

for the whole day being thus 15½ hrs. and door-to-door time 18½ hrs.

In these climbs we were very lucky, especially in a dreadful season like the last (1908), in our weather, and in having chosen the good days. I think too the fact that the work had been almost entirely on the ridges, and with the occasional rock-traverses always facing E. and W., thus getting the sun, was very much in our favour. At any rate among other long dreamt-of good things the Zmutt arête of the Matterhorn, with its N. aspect, was utterly hopeless, as indeed it had been for some years previously.

However, having now finished the *climb* and got to the *weather*, it seems quite time to end my sermon; so *à propos*, or 'finally,' as our clerical friends would say, I will tell you a true little story showing what weird ideas the outer world has of the weather suitable for our glorious sport, and supposed to be liked by climbers. It was in the hunting-field, a perfect hurricane of cold wind blowing, blizzards of snow sweeping horizontally across the bare pastures, and a knot of half-frozen sportsmen shivering and sheltering for a few moments to leeward of a haystack on the bleak hillside. Up spake one of them, a farmer all untutored as to mountains: 'Well, there's only one of us here present as is a thoroughly enjoying of hisself to-day.' 'Who is that?' 'Why, Muster B.' (the present writer), 'of course; *he's* quite happy, and thinks he's a-scalping them blooming Pyrenees!'

THE KLEIN NÄSSIHORN AND THE WELLHORN.

By A. E. FIELD.

IN August 1908. Mr. R. W. Broadrick and myself were climbing in the Bernese Oberland with two Chamonix guides, our leading man being Alphonse Simond. Both were quite unacquainted with the district and anxious to learn what they could of it.

We determined to begin with the Schreckhorn and started off one afternoon for the Schwarzegg Hut. While we were getting wood at the Bäregg the clouds began to gather, and not long afterwards heavy rain forced us to seek shelter in an empty cow-chalet, where we spent nearly two hours. We squatted in the manger till our backs ached, and then we took up a position on the floor, which was covered with a thin layer of ancient hay full of various crawling things. Finally, as the rain showed no signs of abating, we beat a retreat to

Grindelwald, where we arrived in a rather damp condition. The next day was fine, and so we started off again, picked up the wood we had left at the Bäregg on our way down, and went up to the Schwarzegg Hut, where we spent two nights. On the first day we climbed the Schreckhorn; when we reached the foot of the great couloir we climbed up the rocks on the left, looking up, but in the descent we came straight down the snow, which we found in excellent condition, and got back to the hut at two o'clock.

The next day we started off at 4.50 A.M., and ascended the point marked 3,686 m. on the ridge between the Schreckhorn and the Little Schreckhorn. This peak seems not to have been climbed previously, and with the approval of Mr. Coolidge I have named it the Klein Nässihorn. We roped on the Nässi Firn at 6.10, made for the point marked 3,295 m., and had an interesting scramble up the rock arête which leads thence to the summit of our peak, which we reached at 9.30. It was a splendid day, and we had an excellent view in all directions; the N.W. arête of the Schreckhorn was seen to advantage, and we began to regret that we had not attempted its descent on the preceding day.

We descended the main arête running to the Little Schreckhorn for some distance till it became much broken up into gendarmes. We then traversed across the face on the side overlooking the Nässi Firn, regained the ridge lower down after some interesting climbing, and followed it down some steep snow to the col marked 3,420 m., just S.E. of the Little Schreckhorn. Our first idea was to make our way down to the Gleckstein Hut, but a rather steep ice slope just below us would have necessitated two or three hours of step-cutting. We chose the easier side, left the col at 12.45 P.M., and descended easy snow slopes to the Nässi Firn. Here we had one moment of excitement when a sérac above us gave a little shiver and projected a few drops of water across our path. However it stood firm as we ran across, and at 1.30 we unroped on the moraine and halted for nearly an hour. Twenty minutes down pleasant green slopes brought us to the Schwarzegg path, about half an hour below the hut. On our way we passed an old bivouac place, which we took to be the Kastenstein of which we had read in Alpine literature. We reached Grindelwald at 5.15 P.M., and spent the next day there in splendid weather.

The following morning we walked over the Great Scheidegg to Rosenlauri, where we lunched and got provisions. Here we made some enquiries about the Wellhorn, and were

informed that we ought to sleep at some cattle alp about two hours distant. Our informant seemed, however, to know absolutely nothing about the mountain, and we disregarded his suggestions and went off to the Dossen Hut, which I found had been enlarged since my visit five years before.

We had had some idea of trying to make a way up the Wellhorn by the long ridge known as the Welli Grat. We observed this ridge carefully on our way up to the hut, but the higher we rose the longer and more slabby appeared the ridge, which is seen much foreshortened from below. We could not make out a practicable route, and therefore gave up our idea. While turning over the leaves of the book in the hut we came across a very useful sketch, made by a Swiss climber, of the ordinary route up the Wellhorn by the E. arête.

We left the hut at 2.15 A.M. next morning in bright moonlight, and half an hour brought us to the top of the couloir by which the ordinary Wetterhorn route from the Dossen Hut descends to the upper snows of the Rosenlauri Glacier. The snow was in splendid order, and the walk across the glacier most enjoyable in the bright moonlight. At 3.30 we roped at the foot of the rocks, traversed across some slabs which were very wet in places, and reached the E. arête. We found this easy and were able to advance straight up it to the summit of the Wellhorn (10,485 ft.), which was reached at 4.44. Our situation had all the charms of novelty, for this was the first time either of us had been on the top of a peak before sunrise.

The air was still rather cool, and after twenty minutes we started down the S. arête, which was very easy going. This was soon quitted and a divergence made to our right down a long scree couloir. The scree was very loose and we slithered down it just as if we had been making our way down Hell Gate on Great Gable, of which this couloir strongly reminded us. We followed it down for a long way till a climb down a few pitches at its foot brought us out on to the W. face of the mountain. This face is pretty steep and the rocks rather rotten, so that much care was necessary and frequent traverses had to be made. Some of these traverses were not too easy, for the rock was slippery and there was but little handhold. This face ended in a precipice about 200 ft. high, running down to the snow below, and some time was lost in finding a way down.

We climbed down in about four different places till we found ourselves on each occasion on the brink of an im-

practicable cliff, and had to traverse across the face in search of another route. It really seemed for a time as if we should after all have to climb up to the summit again and descend by our line of ascent. However perseverance was finally rewarded, for we caught sight of a couloir to the south which obviously afforded an easy path to the snow below. The problem was how to reach this couloir; must we climb up the face for some 500 feet in order to traverse into it, or could we find a way from where we were? Simond unroped and prospected, only to announce on his return that there was no chance there. We then climbed up for a few minutes, and he again went off to explore, with the result that he found a chimney which he said we could manage with the help of the 'corde supplémentaire' which we had with us.

We found this spare rope very useful on several occasions, notably a few days later in the descent of the north face of the Aletschhorn, where we were obliged to come down some very bad snow mixed with ice. Our second man now climbed down the chimney, and at the point where it terminated on the face he hammered away vigorously with his axe till he detached a flake of rock, the removal of which left a shallow groove round which our spare rope was looped. We had already unroped, and now each of us came down in turn, steadied by the full length of our 100-foot rope. The cliff overhung for about seven or eight feet at one point, and here we dangled free. The doubled rope was held carefully below as Simond descended last, and we were all soon reunited in the couloir. Its descent was easy, and we soon reached the little bergschrund at its base, which gave us no trouble, and at 8 A.M. we found ourselves on the snow.

Having thus made the first traverse of the Wellhorn from the Rosenlauri Glacier to the Schwarzwald Firn, we ascended the snow slopes of the latter, which were still in shadow and afforded excellent going. We kicked steps steadily upwards, keeping fairly close to the foot of the Wellhorn rocks, till at 8.40 we got into the sun and soon found the snow getting softer and softer. We struck the ordinary Wetterhorn route from the Dossen Hut, and toiled along the snowfields till we reached the Wettersattel at 10.12 A.M. We left the sacks there, ascended the Wetterhorn in 45 minutes, came back to the Sattel, and went down to the Gleckstein Hut. We arrived at 1.40 P.M., and spent nearly two hours there with a large party of peasants who were apparently out for a picnic, and then descended to Grindelwald, which we reached at 5 P.M.

In the new edition of Moore's 'Alps in 1864,' p. 367, I



Photo by C. W. Nettleton, Esq

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THE WELLHORN FROM NEAR THE WETTERSATTEL.

find the following mention of the west face of the Wellhorn: 'In front of us rose the singularly fine peak of the Wellhorn, which is, I think, one of the few summits of the Alps that are totally inaccessible. I never saw rocks so perfectly and hopelessly smooth, and it would be totally impossible for any human being to find hold for hand or foot on them. I have, indeed, seen nothing at all like them in any other part of the Alps.'

A footnote adds, 'The Wellhorn was ascended by Herr von Fellenberg in 1866.' Professor Kennedy says in a further note that the party 'climbed the mountain by its eastern ridge, which was found to be "good going" once the difficulties of reaching it had been surmounted. The actual face referred to by Moore has not, of course, been climbed.'

This last sentence will, I trust, be regarded as sufficient justification for my having written this account of the first passage of the west face of the Wellhorn.

ON MOUNTAINS AND MANKIND.

An Address delivered to the British Association at Cambridge.

By DOUGLAS W. FRESHFIELD,
*President of the Geographical Section.**

WE have all of us seen hills, or what we call hills, from the monstrous protuberances of the Andes and the Himalaya to such puny pimples as lie about the edges of the Cambridge fens. Next to a waterfall, the first natural object (according to my own experience) to impress itself on a child's mind is a hill, some spot from which he can enlarge his horizon. Hills, and still more mountains, attract the human imagination and curiosity. The child soon asks, 'Tell me, how were mountains made?' a question, easier to ask than to answer, which occupied the lifetime of the father of mountain science, De Saussure. But there are mountains and mountains. Of all natural objects the most impressive is a vast snowy peak rising as a white island above the waves of green hills—a fragment of the arctic world left behind to commemorate its past predominance—and bearing on its broad shoulders a garland of the Alpine flora that has been destroyed on the lower ground by the rising tide of heat and drought that succeeded the last glacial epoch. Midsummer

* The preliminary portion of Mr. Freshfield's address, dealing with general geographical progress, is omitted.