conditions of travelling, namely, smooth and level ice, they would be compelled, after advancing two sledges, to return and drag on the third. This simply meant that, for every mile advanced in the right direction, a distance of three miles would have to be marched. Little did they then think that the fearfully rugged nature of their road would necessitate the same distance to be traversed five or seven times.

The scale of provisions to be used whilst sledging was almost identical with that of preceding expeditions, the slight difference being that the allowance of spirits was reduced by half, and the amount of tea and sugar doubled.

The question of the weights to be dragged on the sledges was a very serious one, and was most carefully considered. Every little item, even to a small packet of a dozen *pins* placed in the medicine chest, was scrupulously weighed and recorded in the general equipment. The sledges were never weighted beyond the number of pounds they were originally constructed to carry.

Long before the return of the sun, important questions connected with the fitting of leggings to the moccasins ; ingenious modes whereby the use of buttons might be abolished ; and the problem whether face covers should, or should not, be part and parcel of the cap, were eagerly discussed. Many were the curious contrivances suggested for the public weal. All were anxious to commence their regular work, as the sledging was regarded, and a glow of pleasure lighted up the pale wan faces of those who were so fortunate as to be selected for one or other of the two extended parties.

Although the returning light revealed to our notice, only too palpably, a sallowness of complexion, or gave us, as was remarked at the time, "a washed-out look," still all appeared the picture of health, and were in excellent spirits. Little was it thought that the seeds of that terrible disease, which subsequently crippled us so disastrously, had already germinated. A finer body of men could hardly have been collected anywhere, equally ardent regarding the successful termination of their undertaking, animated with the same zealous desire to do their duty, and willing and anxious to do their utmost in furtherance of the cause they had espoused.

The sledges were, of course, all named by their commanders. Some were called after former ships, pleasantly recalling happy reminiscences of the past ; others were named after distinguished travellers, whilst a few rejoiced in more whimsical appellations. The following were the names of those that were engaged in the most important duties :— The “ Marco Polo,” “ Challenger,” “ Victoria,” “ Poppie,” “ Hercules,” “ Clements Markham,” “ Alexandra,” “ Bull-dog,” and “ Sultan.”

During the month of March, the crews of the various sledges were regularly exercised, under their respective officers, for several hours during the day. Sometimes they would be employed laying out depôts of provisions, or, occasionally, dragging their sledges over the pack in the immediate vicinity of the ship, with the twofold object of gaining experience, and becoming better acquainted with the work in which they were about to engage.

It was deemed desirable, before commencing operations for the spring campaign, to despatch a dog sledge for the purpose of communicating with our consort, whose winter quarters were situated some fifty miles to the southward of our own. The *Discovery's* people were, of course, in total ignorance of our proximity, or even of our safety,

so that communication between the two ships was considered necessary, not only to relieve their minds of all anxiety and apprehension, but also to acquaint them with our programme for the ensuing spring, in order that their exploring parties should act in concert with our own.

This duty was entrusted to the charge of two gallant and thoroughly trustworthy young officers, who were accompanied by the Danish interpreter in the capacity of dog-driver. They were provisioned for an absence of ten days. In the event of their supplies becoming exhausted, their stock could be replenished from a large depôt that had been established the previous autumn about midway between the two ships. Their team consisted of nine dogs, which had for the past four or five weeks been regularly fed and exercised. During the winter, when the dogs were idle, their meals were few, and served at uncertain times.

Sunday, the 12th of March, was the day eventually selected for the start of this, the first sledging expedition of the season.

The temperature on that morning was low, but rose gradually towards noon, until it seemed inclined to remain stationary at 30° below zero. The day being bright and clear, and barometer steady, were further indications of a continuance

of fine weather. Letters were hastily finished, and immediately after divine service the colours were hoisted, and amidst the cheers of "all hands," who had assembled on the ice to bid the travellers God-speed, the lively little "Clements Markham," with its bright standard fluttering out bravely before a light breeze, started for the purpose of once more renewing intercourse with our fellow-beings. For the next two or three days the thoughts of those on board were constantly with the absent ones, especially as the temperature shortly after their departure had again fallen very low. Many a silent prayer was offered in their behalf, that they might accomplish their mission in safety, and return with good and joyous tidings from those who, like ourselves, were wintering in those inclement regions.

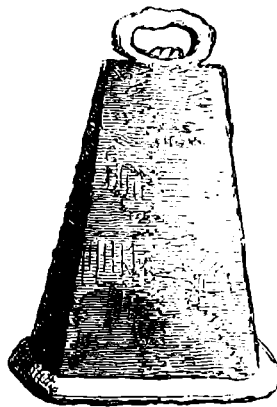
On the third day they returned unexpectedly, with a sad tale of woe and suffering. Shortly after their departure from the ship, the Dane had entirely collapsed from the intense cold. Frost-bitten in all his extremities, he was rendered so helpless that the necessary duties of conducting the sledge, tending and driving the dogs, cooking, etc., devolved on the two young officers who, in addition, had the serious responsibility of nursing their sick and suffering companion. How nobly

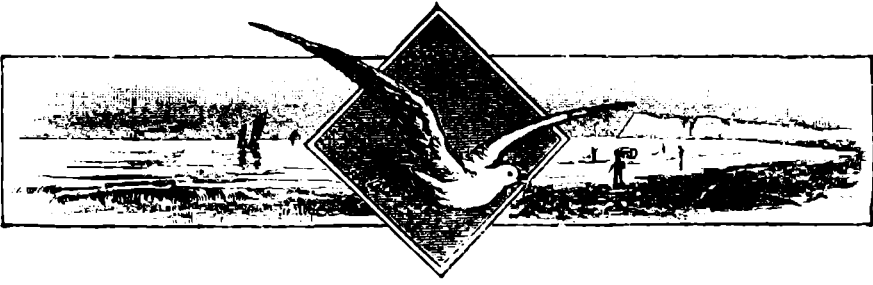
they responded to the call of duty is well known to their shipmates, though few can realise what they actually endured. Finding that they were unable to obtain sufficient warmth for their frozen companion in the tent, they burrowed a hole in a snowdrift, and into this cavity they transported the sick man, themselves, and all their tent robes, closing the aperture by means of the tent. With the aid of their cooking lamp, which was kept continually alight, they succeeded in raising the temperature of the interior to about zero. They deprived themselves of their own clothing for the benefit of the invalid, whose frozen feet they actually placed inside their clothes in direct contact with their bodies, until their own heat was extracted, and they were themselves severely frost-bitten in various parts. Having partially resuscitated their poor helpless comrade, they adopted the only course that a wise judgment and sound discretion pointed out to them, namely, to return with all despatch to their ship.

From the effects of this journey the poor interpreter never recovered, and gradually sank until he died some two months after.

It must be remembered that when this expedition left the *Alert*, the re-appearance of the sun had only taken place twelve days before, so that

little benefit had been derived from its rays ; it afforded, however, sufficient light to enable the travellers to keep on the march for about eight or nine hours each day. On the 20th of March the same two officers made another and more successful start. On this occasion they were accompanied by a couple of sailors, and their sledge was dragged by a team of seven dogs. In five days, after a severe and toilsome journey, rendered doubly so by the extreme cold and the heavy nature of the road, they reached the *Discovery*, conveying to her officers and crew the pleasing intelligence of our safety, and receiving in return an account of the happy winter passed by them.





CHAPTER VI.

ON THE MARCH.



N the morning of the 3rd of April, unwonted bustle and excitement prevailed on board the *Alert*. Men in their travelling attire might have been observed busily engaged in adding the last finishing touches to the already packed sledges. Officers were carefully conveying delicate instruments from the ship to the line of laden sledges drawn up on the floe, whilst the white ensign flying from the peak of the ship betokened some important and unusual event.

The day was indeed one of memorable import, for it was the one that we had all looked forward to during the long winter as that on which our real work was to commence ; and it was the one on which we hoped to start forth to achieve all that was possible in our endeavours to add to the

scant geographical knowledge that we possessed of the polar regions. No wonder, then, that the scene of our winter quarters presented an animated and unwonted appearance on that bright but cold morning.

The sledges, seven in number, were placed in single line, one ahead of the other, according to the seniority of their respective officers, packed and provisioned for an extended absence; whilst the standards of their commanders, fluttering out bravely from each, materially added to the gaiety and spirit of the scene. These flags, made and embroidered by the fair hands of some loved and cherished one at home, were swallow-tailed standards, bearing the armorial colours, and emblazoned with the crests of their owners, each charged with the blood-red cross of St. George.

Shortly before the hour appointed for the start, officers and men assembled, for the last time, for the customary morning prayers. Immediately after this service was concluded the order was given to "prepare to march," and amidst the cheers of those few who were, of necessity, obliged to remain on board, fifty-three officers and men,

"A chosen band, stepped boldly forth,
To the unknown West and the unknown North,"

a band of resolute, determined men, eager to

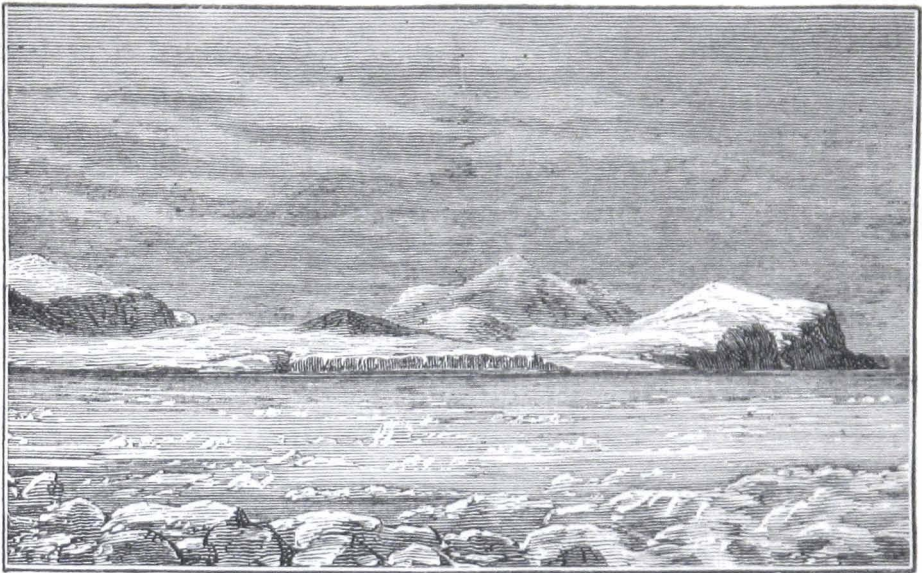
emulate the deeds of their predecessors, and willing to risk their lives in bringing to a successful issue the task they had resolved to accomplish.

The temperature at the time of departure stood at 33° below zero, falling on the following day to -45° , or 77° below freezing-point. The cold then was so severe as to deprive the majority of the party of sleep, the whole period of rest being occupied in keeping the blood in circulation. The experience gained during the autumn had a very salutary effect on the travellers, the apprehension of frost-bite being in itself sufficient to banish all idea of sleep.

The first day's march was, necessarily, a short one. It was to many their introduction to the "drag-ropes," and symptoms of fatigue were soon detected, caused by the energetic exertions of the inexperienced, who, unlike the veterans of the previous autumn, overtaxed their strength in their ardour to perform a good day's work.

The scene of the first encampment was an animated and picturesque one. The site selected was at the base of a low brow forming a connection or isthmus between a long projecting point of land and the main. Here were pitched our seven tents, and from each one could be seen the smoke from the cooking utensils ascending in spiral

columns until lost amidst the clouds. In our rear were the snow-clad hills, whilst in front was the illimitable frozen sea. Men hurried about in the execution of various duties, such as the issuing of provisions, the banking up of the outside of the tents with snow, the re-packing of the sledges, or the careful covering up of the lading so as to



Cape Joseph Henry.

preserve it from snow drift, all which duties must be sedulously carried out before rest and repose can be sought in the sleeping-bags. Not the least hard part of a day's work is that of camping after the toilsome and weary journey, especially when the temperature is low, and a cold sleepless night is anticipated.

The sledges travelled together, mutually assisting and supporting each other, when necessary, until arrival on the eighth day at the depôt of provisions established near Cape Joseph Henry during the past year. Here the supporting sledges, having fulfilled their portion of the work, bade farewell to their companions and returned to the ship. The extended parties advanced on their solitary mission, the northern division leaving the land and pushing straight out on the rugged polar pack, whilst the western party continued the exploration of the coast to the westward.

Our travelling costume was somewhat different from that worn during the winter. The underclothing consisted of thick flannel. Over this were worn one or two flannel or check shirts, long-sleeved woollen waistcoats, thick knitted guernseys, and duffle* trousers. All wore broad flannel belts, commonly called cholera belts, round their loins. Each person wore a suit of duck "overalls," which acted as "snow-repellers," and were found very useful. As an extra precaution against snow blindness, the men had some device painted on the backs of their duck jumpers in order to

* Duffle is a thick woollen material resembling blanket or felt, and was used on Arctic service for the first time by the members of the late expedition.

afford relief to the eye; the designs, being left entirely to their own imaginations, were more quaint than artistic. On our heads we had the woollen helmet caps so kindly given to us by the Empress Eugénie, and over these were worn our thick seal-skin caps. Our feet were encased in one or two pairs of blanket wrappers, thick woollen hose reaching above the knees, and moccasins. Blanket wrappers were cut from the very best Hudson's Bay blanket, of about sixteen inches square, and were worn wrapped round the feet.

We slept in duffle sleeping-bags, and our tent robes were made of the same material. Snow spectacles were invariably used. After their adoption we were comparatively exempt from that painful ailment, snow blindness, which renders all attacked so helpless. We occasionally suffered from it, but only, except in one or two instances, in a mild form. When camped for the night the "snow-repellers" were taken off, duffle coats substituted, and the foot gear changed. This was the extent of our toilet.

The important duties of "cook" are equally shared by the whole sledge crew, each performing this office in turn for twenty-four hours. It is, during very cold weather, a most severe and

unpleasant task, requiring great patience and powers of endurance.

The cook of the day has always to rise in the morning two hours before the rest of the party, and seldom gets into his bag until two or three hours after the others are comfortably settled; and this, it must be remembered, after a hard day's work. Gladly does he hand over his duties to his successor, happy in the assurance that his "turn" will not come round for another week. His duties commence at an early hour, when, after having lighted his spirit-lamp and converted sufficient snow or ice into water for the morning meal, he re-enters the tent, and walking unconcernedly on the bodies of the sleepers, proceeds to brush from the top and sides of the tent the condensed moisture that has been accumulating during the night, and which falls in minute frozen particles on the coverlet. This operation being concluded, the coverlet is removed, well brushed, shaken, folded up, and placed on the sledge. In about two hours from the time the cook is first awakened the cocoa is reported ready, when the remainder of the party are aroused. If the weather is very cold, breakfast is discussed in our bags, in which we all sit up, resembling, in our grey skull-caps and duffle coats, more a gathering of hospital

patients than a band of strong robust men. The biscuit-bag is then laid in the middle of the tent ; spoons, each man being provided with one, are produced, and the pannikins, containing each one pint of warm cocoa, are handed in. When this is finished the pannikins are passed out again to the cook, who has in the meantime been preparing the pemican. So hard is this latter article frozen, that the pieces for use have to be chipped off with an axe before they can be put into the stewpan. While the cook's patience is being sorely taxed, and his fingers alternately burnt and frost-bitten in his endeavours to prepare the repast, prayers are read to those inside, foot-gear is changed, and the sleeping-bags rolled up. This operation of dressing and undressing, although entirely limited to the feet, is one of the most disagreeable duties connected with sledge travelling. The hose and blanket wrappers, although kept *inside* the sleeping-bags during the night, the wrappers being frequently tied round the knees to protect them from the cold, were frozen so hard in the morning that it was with the greatest difficulty they could be folded over the feet. Not the least trying part is that of lacing or tying the stiffly frozen strings of our equally hard moccasins, with fingers either aching from cold or devoid of all sensation.

Immediately the pemican is consumed the orders are given to strike tent, pack sledge, and prepare to march. The drag-ropes are then manned, and with a "One, two, three, haul!" the sledge is started and the march commenced. Care must be taken to scrape the pannikins out with a knife before the refuse inside has time to freeze, otherwise it will be difficult to remove.

Water for washing purposes of any description, whilst sledging, is quite out of the question. Should the daily allowance of fuel be sufficient to enable the cook to make a little extra, it is equally shared amongst the men, but unless it is quickly used it is of little avail, so rapidly is it converted into ice, in spite of the water-bottles being kept inside the waistbands of the trousers! We, in consequence continually suffered from an intolerable thirst, which could only be appeased at meal-times.

After marching for about five or six hours, a halt is called for lunch. This meal consists of four ounces of bacon, a little biscuit, and a pannikin of warm tea to each person.

Although the most refreshing and enjoyable of all our meals, luncheon was, when there was much wind or the weather intensely cold, a very trying one. The halt is of necessity long. Frequently an hour or an hour and a half elapses before the

tea is reported ready, during which time the men are compelled to keep constantly on the move to avoid frost-bite. If we were not all suffering from the same cause, the antics of the different individuals in their efforts to keep their feet warm would undoubtedly provoke much laughter. Anxiously is the kettle watched, and many are the tender inquiries concerning the state of the water inside. "Does it boil?" is a question frequently asked, and, unless the cook is blessed with an amiable disposition, the perversity of the kettle is sufficient, at times, to drive him almost distracted. The old saw, "A watched pot never boils," was fully exemplified. At length, to the relief and the delight of all, the announcement is made that the tea is ready, when all troubles are forgotten in the pleasure and enjoyment of a warm pannikin of tea. Sometimes little difficulties would crop up in consequence of the haste that had to be exercised in the preparation and discussion of this meal. These, although serious at the time, served afterwards to amuse, and were soon forgotten. On one occasion, the water having been boiled, and the cook having, as he thought, carefully added the tea and sugar, which were as carefully stirred up, the allowance of tea was served out and eagerly drunk by the wearied sledgers, who were only too glad to receive

anything warm. It was not until some time after the allowance had been consumed that the cook discovered he had omitted to put in the *tea*, and had served out simply a decoction of warm water and brown sugar! Sometimes the tea was made from salt-water ice, the cook having inadvertently mixed it before tasting the water!

Our bacon was as a rule frozen so hard as to be almost uneatable, and it was only by thawing it in our warm tea that it was rendered at all palatable.

The time for halting for the night varied considerably, but when the order was given it was always received with very great satisfaction, especially when a good day's work had been accomplished, with the prospect of fair travelling on the morrow. A suitable site having been selected, the tent is pitched, the outside being banked up with snow to the height of about two feet. The tent robes, knapsacks, and sleeping bags, are passed in and deposited in their respective places. The cook in the meantime is busily engaged in the necessary preparations for supper. Immediately the tent is ready, the men enter, shift their foot gear, and struggle into their half-frozen bags, their toes and feet having previously been examined for the detection of frost-bites; should any be dis-

covered, circulation is restored as speedily as possible, and the injured part dressed.

When the men are comfortably ensconced in their bags, supper, consisting of tea and pemican, is served ; after which pipes are lighted, conversa-



In the Tent.

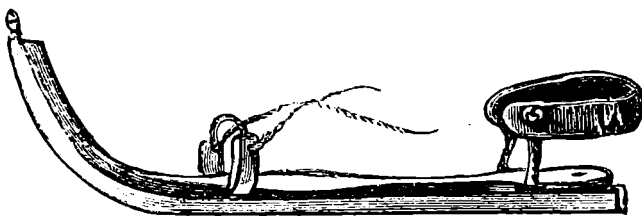
tion ensues, and the allowance of grog is served out. Songs will sometimes be called for, or perhaps a book will be read aloud ; but whatever amusement is resorted to for the purpose of enjoying the half hour after supper, whether it is read-

ing, singing, or yarning, all are cheerful, contented, and happy.

Home is a great topic of conversation, and what each one intends doing when he returns to England is freely discussed.

This period of the day, when the temperature is not too low, is undoubtedly the most pleasing and comfortable part of the twenty-four hours.

Before composing ourselves to sleep, the cook, having made the necessary preparations for the morning's breakfast, passes in our coverlet. It is impossible for those who have never been initiated into the mysteries of Arctic sledge travelling, to conceive what this coverlet is like when handed in. It resembles wood, or sheet iron, more than an article of woollen material. With difficulty it is unfolded, when it stands up in the centre like a second tent, and not all the beating with which it is assailed will knock it into shape: this is only regained when the heat emanating from our bodies has sufficiently thawed it, and it then becomes a "wet blanket" indeed.





CHAPTER VII.

NORTHWARD HO !



IT was a strange farewell chat which was taken on that cold day on the rugged ice-floe, amidst bristling hummocks and heaped-up snow-drifts, as one division of sledges turned to the westward, and the other pursued its course northward, to unknown difficulties and hoped-for discoveries.

Brief was the parting, but sincere were the heart-felt wishes for each other's success.

Hearty British cheers resounded in the icy wilderness as we bade adieu to our fellow-travellers, the echoes from which had scarcely died away before their forms vanished from our view in the thick driving snow that shrouded in mist the surrounding objects. It was no time for reflection ; for now all our energies, both mental and phy-

sical, had to be devoted to the furtherance of the great work with which we were intrusted. Resolutely did the men turn to their drag-ropes, and with light and willing hearts commence their toilsome advance.

The serious obstacles that so persistently impeded the progress of the northern division were immediately encountered. To make any advance it was necessary to organize a strong party of road-makers, whose duty was to construct a road, with pickaxes and shovels, through broad fringes of heavy squeezed-up hummocks, that invariably surrounded the different ice-floes. Along this road, when completed, the three sledges were dragged one at a time. Amongst the hummocks the snow lay very deep, often up to the men's waists, and sometimes of such a depth that it was impossible to advance before a passage was cleared with shovels. The floes, although heavy, were never of any great extent.

A terrible conflict appeared to have been fought between the ponderous masses of ice over which we travelled, that had so shattered and split them up as to give one the idea of a tempestuous broken sea suddenly frozen.

Vainly did we attempt to console ourselves with the idea that this irregular and broken-up sea of

ice was only caused by our proximity to the land, and that as we advanced in a northerly direction



Lowering Sledge over a Hummock.

we should meet with long smooth level floes, over which we should be able to make up for the

time lost whilst struggling through the heaped-up masses of hummocks that we were then encountering.

Our hopes proved delusive. Instead of the floes increasing in size and getting more level, the reverse was the case; hummocks varying from fifteen to fifty feet in height, extending in broad belts or fringes from twenty yards to half a mile in breadth, were met; the few floes fallen in with being small, though heavy, and presenting an uneven surface. Road-making became a work of daily occurrence. Occasionally the sledges would have to be unpacked and considerably lightened before they could be dragged through the deep soft snow. So thick was the snow that great rents and fissures in the ice were treacherously concealed by it, and only discovered by some unfortunate man breaking through and almost disappearing.

Against such difficulties, the daily rate of progress was distressingly slow; but, although the actual distance accomplished during the day would only be from a mile and a half to two miles, so often had the same road to be traversed by the entire party, that a distance of ten, twelve, and fifteen miles was usually that estimated at the conclusion of a day's journey.

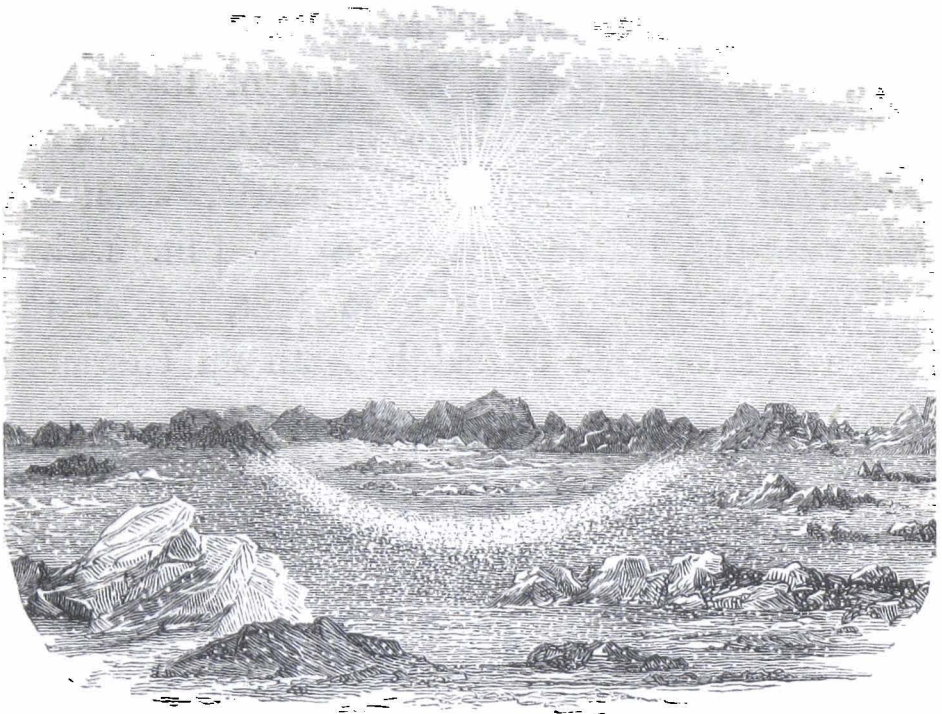
Sometimes a gale of wind would render tra-

velling totally out of the question. Nothing more wretched can be imagined than a forced detention on one of these occasions. Unable to stir outside the tent on account of the dense snow-drift that is whirling around ; too cold to read or even to sit up in one's bag for the sake of conversation ; tent robes frozen so hard that no warmth can be derived from them,—a combination of these evils renders the lot of those who suffer from them one indeed of abject misery. Frequently, when the gale subsides, is the drift found piled more than half-way up the sides of the tent, whilst the sledge is altogether buried beneath an enormous heap of snow.

But as a contrast to this, the bright sunny days, lighting up the snowy world that surrounded us, dispelled all thoughts of these discomforts, and the present and the future alone occupied our minds. On such days, so highly crystallized was the surface-snow, that it sparkled and glittered with the most brilliant iridescent colours. The ground on which we walked appeared to be strewn with bright and lustrous gems ; diamonds, rubies, emeralds, and sapphires, being the most prominent. It was, indeed, a fairy-like picture, but how strangely at variance with this scene of enchantment were the dirty, rough-clad, and weather-

beaten travellers that formed the chief feature of the lovely scene !

Nothing occurred to break the stillness. No sound relieved the intense solitude. No signs of life were met with, save the solitary track of a little



Diamond Dust.

lemming, seen about three miles from the shore, and the footprints of some poor wandering hare that had strayed at least twenty miles from the land only to die of starvation and exhaustion amid this desolate frozen waste.

The little animal first named, called by naturalists

the *Myodes lemmus*, is the most diminutive, yet the most common, of all quadrupeds in the Arctic Regions.

In size and appearance it resembles something between a mouse and a mole. They are extremely pugnacious, and often attract attention, when they



Lemmings.

would otherwise be unobserved, by their shrill cries of rage at the approach of any one. They hibernate in burrows under the snow, and live during the summer on the scant vegetation of the climate.

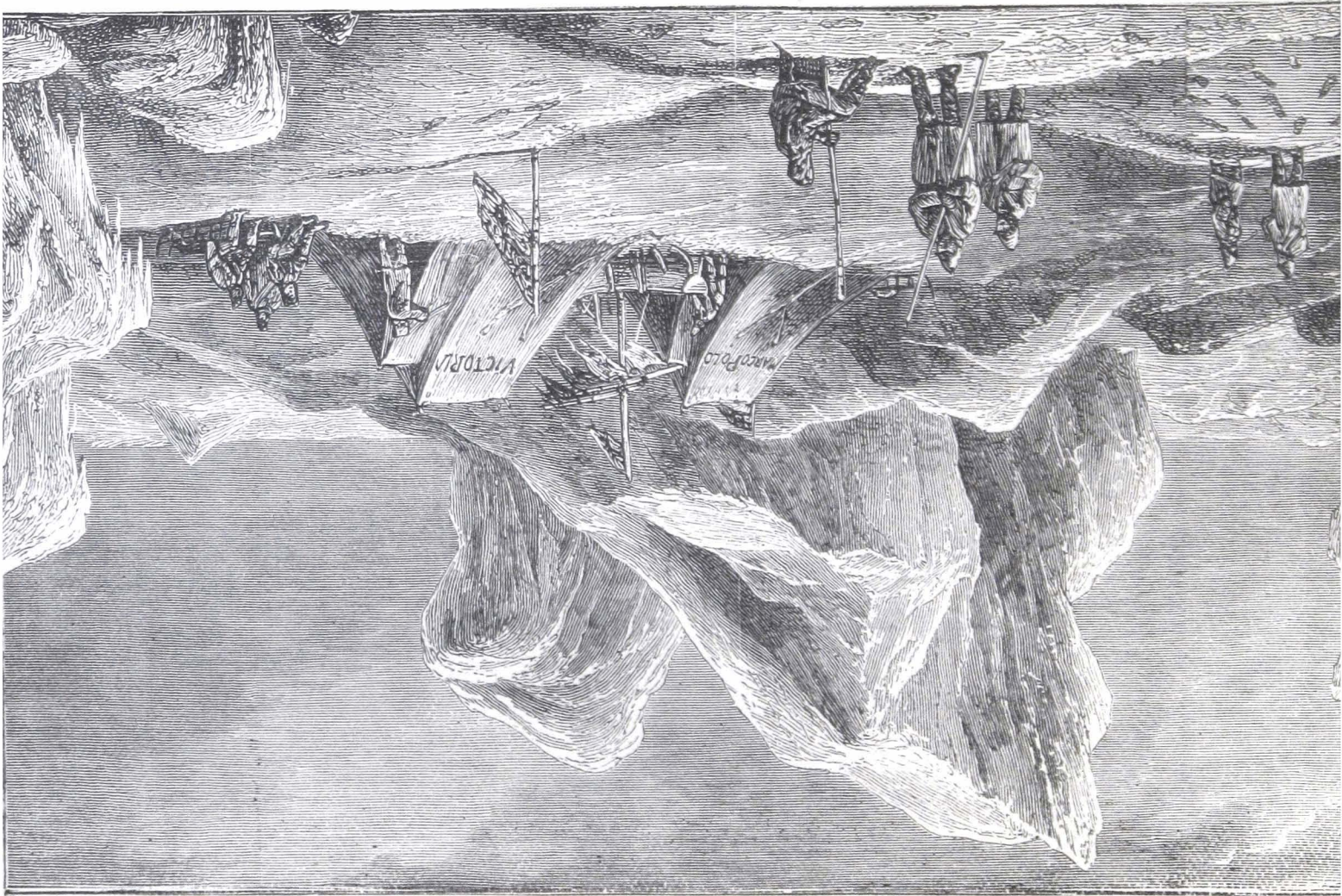
Great as were the natural difficulties to be combated by the explorers, yet another and a more

terrible one rose up against them. Scurvy, that fearful and wasting disease, so dreaded by our mariners of old, appeared, and gradually, but surely, laid its dread hand upon the men, completely prostrating and rendering them utterly helpless. The poor fellows were assailed one by one, but they gallantly resisted the insidious attacks of their terrible foe, until flesh and bone refused, however much the mind was inclined, to proceed any further, and they fell on the snow, requesting to be left there to die rather than be a hindrance or a trouble to their comrades. Nobly did these brave men battle with this fell disease, struggling on manfully, and keeping on their feet, until pain and weakness alike compelled them to submit to being carried on the sledges.

On the thirty-fourth day after leaving the ship, the northern division were dragging five disabled and helpless men on their sledges! The heavier of the two boats had long ere this been abandoned, but the extra weight to be carried and the diminution in the strength of the party fully counteracted the benefit that would otherwise have been gained by this step.

The temperature, too, remained remarkably low; the thermometer never rose above zero until the very last days of April. Even in the middle of

Four hundred miles from the North Pole.



May the temperature was frequently as low as 17° below zero.

The monotony of the travelling was indescribable ; day after day was the same, each one the counterpart of the preceding, and no change of scenery, nothing but hummocks and snow-drifts, snow-drifts and hummocks. At length, on the 12th of May, the party arrived at a perfect labyrinth of squeezed-up hummocks, an irregular chaotic sea of ice, travelling over which would entail great hardships and meagre results. This being the fortieth day out, and having only thirty days' provisions remaining on the sledges, it was resolved to return. But in order to insure being within four hundred miles of the North Pole, the party, leaving their sledges and the sick, who were comfortably settled inside the tents, proceeded to push their way over hummocks and through deep snow-drifts to the northward. After more than two hours' walking, in which time, however, barely more than a mile was accomplished, a halt was called shortly before noon. The artificial horizon was set up, and the flags and sledge standards, brought for the especial purpose, displayed. A good meridian altitude was obtained, and the latitude $83^{\circ} 20' 26''$, or $399\frac{1}{2}$ miles from the North Pole, announced !

Three cheers were called for and given by the party, then all sang the "Union Jack of Old England," the "Grand Palæocrystic Sledging Chorus," winding up, like loyal subjects as they were, with "God save the Queen."

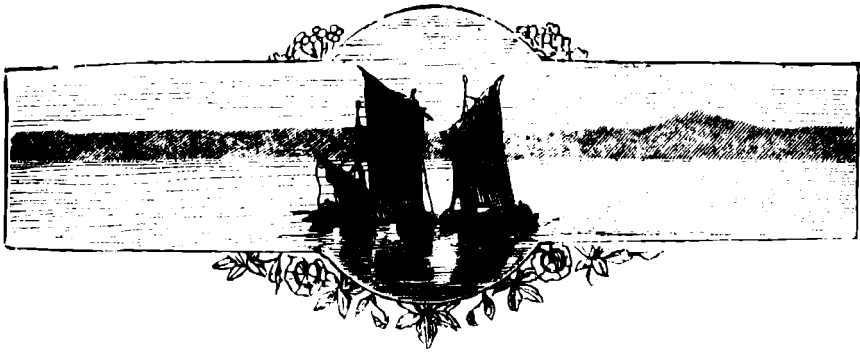
What a scene surrounded this little band of men that had penetrated further north than the foot of man had yet trodden! Surely Coleridge, in his "Ancient Mariner," must have been depicting the veritable scene when he said,—

"The ice was here, the ice was there,
The ice was all around."

In spite, however, of these surroundings, suggesting everything that was dreary and desolate, mirth and happiness seemed to reign paramount amongst them. Perhaps there is something in the idea of being where no other man had ever been, or of being one of a party that had planted the British colours in a higher northern latitude than any human being had hitherto reached, that produced such feelings. Whatever it was, it was shared in by all; even the sick, prostrate as they were, participated in the general feeling. Their toilsome journey, they knew, had terminated. Every day would bring them nearer to their ship and to those supplies that were necessary to restore them once

again to health and vigour. Long will that 12th of May be remembered by the little party which on that day succeeded in unfurling the Union Jack on the most northern part of our globe yet reached by man.





CHAPTER VIII.

HOMeward BOUND.



RELUCTANTLY, very reluctantly, was the determination arrived at that further progress northwards was out of the question. Still the little company had the consolation of knowing and feeling, that the motto engraved on their flag-

staff :

“ I dare do all that may become a man :
Who dares do more is none ,”

had been fully carried out by each individual member of the party. They felt that their want of any very great success could not be attributed to a lack either of energy or perseverance. With five of their little force disabled, and as many more showing decided scorbutic symptoms, prudence counselled a return, however much inclination

might have prompted an advance. It was a bitter ending to all their aspirations, compensated, however, to a certain degree, by the fact that they were homeward bound.

Day by day did their strength diminish. Gradually, but surely, did each and every one feel the cruel grasp of the disease, as they struggled manfully on, dragging their poor helpless companions, in spite of racking pains and aching limbs. Although themselves attacked by the dreadful malady, the men who were still able to work forgot their own sufferings in their endeavours to ameliorate those of their more helpless comrades. Unmindful of their own miserable plight whilst performing the tender and soothing offices of nurses to others, they proved themselves to be worthy followers of those men who fell fighting by the side of Nelson, or who patiently laid down their lives with Franklin. Often was the same road traversed as the sledges were dragged singly along. It was most fortunate that they were able to adhere to the road constructed during the outward journey; should they by ill-luck wander away from and lose it, they knew their chances of returning safely would be poor indeed! Snow fell heavily the greater part of the time, and fogs and gales of wind had to be endured; rest there was none; "onward" was

the order of the day. The temperature had reached a more comfortable height, although during the entire month of May it never rose above freezing-point. Frost-bites were now no longer dreaded ; in fact, they had become things of the past.

As the malady gradually assumed the mastery over the party, so did the appetites decrease, until it was with the greatest difficulty that any could be induced to eat at all. Instead of each man consuming one pound of pemican per diem, the same quantity sufficed for the entire party in one tent ; occasionally even this was not all consumed. Hunger was never felt, but aching bones and sleepless, restless nights formed the general causes of complaint. Complaint, however, is not the correct term to use, for more uncomplaining and enduring men it would be difficult to find.

Before many days had elapsed from the time of commencing the homeward journey, it became only too painfully evident that, to insure reaching the land alive, the sledges must be considerably lightened to admit of a more rapid advance. To do so it was necessary to abandon the remaining boat ; but this was decided on only after very serious and mature deliberation ; it was a *dernier ressort* ; a choice of the lesser of two evils. Should a disruption of the pack occur, and already ominous

signs of such an event had been observed, without a boat the party would indeed be placed in a helpless position ; but, again, should the boat be retained, the weights to be dragged by the debilitated and weakened crew would be so excessive as to preclude all possibility of reaching the land before the provisions were expended ; they would thus be reduced to the verge of starvation. Again, it was of the utmost importance that despatch should be exerted in reaching the ship and placing the sick under medical treatment, the disease extending so rapidly as to produce a marked change for the worse every day. The boat, therefore, and all unnecessary weights, were abandoned. Still, so few were left able to work, that they were actually dragging a greater weight per man than they did when leaving the ship. Cheerfully did they "buckle" to their work, joking each other as they hobbled along. Their lameness went by the name of "the Marco Polo limp," which they said would be introduced by them into England, and become the fashionable gait. The disease itself was called "the Joseph Henry mange." Nothing appeared to subdue the spirits or the courage of these brave fellows. Orders were always executed with the greatest willingness and good humour, and with as much alacrity as they were capable of evincing

On the 28th of May great excitement was caused by the appearance of a little snow bunting



Snow Buntings.

that fluttered about amongst the hummocks, uttering its—to us—sweet and pleasant chirp. No wonder this little warbler was such an object of

interest : it was the first bird we had seen for nine long months. Even the invalids on the sledges requested they might have their faces uncovered so as to both see and hear the little friend that had suddenly appeared amongst us, as it were a messenger, to welcome our party back to life and friends. Anxiously was it regarded and long was it watched as it flew towards the land, to which we were now slowly approaching.

On the 5th of June, after an absence of two months, the party once more set their feet on *terra firma*.

The depôt of provisions established near Cape Joseph Henry for their use was found intact ; but something more than provisions alone was now needed for the safety of the party.

So rapid had been the encroachments of the disease that immediate succour was necessary for their salvation. At the rate of progress that they were then making, it would take them three weeks to reach their ship, although only forty miles distant. The few who were able and strong enough to drag the sledges would barely last as many days. It therefore became absolutely necessary that assistance should be speedily obtained. To procure it, one was ready and willing to set out on this lonely and solitary mission, with the full

confidence of being able to accomplish what he had undertaken.

On the 7th of June this officer started on his arduous march for the *Alert*. The Godspeeds uttered by those for whose succour he was about to undertake a long and hazardous walk were deep and heartfelt, and his retreating form was anxiously watched until gradually lost sight of amidst the interminable icy sea.

But on the day following sadness and despondency prevailed amongst the little band. One of their number had received that summons to which all must at some time attend, and had been called to his long account. This was a fearful and unexpected blow to many, who regarded themselves as being in a more critical and precarious condition than that of their dear comrade just departed.

Sad and mournful indeed was the small procession that wended its way slowly to the new-made grave, dug out of a frozen soil of snow and ice; and there, with the tears trickling down their weather-beaten and begrimed faces, with their hearts so full as to choke all utterance, they laid the remains of their late fellow-sufferer in his last icy resting-place.

A rude cross, improvised out of the rough materials that their own equipment supplied, with

a pencilled inscription, marks the lone and drear spot in that far-off icy desert where rests our comrade in his long sleep that knows no waking.

The order to renew the march was gladly received, every one being desirous of quitting a place so fraught with sad and melancholy associations.

On the day following that on which the funeral had taken place, shortly after the march had been commenced, a moving object was suddenly seen amidst the hummocks to the southward. With what intense anxiety this object was regarded is beyond description. Gradually it emerged from the hummocks, a hearty cheer put an end to the suspense that was almost agonizing, as a dog-sledge, with three men, was seen to be approaching. A cheer in return was attempted, but so full were the hearts of all that it resembled more a wail than a cheer. They felt they were saved, and a feeling of thankfulness and of gratitude was uppermost in their minds as they received a warm and hearty welcome from those who had hurried out to their relief the moment intelligence of their distress had reached them. A reaction appeared to take place. Those who a few short moments before were in the lowest depths of despondency appeared now in the most exuberant spirits. Pain was disregarded, and hard-

ships were forgotten, as numerous and varied questions were asked and answered.

On the day following, another and a larger relief-party came to their assistance; and on the 14th of June, seventy-two days after their departure from the *Alert*, the northern division arrived alongside their ship.

What a contrast to their start did the return afford! Then, on that bright April morning, all were in the highest spirits, cheerful and enthusiastic, looking forward with confidence to a comparatively successful issue to their undertaking—a fine, strong, and resolute band!

Alas! how different was the return! Out of that party of fifteen men, one had gone to his long home, eleven others were carried alongside the ship on sledges dragged by a party despatched to their relief, and only the remaining three were capable of dragging the sledge, themselves scarcely able to move one leg before the other. It was indeed a sad and terrible calamity with which they had been afflicted, totally unexpected, and unparalleled in the annals of Arctic sledging experiences.

The good ship *Alert* was now converted into a regular hospital, and might almost be said to be solely in charge of the medical authorities, for those who were not actually under treatment were

placed at the disposal of the doctor to act as nurses, cooks, or attendants. Unremitting were they in their duties and attentions, and it is entirely due to the patient and unceasing watchfulness of the medical staff that we owe the complete recovery of the sick.

Fresh provisions being an indispensable item towards the attainment of this object, shooting parties were organized amongst the officers for this purpose, and the whole country for a radius of many miles well scoured in search of game.

This service was carried out with such energy, that a fresh meat meal was issued daily to the sick.

Six musk oxen, many geese, a few hares, and some seals were obtained. Everything possessing life was shot, and consigned to the "pot." Nothing escaped our eager sportsmen, who had for their share all the foxes and owls that they succeeded in shooting, which they devoured with avidity and pronounced delicious.

Mustard-and-cress was raised in sufficient quantities on board to serve out periodically a small allowance to the sick. Like the hair on our faces it grew white and blanched, totally devoid of all green colouring. By the time the snow had disappeared from the valleys and sides of the hills, there were a sufficient number of convalescents on

the list who were able to go on shore to gather sorrel, often returning with large quantities.

Meanwhile active preparations were being made for the purpose of releasing the ship from her icy bondage.

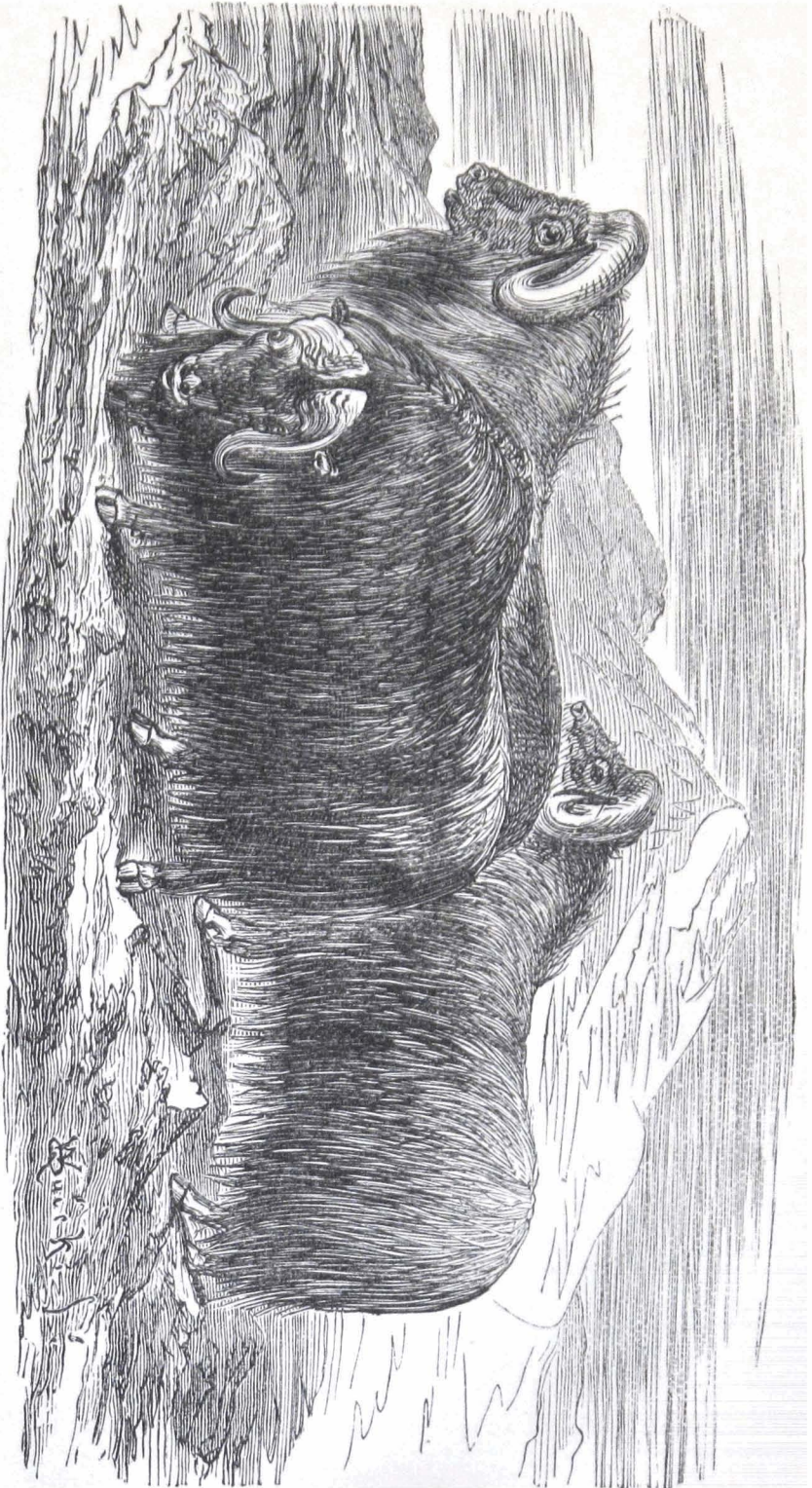
All the stores and provisions were re-embarked, instruments brought on board and carefully put away, boats hoisted up, the screw lowered, and the engines reported in good working order.

By means of powder we succeeded in blasting a passage from the position in which we had been imprisoned for eleven long months to a channel of water immediately outside our friendly floe-bergs.

Great was the excitement on board when on the morning of the 31st of July orders were given to raise steam with all despatch. A fresh south-westerly wind had blown the ice off the shore, leaving a clear channel of water extending as far as could be seen to the southward. By seven A.M. the ship was free and afloat, and at eight o'clock the colours were hoisted; and we succeeded without much difficulty in steaming clear of the prison that had so securely, and so long, held us in its icy fetters.

Who can describe the relief experienced by all on hearing again the long-silent throbbing of the engines, and feeling the ship in motion?

Musk Oxen.



No pang of regret was felt at leaving that barren sterile coast off which we had passed so many days, yet we could not but be grateful to the kind floe-bergs which had during that time protected us from the merciless ice.

Short-lived, however, was the feeling of delight and relief in being once more exposed to the vicissitudes of ice navigation. A few short hours demonstrated most clearly the capriciousness of our implacable enemy.

Ice of a very heavy description off Cape Union, for a time, completely obstructed further advance.

Excessive caution had to be exercised whilst situated amongst these ponderous floes ;

“ For ice mast-high came floating by,
As green as emerald.”

Patience, combined with perseverance, were essential virtues in order to insure a safe deliverance from our unwieldy foes.

A constant and vigilant watch had to be kept on the drifting pack, and the ship moved from time to time to avoid a “ nip.” We frequently observed a heavy floe coming into contact with the large grounded floe-bergs that lined the coast, forcing them over or crumbling them into small and shapeless fragments, clearly illustrating our own

fate, should we be so unfortunate as to be caught between the two.

The order, "Up screw and rudder!" was given and carried out several times every day. Preparations, as on the outward journey, were made for abandoning the ship, and everything was in readiness that could possibly be foreseen in the event of a catastrophe of any description.

It was remarkable, the cool and *nonchalant* way in which every one spoke of the loss of his home, and the prospect of being cast on the ice with little warning.

The *Discovery* being within some forty miles might account for the light manner in which such a calamity was regarded; but it was impossible to disguise the fact that the loss of our good ship would be a very serious, not to say disastrous, event.

On the 7th and 8th of August the ship was subjected to some very severe and heavy nips. On the latter day a large floe-berg, being driven into contact with the vessel, forced her on shore, lifting her stern bodily out of the water to the height of about five feet. The noise of the cracking beams and the groaning of the timbers were sounds that few who have heard them will ever forget. To those below, the crumbling of the pitch in the

deck-seams sounded like a shower of hail beating on the upper deck. Most fortunately, the floeberg was heavy, and therefore grounded before it had time to cause the destruction of the vessel.

Our position was by no means a pleasing one. The spirits of the desponding sank still lower. An unusual pressure from the pack, caused by spring tides or otherwise, must inevitably crush the ship. There was apparently no escape as, from our experience of the preceding year, we had cause to believe that when once the large floebergs grounded along the shore they remained immovable during the whole winter. The only course open to us, then, was to reduce the huge mass of ice by which we were imprisoned, so as to lighten it sufficiently to float and drift away at high tide.

This was no sooner resolved on than every working man in the ship, irrespective of rank or station, was busily engaged with pick and chisel in demolishing the obstruction. On the third day so much had been removed that, by the judicious explosion of a heavy charge of powder immediately alongside the berg, it floated away at high water and released the ship.

On the following evening we had the very great satisfaction of dropping anchor alongside our con-

sort in Discovery Bay, having been separated from her for nearly twelve months.

An interchange of visitors immediately took place, and the close and long friendship that existed between many was again renewed. Local news, for want of more important intelligence, was fully and freely discussed, and the routine of the winter and the proceedings of the sledge parties were topics of interesting and voluble conversation.

So packed and impenetrable was the ice that, although several unsuccessful attempts were made to push on, it was not until the 20th that anything like an advance could be made.

On that day, by dint of boring and charging, during which we received some heavy blows, we succeeded in forcing a passage through the ice in Lady Franklin Straits, and into a broad stream of water extending along the coast to the southward, in which the two ships made good progress.

On the day following, however, so uncertain is navigation in the icy seas, we were compelled to seek refuge from the pack inside a land-locked and apparently well-protected and secure harbour. How deceitful was its appearance of safety! Hardly an hour had elapsed from entering this sheltered retreat, before the *Alert* was severely nipped by a heavy floe and forced on shore. For

many hours she remained in a very critical position, as the tide receding left her completely high and dry, and listed over at an angle of 25° .

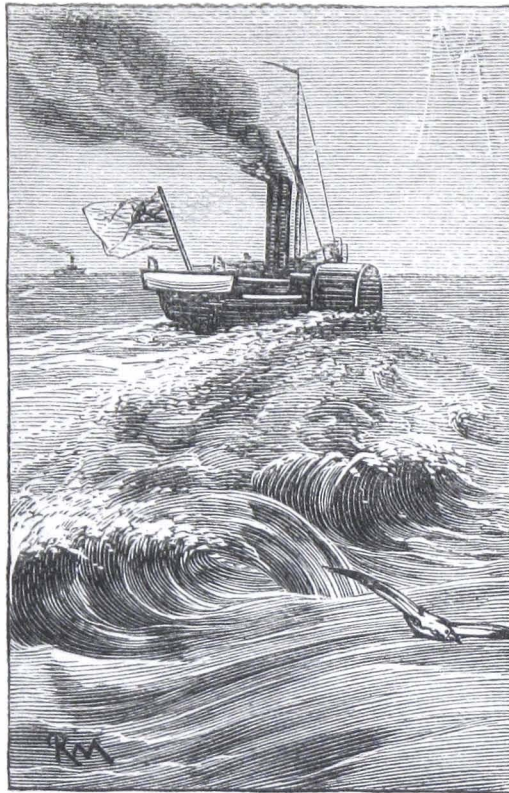
Strenuous efforts were at once made to lighten and float the ship, and with such good-will and hearty co-operation did all work, that we had the satisfaction of seeing our good ship afloat, and ready to proceed, in about fifteen hours from the time of the accident taking place.

From this time, until the 9th of September, we were engaged in a continual struggle with the ice—frequently detained for many hours, and rarely making more than a few hundred yards during the day. The fast forming ice reminded us unpleasantly of the near approach of winter, whilst the land had already assumed its wintry covering of snow. The newly-formed ice gluing or cementing the broken fragments of floes together, created such an impediment to our advance, that we were on several occasions compelled to relinquish all attempts of penetrating further, and with heavy hearts secure the ships until more favourable opportunities would occur.

It was with no small amount of satisfaction and thankfulness that we eventually emerged from the cold grim clutches that seemed only too anxious and ready to detain us for another winter in the

realms of the dreaded Ice-king, and to feel the ships rise and fall once more on the bosom of an undoubted ocean swell.

Experiencing a rough and tempestuous passage across the Atlantic, during which the two ships were separated, they arrived, on Sunday, the 29th of October, in the harbour of Queenstown, where they received the warm welcome and hearty hospitality for which that port is so justly celebrated.



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