

ber of altitudes are introduced; but these, I learn from Dr. Rink himself, are only eye-estimates, unless they are specified as having been obtained by barometric means, and I have found they are almost always greatly under-estimated.

We now come again to the English Admiralty Chart, sheet 1, which is the map used by our whalers. In this Dr. Rink's map has been copied outright. Even his altitudes, which on his own map are given in Danish feet, are transferred exactly to the English chart, our authorities apparently being unaware that the English foot is not equal to the Danish one. The details, too, are so much reduced, that the coast-line looks, as I have already said, as if it had been delineated with great minuteness, instead of looking, as it should do, like unexplored land.

There are therefore three maps in existence of North Greenland. The first (Graah's) is to be relied upon to a certain extent; the second (Rink's) is not always equally valuable, because it is not possible to separate in it that which is founded upon observation from that which is merely conjectural; whilst the third, notwithstanding its pretensions, is the least useful and reliable of all.—(*To be continued.*)

EXCURSIONS FROM COURMAYEUR, IN THE RANGE OF MONT BLANC. By T. S. KENNEDY. Read before the Alpine Club, December 16, 1872.

ON Saturday, June 29, Johann Fischer and I walked from Courmayeur to the Miage glacier, to see if we could find any route up Mont Blanc from the lower part of that glacier. The best point of view for this purpose would have been one of the Trélatête Aiguilles, but bad weather had prevented our going thither from the Trélatête pavilion, as well as from seeing anything during a walk to the top of the Glacier de la Frasse.

After spending the day in climbing past the Aiguille Grise, examining the Glacier du Dôme and frightening numerous chamois, we returned to Courmayeur and telegraphed to Val Tournanche for J. A. Carrel. Carrel arrived on Sunday evening; we engaged Julien Grange as a porter, and set out again on Monday up the Miage glacier.

When opposite to the ice-fall of its most southern tributary (called by Mr. Reilly the Glacier du Mont Blanc, but without a name in the French Ordnance Map) and almost exactly between the summits of Mont Blanc and of the Trélatête Aiguilles, we turned to the right hand and ascended the glacier

diagonally towards its northern bank. In about an hour we came to the rocks at the side and went straight up, spreading out our party to look for a convenient bivouac.

This was soon found, at a height of a few hundred feet above the ice, at the base of an upright rock, with water conveniently near, and at a distance of $4\frac{1}{2}$ easy hours from Courmayeur. We could not find any cave or overhanging rock for shelter. After a short rest Fischer went on to explore, and the rest of us built a small shelter wall and arranged sods of turf to lie on. Fischer came back after sunset with the news that he had gone as far as the upper basin of the glacier and had seen no reason why a greater height should not be attained.

Next morning we gave Grange a bottle of wine to comfort him on his way back with the luggage, fixed on our rope, and started at 3. Carrel led, and was so eager that he went very fast—too fast for my taste. We came to the snow on a small patch of glacier by 4 o'clock. The snow was soft and troublesome, and we waded knee-deep for an hour. Inclining slightly to the right, we got on harder névé lying at a high angle, and about 6 arrived on the small plateau attained by Fischer the previous evening.

Here the main mass of the mountain came into view. Before and below us lay the upper basin of the Glacier du Mont Blanc, perhaps a quarter of a mile across, sloping gently to the right to the summit of the ice-fall by which it plunges to the Miage glacier. On the left hand this basin is bounded by low broken rocks, which rise into a rugged aiguille close above where we were standing. On the opposite side of the basin rises the immense slope of Mont Broglia, almost bare of snow away to the right, but whitening as it sweeps round to the point opposite to us, and crowned with a line of séracs glittering against blue sky.

Now it had been our intention to ascend the rocky part of Mont Broglia, so as to gain its ridge above a notch or break, which is well seen from Mont Saxe and from many other points near Courmayeur, and to complete the ascent by that ridge. From our standpoint we saw at once that there would be little difficulty in doing this. But it was also clear that this course would be a roundabout one, and we decided to make for the slopes directly opposite, and to get past the séracs by keeping slightly to the left, where they seemed to run out. We could not see the upper part of the mountain, but, as it happened, a better line could hardly have been pointed for the Calotte.

We dropped down a hundred feet to the glacier basin, crossed it and its *schrund*, and at once commenced the ascent of steep

and rotten crags. We climbed up gullies and over little slopes and ridges, sometimes stopping to throw down masses of disintegrated and unsafe rock. About half the way had to be won with the axe, small frozen-in stones served as foothold for the remainder. Fischer led with much sagacity, and we sat down at intervals to measure progress by the appearance of the Trélatête Aiguilles. Gradually we found ourselves on a level with the séracs, though our course entirely avoided going through them, and we could see that they were merely small accumulations of névé on the brow of the descent. It would not be safe to mount directly beneath these, for the upper slopes are too steep to allow of much glacier clinging to them. We were nearing the head of a snowy spur on our left, and to surmount it was not easy, for its last 50 feet looked formidably steep. Fischer made us stand on the last jutting stones, while he cut a zigzag passage through the soft snow. We followed for a short distance to give him rope enough, and he pulled himself cleverly over the top. Then our passage was easy, and we walked up to some rocks and sat down to lunch. Now we could see something. Over the top of the Trélatête Aiguilles lay a fine distant peak—probably the Dauphiné Écrins. Between ourselves and Mont Broglia was a smooth, steep snow-slope, verging gradually into a large and exposed plateau supported by Mont Broglia and Mont Péteret. To the left and much below us lay the Dôme du Goûté, its ridge sweeping up grandly until we lost it behind some big rocks. Above us these rocks extended, concealing the head of Mont Blanc, and forming the western side of the Calotte. We saw that our ascent was secured, even if compelled to go round by the Bosses du Dromadaire. The wind had lulled, and we took a long and most enjoyable survey.

Carrel went on again, a large snow-wreath giving us easy access to the rocks. These were much frozen, and the axe was constantly necessary. I had a good opportunity of seeing Carrel's fine climbing, in which, however, he could not surpass Fischer. The rocks closed round us, became steeper and more icy, and we could see less and less of what was above us. At last, about 1 o'clock, we stepped on some soft snow and found ourselves on the ridge. Turning to the right hand, Fischer surmounted a small snow-mound with a crevasse at its base, and we were on the top.

A cold wind was blowing, mists were coming fast over the Dôme du Goûté and filling the hollows below, and we did not stay long. My men were unacquainted with the ground, and I had undertaken to find the way down. It was a rash pro-

mise. By the time we had run down the Calotte, mist and driving snow obscured everything. I made for the slope between the two Rochers Rouges, by which, seven years before, my ascent had been effected. A break in the mist showed us a steep slope with big crevasses, and Fischer declined to take that way.* We circled round the head of the lower Rochers Rouges in deep snow and much perplexity, and ascended again to the base of the Calotte, for I was quite unacquainted with the position of the Mur de la Côte. Then I felt how big Mont Blanc is and how unadvisable to trifle with him in bad weather. I proposed two alternatives to Fischer—to re-ascend half way up the Calotte and then to slide down quietly by the Ancien Passage; or to go back over it, and to descend by the Bosses du Dromadaire and the Dôme. But he promptly declined anything involving more ascent. We again went round the head of the Rochers Rouges, to try and find a passage down the rocks. In doing this we got to the Italian side, found out our error, and rushed tumultuously down the Mur de la Côte and the Corridor, until we were brought up by Fischer's broad back and the upper lip of a big schrund. Luckily he had caught a glimpse of it through the fog. It took us much time and trouble to pass this obstacle; then we got down on the Grand Plateau, passed an avalanche which had fallen from the Calotte, and became entangled in the broken glacier below. For half an hour we sat in the snow at the edge of a crevasse, and then a partial lightening of the mist gave a sufficient glimpse of things for us to move forward a few hundred yards. About 6 P.M. it got so thick that we sat down again in a very discontented state of mind, expecting to stay there all night. At last it occurred to me that we must be sufficiently near the Grands Mulets for the voice to be heard, and, to our delight, a shout answered ours with directions how to go. Then the mist lifted up, and at 7 we gained the Mulets, and found a party of gentlemen preparing to ascend Mont Blanc the next day. After a short halt we set off again, and arrived at Chamouni at 9:45.

Respecting this way of ascending Mont Blanc, I may say that there is no reason why, if the Courmayeur guides will build a hut at or near our bivouacking place, it should not be commonly used by travellers who have had some little previous experience. Of course the mountain is steep. A straight line drawn from the hut on the Aiguille du Goûté to the top would

* It seems that this short cut cannot now be used, as the ice has become more difficult than formerly.

show an angle of about $15\frac{1}{2}^{\circ}$, from the Grands Mulets about 23° , whilst from the side of the Miage glacier it would be about $36\frac{1}{2}^{\circ}$. Still there is no place that requires anything more in a traveller than steadiness. Nor is there any fear of avalanches if the proper route be taken, and that route is tolerably obvious. On the other hand, the mountain is very exposed to northern and easterly winds; there is not a particle of shelter on it; and it is too steep to allow a party of men to run back quickly, as they may do on the Chamouni side.

It is short compared with the long snow journey viâ the Aiguille du Midi, and easy compared with Messrs. Moore and Walker's route by the Brenva glacier, and it seems to me to be the natural way for the Courmayeur people to ascend their mountain. Had we not lingered on the way up, we might have been on the top two hours earlier.

Leaving Carrel to take charge of some friends at Chamouni, we returned by the Col du Géant to Courmayeur; ascending on the way to the base of the Dent du Géant. We found a small cairn there, erected the previous year by Mr. Whitwell and his guides the Laueners. From the base of the final tower, which is easy of access, the walls go up quite straight, and I think one might as well try to climb up the outside of a bottle as to ascend this tower. In fact, one cannot ascend even 50 feet. If it is to be climbed at all, the attempt must be made on the side facing towards the Aiguille du Plan.

A few days afterwards my friend Mr. J. A. G. Marshall joined me in the excursion up to the Aiguille de L'échaud—a walk which originated in a suggestion of Mr. Reilly's. This point does not seem to have been previously climbed, on account, no doubt, of its comparative lowness. Fischer was our guide, and we engaged a Courmayeur man of repute to help. Leaving Courmayeur on July 14th, about 4 o'clock (having waited an hour for our local guide), we walked up Val Ferret as far as the châteaux of Tréboutzie. Thence we turned to the left up a wilderness of stones, which come down from the flanks of the Grandes Jorasses. After an hour of these we came to the base of some small rocks which have been rubbed by the glacier when longer than it is at present. They were sufficiently steep to require care in climbing. Above came grass slopes, tenanted by a few sheep—which must, one would think, have been pulled up by a rope—and then we entered upon the ice.

A big rock divides this, the easterly, part of the glacier into two portions, of which the southern one comes from Mont

Gruetta, and the northern from the Aiguille de L'échaud and Petites Jorasses. All this cannot be seen from below, but the map had decided us to take the northern side, when our Courmayeur man told us that he had previously examined it, and that it would not be easily climbed. Consequently we bowed to his knowledge, and went the wrong way. Keeping at first to the left, to avoid a break in the glacier, down which séracs tumble, we came under the shadow of an unpleasant-looking ice-cliff, with some avalanche débris lying about its base. Fischer went on steadily, with remarks about trusting to his own judgment another time, and we presently waded up a curtain of deep snow, and stepped out of a small mist on to the ridge connecting Mont Gruetta with the aiguille of which we were in search. A couple of minor points rose out of the ridge, obstructing our road to the left, and we turned to pass over them.

This interesting moment was chosen by our Courmayeur friend to lie down on his stomach in the snow, and to announce that he meant to stay there. Mr. Marshall, who was making his first acquaintance with the Alpine guides, appeared somewhat astonished at this proceeding; but he took away the wine-bottle and followed us up the first point, leaving the unhappy man to his fate. After waiting a quarter of an hour the thought of being abandoned without the wine-bottle revived him sufficiently to get up and follow us, and to tie himself to the tail of our rope. It was the old story; the cause of all this was not so much the quantity of wine he had drunk the previous evening as the mixture of beer and *schnaps* which he had been so imprudent as to make.

One hour's climb sufficed to descend the little dip in the ridge, to ascend the rocks on the opposite side, and then to follow a most graceful snowy ridge to our desired aiguille. We got there at mid-day, having lost an hour by taking the wrong arm of the glacier.

The point of view, though low, is particularly fine. It lies in the heart of the mountains, and at the head of three distinct glaciers, all of which can be seen by merely turning the head. The views of the Grandes Jorasses, Aiguilles Verte and Triolet and Mont Dolent, were splendid, and we looked down upon the Petites Jorasses. After staying an hour to enjoy the place and to build a small cairn, we went down, turning almost immediately to the right hand from the ridge. This led us to some rocks at the head of the northerly arm of the glacier. There is no difficulty in descending these, and we found an easy way over the crevasse at their base. Then Fischer

scented out the way through the glacier with much skill, and we rounded the big rock to the place where we had gone wrong in the morning. After a little climbing in the rocks below, when Mr. Marshall was obliged to go last, so as let down our local guide by the rope, we returned to Courmayeur by 7 o'clock.

This is a pleasant little expedition for any one not inclined for the laborious ascent of the Grandes Jorasses, and it might be varied by ascending the nearer and lower part of the ridge called the Petites Jorasses.

A WOLF HUNT IN THE MARITIME ALPS. By the Rev. W. H. HAWKER. Read before the Alpine Club on May 7, 1872.

WHEN, at ten o'clock on the bright autumn morning of September 10, 1869, I stood on the top of Monte Viso, after the first fond gaze had naturally been cast at those old friends of the great Alps which at any distance, near or far, seem equally enchanting, and whose familiar forms required neither compass or chart to identify them, and after the less known peaks of Dauphiné, looking like a storm-tossed petrified sea, had claimed somewhat more care in order to make them out, I turned my face southwards with a thrill of joy and looked down with some feeling of pride, though none of disdain, upon the rugged but clearly-marked chain of the Maritime Alps. Of pride, though not disdain, for I had, during three seasons spent at Mentone, and varying in duration from the beginning of October to the end of June, been constantly exploring their recesses and scaling their crags, with the ever-increasing hope, whenever the mighty pinnacle on which I was now standing burst upon the view—as many and many a time it did—that some day I might complete my exploits in this district by achieving in summer what the winter snows forbade—the ascent of this noble mountain.

This, it is true, is rather beginning at the wrong end; but it is necessary, in order that I may give, in as few words as I can, some idea of the geography of the district to which I wish to introduce my readers.

On the ridge which extends to the S.W. from Monte Viso, there stands just beyond the Col de la Maddalena a mountain of pyramidal form named L'Enchastraye, or the Cima dei Quattro Vescovadi. This peak is remarkable, not for its height [9,747'], since it is surpassed by several peaks further