

"The most interesting expedition of the season was in February, when Dr. Teichelmann, Guide Graham, and myself crossed the Alps to the western side by a new pass between the Peaks of Haast and Haidinger, and which the doctor claims a first-climber's privilege in naming Pioneer Pass. Camping at Hochstetter Bivouac we were forced back to Ball Hut by stress of weather, but three days later renewed the attack. This time we were more fortunate, but the snow was in bad order for climbing, and we spent the day photographing on the grand plateau. Leaving at break of day we crossed over Glacier Dome, 5,500 ft., and descended to the plateau; there rejoined the Haast Ridge at a point higher up (8,000 ft.), and followed the jagged *arête* along until above the badly broken ice of the Haast Glacier. Then a long traverse to the head basin of the Haast; here it was a heavy tramp in soft snow to the foot of the final 500 ft., and to the pass itself. A wide steep *bergschrand* barred the way except at the extreme right, and this was only 10 ft. wide at the actual crossing-point. We fought our way breast-high in light crusted drift snow lying at a sharp angle; although the day was warm our hands began to stick to the steel on the axe-heads. After a painful effort I got level with the top and drove in the axe to the head about 2 ft. back. On putting on a little pressure the whole lip came away and threw me back, but I quickly recovered, and finally, with the assistance of two ice-axes and standing on the doctor's shoulders, managed to get over and anchor; the others then came up in safety. This was midday and in glorious weather. The view was magnificent. Looking east we saw the great glacier-system and the barren rugged hills of Canterbury, while to the west were the immense snowfields of the Fox Glacier, then lower the luxuriantly bushclad hills and valleys trending to the Tasman Sea.

"The afternoon was extremely hot as we plodded down through soft heavy snow, working among *séracs* and riding *névé*-ridges too sharp to walk over, till we finally reached Chancellor Ridge. Here we met the Rev. Mr. Newton, who was waiting to climb with us, and had made a high bivouac, and lower down a comfortable base camp near Victoria Stream. Here we stayed for the night. The whole trip from Haast Ridge was, I think, the most interesting I have ever made in the course of a varied mountain life. It would need the pen of a writing climber and not that of a climbing writer to do it anything like justice. We had a heavy day of eighteen hours, so next morning took a much-needed rest, and in the afternoon returned to the high bivouac, and made ready for the climb next day. On the following morning we started before daylight, but the weather turned out foggy and drizzly, and we had to content ourselves with making the first ascent of Pioneer Peak, in the centre of Fox Glacier basin. On the ridge we found a seam of perfect crystallized quartz. Crossing over the peak we made a round trip back to Chancellor Ridge, and next morning struck camp and continued down to Fox Glacier Hut, and then on to the Franz Josef. Here Graham and I left our party and returned to the Hermitage by a spur north of and through the basin of the Franz Josef, over Graham Saddle, and down the Kron-Prinz Rudolph Glacier. The time occupied on the return journey was two days.

"Some time later Captain Scott and Mr. Ferrar (geologist), of the Antarctic exploring-ship 'Discovery,' paid a visit to the mountains. After their South Pole experiences they were much interested in the thermal faces and the accumulation of moraines found on the eastern side of the Alps. Mr. Ferrar was kind enough to furnish some remarks comparing the glaciers of Mount Cook and the South Pole, which I attach.

"Although the season was relatively good and the mountains exceptionally free from snow, the highest flood yet recorded occurred in the rivers in February. The Hooker River rose about 17 ft. above normal level, and threw the water over the suspension bridge, without, however, doing any damage. The cage at the point of the Mount Cook spur still stands, but is on its last legs; any flood may carry it away beyond hope of repair. The cable is at its limit, and is 306 ft. from post to post.

"Nothing has been done towards completing the track around Mount Cook spur undertaken by the Roads Department three years ago. This work is an urgent necessity, as in the event of the river rising and affecting the cage, returning parties from the Tasman are practically blocked. The track only needs four bracket bridges erected to make it serviceable. The other glacier tracks are in fair order. The Ball Hut track is being steadily improved, fine shingle being carried in stretchers and laid on the rough moraine pieces. The Tasman Huts are well equipped and give unanimous satisfaction. A convenience was erected at the Malte Brun, and timber is now ready to put a floor in the main room, 12 ft. by 12 ft., with a concrete hearth. Spouting has been erected at both huts to keep a permanent supply of rain-water—two casks at each place.

"Since the Department reserved the land in the vicinity of the glaciers no trespass or fires have occurred, and the general growth of the alpine plants, &c., already bears evidence to the wisdom of the action."

The Mount Cook Glaciers: A Comparison.

"To the Chief Guide.

"SIR,—

"The Hermitage, Mount Cook, 18th April, 1904.

"My object in visiting the glaciers of Mount Cook and the vicinity was not so much to see the scenery as to make a comparison between the glaciers and the work they have done in the past, and the ice phenomena and glaciers of the Antarctic (South Victoria Land).

"I was much impressed by the quantities of material carried down by the glaciers, especially the Tasman and Müller, for in this respect they are unique, and will go far in explaining the vast quantities of rock-*débris* which cover the greater part of the British Isles. The Antarctic glaciers, on the other hand, are remarkably free from morainic material, though they give evidence of once having been greater transporting agents than they are at present; but even then the old moraines met with on the slopes of Mount Erebus are minute as compared with those on the mountain-side above Glentanner Station and elsewhere.

"The ice of the Mount Cook region has certain resemblances to the ice of the mountains of South Victoria Land; but the differences are easily understood when it is known that the tempera-