their mutual responsibilities are great; but the reward is in proportion to the effort.\*

## THE JUNGFRAU AND MÖNCH IN JANUARY.

By C. M. MURRAY...

WINTER climbing—in the Alps—is a branch of that most fascinating pastime which is, as yet, pursued by comparatively few mountaineers. Last winter, while at Grindelwald, I was fortunate enough to reach the summits of both the Jungfrau and the Mönch, and perhaps a brief account of our experiences may not be altogether without interest.

It will be quite unnecessary for me to give a detailed account of the route followed, as it will be known personally to many, and by description to many more. Fine weather is of primary importance in winter, as storms—which are trying enough in the summer—when combined with the great cold of winter would be almost beyond endurance. The weather during the early part of the winter had been unusually bad—thoroughly unsettled, in fact—and numerous heavy snowfalls had made it look as though any expedition would be out of the question.

However, about the middle of January a break came. The sky cleared, the wind dropped, and the glass began to rise.

\* The diary was briefly as follows:—

July 26, Pointe de la Réchasse.

" 28, Grande Casse.

29, Pointe de la Glière. 31, Col d'Aussois.

August 1, Col de l'Arpont to Bonneval.

2, Levanna.

,, 4, Aiguille Pers and Mont Iseran.

6, Mont Pourri. 8, Sassière.

,, 9, Col de Galise to Pont.

,, 11, Grivola.

, 13, Gran Paradis.

" 14, Charforon and Monciair.

" 15, Herbetet.

, 16, Courmayeur.

18, Dôme hut. 19, Mont Blanc.

, 21, Tour Noir.

,, 22, Aiguille d'Argentière.

I had been in daily consultation with my leading guide, Christian Jossi Sohn, and at this change in the conditions we decided upon making a start on January 17.

Jossi considered the weather promising, but the deep new-fallen snow an obstacle which we should be fortunate in overcoming. Having this in view, we provided ourselves with a pair of Swiss snow-shoes apiece. These are quite unlike the Canadian snow-shoe. They consist of an oval wooden frame, of such a size as to project about two or three inches beyond the sole of the boot. The hollow of the frame is filled by threading a stout cord from side to side across its length, so affording a platform upon which the foot is strapped. The advantage of this form of snow-shoe is that it is possible to use them upon the steepest snow-slopes.

We left the Bear Hotel at 2 A.M. on the morning of January 17, starting thus early as it was impossible with so much recent snow about to know how long it would take to reach the Bergli Hut. The morning was a perfect one. There was not a breath of wind nor was a cloud to be seen. The moon shone brilliantly, lighting the snow-smothered slopes with a clear soft light, so bright that we needed no lantern to guide our steps. Taking to our snow-shoes at the foot of the lower glacier, we followed the usual route up to the Eismeer. Here Jossi decided with my second guide. Peter Bernet, that the usual summer track up to the right of the Fiescher glacier was impracticable, owing to the depth of the snow. So we plodded steadily on across the foot of the Fiescher Glacier, and almost knee-deep notwithstanding the snow-shoes, reached the top of the Zäsenberghorn at 10 a.m. Then a long trudge across the head of the great icefall in the Fiescher glacier brought us, towards midday, to the foot of a steep slope. where the summer route meets the more circuitous one we had taken.

Here a short halt was called for lunch. My thermometer registered  $-2^{\circ}$  F., and as we were too low in the valley to get the sun the cold was intense.

Another 3 hrs., completed by a scramble up over the steep rocks below the hut, covered with loose snow and ice, saw us safely upon the platform of the hut. The hut contained a good deal of snow, which had to be cleared out before we could make ourselves comfortable for a rest and some coffee. Upon removing my boots I was surprised to find that, although I had not suffered much from cold, the spare room in the toes had become occupied by solid little blocks of ice.

Wood was far too precious to permit the use of more than

just sufficient to boil water for coffee and soup, so when the fire died down we buried ourselves beneath all the blankets

the hut provided and slept.

Next morning I turned out at 1 A.M., and was somewhat dismayed to find that the weather had lost its promising appearance of the day before. Suspicious-looking clouds were drifting across the moon, while every now and then an icy puff of wind swept down the valley. It was still very cold, and upon returning indoors I noted that our occupation of the hut had only raised its temperature to 15° F. Our boots were hard and stiff, and required thawing before they could be put on with any comfort. Before strapping on our snow-shoes we swathed our feet in strips of sacking, as an extra protection against the cold. This device proved an excellent help towards keeping our feet warm.

Breakfast over, we left the hut at about 2 A.M., and kept straight up towards the summit of the Bergli ridge. During this time the weather began to improve, and by the time we reached the crest the sky was quite clear and the views magnificent. Descending a short slope into the basin known as the Ewig Schnee Feld, we crossed it by a long gentle ascent (snow deep and soft) and gained the Ober Mönchjoch at about 6 A.M. From this point the Jungfrau for the first time came into view, away over the other side of a huge snow-field. Across this vast valley the going was very heavy and tedious, as the snow was even softer and more powdery than before. Towards daybreak the weather again assumed a threatening aspect. Drifting banks of cloud began to appear, and presently one of these settled upon the huge Mönch, now towering at our backs. Gradually it sank down as low as the Mönchjoch, over which we had come. Then the Jungfrau became shrouded in mist, and an icy wind sprang The sun rose, very red and angry, in heavy banks of cloud; in fact, so piercing was the cold and so threatening the clouds and fine snow which began to fall, that it looked as though we were doomed to fail in our object.

We were now in the steep valley leading to the Roththal Sattel, and to some extent sheltered from the full force of the wind. It was therefore decided to continue upwards to the 'Sattel,' as it would not be till this point was reached that the inclement conditions then prevailing would seriously impede our progress. Therefore, with caps pulled down, so that only our eyes were uncovered, we ploughed our way slowly onwards.

About  $1\frac{1}{2}$  hr. after sunrise, to our immense joy, the mist

showed signs of breaking before the increasing power of the sun. The wind gradually died down, and when, at about 9.30, we gained the back of the 'Sattel,' the sun came out bright and strong, and all traces of bad weather were rapidly dis-

appearing.

Snow-shoes were now discarded, and half an hour's stepcutting across the face of a steep slope of bare ice brought us to a sheltered sunny spot beneath some rocks. Here we ate some food and rested for a while. So cold was it that the wine almost refused to come out of the flask in which it was carried, being frozen to the consistency of porridge. Though the sun now shone bright in a cloudless sky—very pleasant after the cold in the valley below—it was far from warm enough to sit still for long. My thermometer, placed upon a rock full in the sunshine, registered 15° F.

It was not, therefore, long before we were once more on the move. Keeping to the rocks, we made steady progress upwards, finding that once more the old adage, 'It's an ill wind,' &c., had proved true. The strong wind during the smaller hours of the morning had blown away most of the recent snow, uncovering the more prominent rocky points, and so rendering our progress far more rapid and safe.

After clambering silently upwards for about an hour, Jossi -who was in front, and had just gained the top of a rather steep little gully, in which Bernet and I were wedged suddenly shouted, 'Achtung!' and dived under cover of an overhanging ledge. Bernet and I were not slow to follow suit. Then I heard a sort of humming, hissing noise, gradually growing louder and louder, until almost in a flash from the first alarm a mass of stones crashed by us, some of the smaller ones going over our heads. We kept quiet for a while, and then Jossi looked cautiously upwards, while Bernet and I scrambled up to where he was. Small stones kept falling at intervals, but no more big ones came. Jossi then took off the rope, and with great coolness proceeded to cut steps across a steep ice-slope about 20 yards wide, which we had to traverse in order to reach the last rocky arete leading to the top. Bernet and I kept a sharp look out, while Jossi chopped away as though there was not the least danger to be apprehended. Some small chips fell while he was at work. and I was much relieved when I saw him gain the shelter of the opposite ledges. Just as I started to cross the steps both Jossi and Bernet simultaneously yelled, 'Achtung!' Once more we dived like rabbits into their burrows, and some more large stones came down across the steps and over our heads.

Then came another lull, during which we hurried across to Jossi, and had just reached him when three or four fair-sized lumps of rock came humming down over the ice and swept over the steps behind us. We were now, however, well out of the line of fire, and without further adventure reached the summit at about 12 noon.

The views were superb. The keen frosty air was clear right to the horizon, and all the principal mountains in Switzerland seemed spread out close before us. We could see the Bernina group, Monte Rosa, the Dom, and Matterhorn, standing up clear in the distance. All the nearer mountains, of course, were clear in every detail, and it was then for the first time that I remembered that, curiously enough, upon that very same day—January 18—of the previous year Jossi and I had reached the top of the Eiger, close beside us.

Very loth were we to turn away from the glorious view

spread out around us.

The homeward journey to the hut was uneventful though very fatiguing. Upon reaching the Roththal Sattel our snowshoes once more came into play, as we found that it was hopeless even to walk down the steep slopes from the 'Sattel' without them, so soft and powdery was the snow. In fact—Jossi agreed with me—that but for the snow-shoes our attempt to cross those immense fields of soft snow must have proved quite hopeless. At 6.15 P.M., after sixteen hours' almost continuous walking in heavy snow, we reached the hut once more. I felt thoroughly tired, and after some coffee and soup turned in and slept pretty soundly.

When I awoke next morning at about 4 a.m. I felt quite fit, but about as dry as a clean sheet of blotting-paper. It took many copious draughts of coffee before I felt at all moist again. We left the hut at about 6 a.m., and our old tracks made the going to the Ober Mönchjoch far easier than we had found it the day before. Day was just beginning to dawn as we turned from the Mönchjoch to ascend the arète leading from it to the summit of the Mönch. It was very cold, and toes and fingers had to be carefully watched to prevent frost-bite, as we took it in turns to stand still while the third man cut steps. In fact, I often hacked away steadily, enlarging the steps, simply as an easy means of keeping warm.

Presently the sun rose clear and magnificent, and we welcomed him both for the wondrous beauty of varying colour he cast over the vast masses of snowy peaks, and for the grateful warmth he brought. It was a perfect day and one

I shall never forget. The three hours of patient step-cutting seemed to pass in a moment, so absorbing was the glorious view ever before us, till at about 11 A.M. the summit was reached.

Here lunch was produced. Jossi had taken the precaution of boiling the wine, after making the coffee for breakfast, and then wrapping the flask in some spare sweaters, so that now we enjoyed a fairly warm drink, compared to the chilly chips of ice of the day before.



THE JUNGFRAU FROM THE SUMMIT OF THE MÖNCH.

The views from the top were even better than those from the Jungfrau on the previous morning. All cloud had gone, and there was no wind to make the cold bite. So clear was it that with a glass I could see the people, like dots against the snow, wending their way up the Faulhorn and also walking about at the hotel on the top. It was about 3.30 when we got back, and as we did not know how long it would take us to get to Grindelwald we slept again at the hut; 5.30 the following morning saw us homeward bound. We came back in our old track, reaching Grindelwald at shortly after 10.15 A.M., thus taking under 5 hrs. to descend what it had taken us 13 hrs. to ascend.

VOL. XXI.-NO. CLX.