

MOUNTAINEERING IN THE ANTARCTIC

By A. R. C. BUTSON

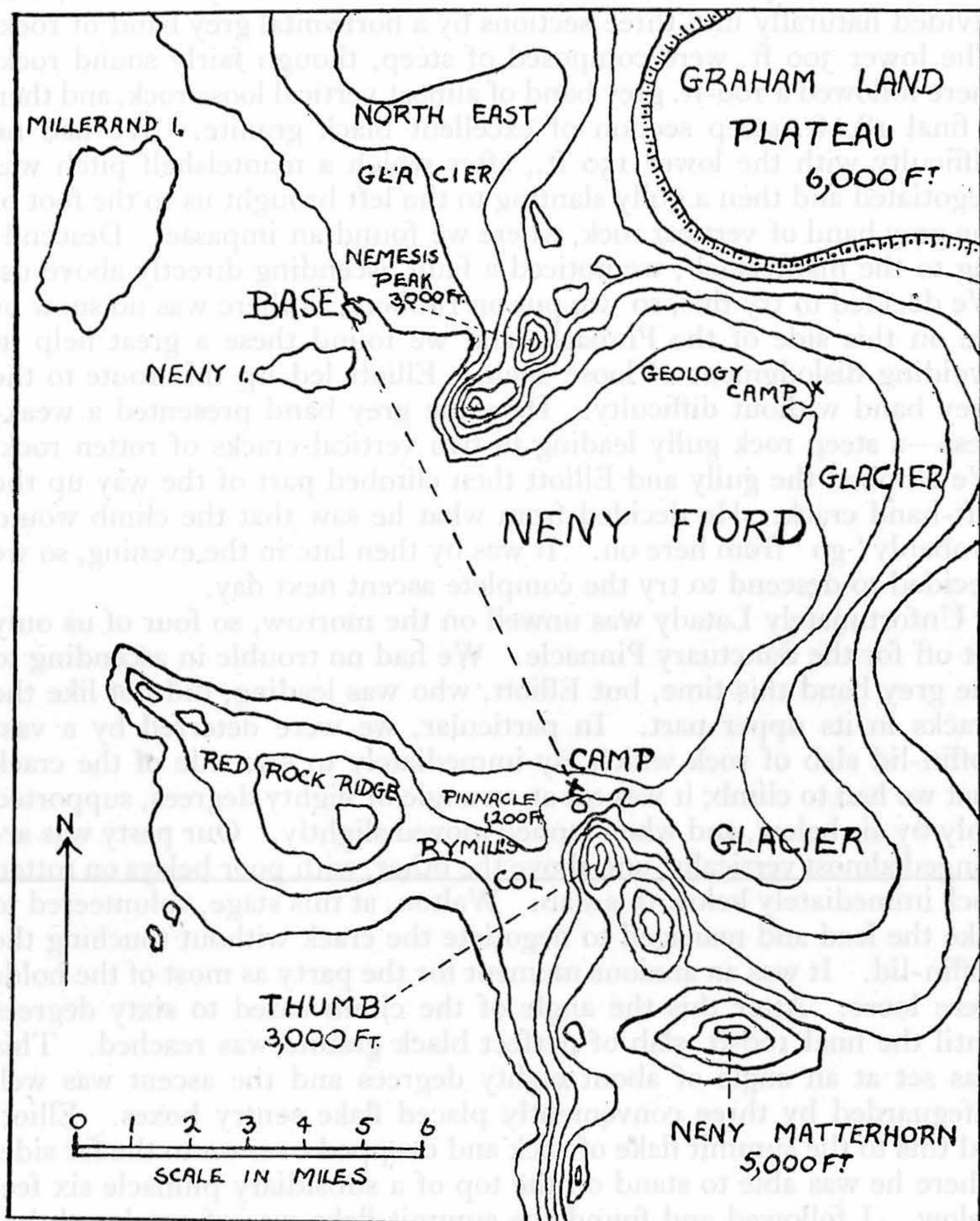
OPPORTUNITIES for mountaineering during an exploratory expedition to the Antarctic are not always forthcoming. The main purpose of expeditions to polar regions is usually topographical survey and scientific work, which includes geological, physical, meteorological and biological investigations, and such a programme leaves little time free for mountaineering. Mountaineering parties should preferably number at least three, and good mountaineering peaks are not always readily accessible. It was therefore fortunate that some of us, while engaged with the Falkland Islands Dependencies Survey of the Colonial Office, had an opportunity to do some mountaineering in the area of Marguerite Bay, Graham Land. Graham Land is a mountainous peninsula of the Antarctic that projects 1,000 miles northwards towards South America, and is composed of a narrow plateau, 4,000 to 8,000 ft. high, from which coastal mountains drop to the sea on either side. Some of the mountains in this part of the Antarctic rise to nearly 13,000 ft.

On the outward journey several of us had a month to wait at Port Stanley in the Falkland Islands. We found that the low, rocky mountains within twenty miles of Port Stanley offered good prospects for rock climbing, and one in particular, Mount Low, which rises to 1,000 ft. above Sparrow Cove, provided a dozen first-rate rock climbs. Each climb was about 250 ft. in length, of 'very difficult' to 'severe' standard, on almost perfect rock.

During the year that I was stationed at Marguerite Bay, a private American expedition came to the locality and settled two hundred yards away from the British base. E. W. K. Walton and myself, who were both keen on climbing, soon found that there were kindred spirits among the Americans, in particular W. R. Latady, an ex-president of the Harvard University Mountaineering Club, and R. Dodson, an ex-secretary of the same club.

About midwinter, a party of six of us attempted to climb a nearby mountain, subsequently named Nemesis Peak, which rises to 3,000 ft. from the sea-ice. We set off by moonlight in the morning with dog-sledges across the sea-ice to the foot of the mountain. The party was delayed three-quarters of the way up by a 300-ft. gully with loose rock walls, only to find on surmounting this, that we were faced with an unclimable vertical rock wall only a few hundred feet from the summit. What little daylight there had been was gone by then, so we decided to retreat by descending with crampons a steep 2,000-ft. ice-slope in the dark to a glacier below us. There was considerable anxiety at the base, and as a result further mountaineering exploits were discouraged until the sledging programme was completed.

Six months passed, and the number of mountaineers was increased by F. K. Elliott, who had sledged 550 miles from Hope Bay, the northern sledging base of the Falkland Islands Dependencies Survey. On January 15, 1948, the two Americans already mentioned, Walton, Elliott and myself left the base huts with dog teams and loaded sledges



NENY FIORD, GRAHAM LAND.

for a fortnight's mountaineering. We travelled across the sea-ice of a sea inlet called Neny Fiord, and set up camp ten miles from the bases on a rocky beach at the foot of a fine group of mountains. The geological structure of these mountains is igneous rock, mainly granite and schist. At that time of the year, in summer, the steep rock faces had

virtually no snow on them, though the inevitable weathering accounted for the general rotten character of the rock that we found while climbing. There is no soil or vegetation.

The next day we set off up the 700 ft. of scree behind the camp to the foot of an amazing pinnacle which towered 1,200 ft. above the sea-ice. This pinnacle, which we named Sanctuary Pinnacle, was divided naturally into three sections by a horizontal grey band of rock. The lower 300 ft. were composed of steep, though fairly sound rock, there followed a 100-ft. grey band of almost vertical loose rock, and then a final 180-ft. steep section of excellent black granite. We had no difficulty with the lower 150 ft., after which a mantelshelf pitch was negotiated and then a gully slanting to the left brought us to the foot of the grey band of vertical rock, where we found an impasse. Descending to the mantelshelf, we noticed a fault ascending directly above us. We decided to try this, so we put on rubbers, as there was no snow or ice on this side of the Pinnacle, and we found these a great help in avoiding dislodgment of loose shale. Elliott led up this route to the grey band without difficulty. Here the grey band presented a weakness—a steep rock gully leading to two vertical cracks of rotten rock. We climbed the gully and Elliott then climbed part of the way up the left-hand crack. He decided from what he saw that the climb would probably 'go' from here on. It was by then late in the evening, so we decided to descend to try the complete ascent next day.

Unfortunately Latady was unwell on the morrow, so four of us only set off for the Sanctuary Pinnacle. We had no trouble in ascending to the grey band this time, but Elliott, who was leading, did not like the cracks in its upper part. In particular, we were deterred by a vast coffin-lid slab of rock which lay immediately to one side of the crack that we had to climb; it was set at an angle of eighty degrees, supported only by air below, and when tapped moved slightly. Our party was arranged almost vertically, one above the other, with poor belays on rotten rock immediately below this slab. Walton, at this stage, volunteered to take the lead and managed to negotiate the crack without touching the coffin-lid. It was an anxious moment for the party as most of the holds were loose. After this the angle of the climb eased to sixty degrees until the final 100-ft. slab of perfect black granite was reached. This was set at an angle of about eighty degrees and the ascent was well safeguarded by three conveniently placed flake sentry boxes. Elliott led this to the summit flake of rock and dropped over on to the far side, where he was able to stand on the top of a subsidiary pinnacle six feet below. I followed and found the summit flake was of good rock but slightly loose, with an edge so sharp that it cut one's fingers. On the far side, the Pinnacle appeared to drop vertically, or even to overhang, and on putting one's nose to the edge of the flake one could see the tents, over 1,000 ft. below, with both eyes simultaneously, rather after the manner of holding a sheet of paper vertically between the eyes. I found Elliott perched on the top of the subsidiary pinnacle, an area about the size of a matchbox. For the first time in my life I felt slightly

queasy with the exposure. There was a marked sense of fresh air in all directions, not least directly below me. I descended, to wedge myself between the two pinnacles for three-quarters of an hour, while Walton and Dodson ascended to the summit flake and then descended. I found diversion from the general sense of airiness by watching the expression of triumph on my colleagues' faces rapidly change to one of horror, as they peered over the flake at the drop below them. We drove a piton into the summit flake to mark the ascent and descended without mishap, roping down 100 ft. of the grey band. We turned into our sleeping bags that night well content. We had been fortunate in having first-rate weather for the climb, with the sun on us most of the time, and temperatures little below freezing.

Just beside our camp, below the Pinnacle, there was a thaw-pool formed in the snow. We found it delightful to be able to use this as a source of cooking and washing water. Usually life in the snow necessitates the monotonous daily task of fetching snow or ice to melt for cooking and the rare luxury of washing. Our camp was placed a short distance above the sea-ice at the foot of a shale slope. At the junction of the sea-ice with the land itself was the usual tide-crack, and here it was very broken with gaps up to 5 ft. wide, which gave us a good deal of fun when negotiating it on ski with a dog team. On one occasion, when Walton's team ran amok on sighting a seal, his skis caught under the ice on the far side of the crack, providing everyone else with much amusement. A long lead, or crack in the sea-ice, stretched out from the tide-crack into the fiord, and beside this lead we often found a seal lying. Any seals conveniently near the camp we killed to give the dogs a good feed of fresh seal steak. We ourselves fed on an excellent mixture of British sledging rations and U.S. Army 'E' rations. With all these amenities ready to hand we felt that we were in an ideal base camp.

Bad weather followed our ascent of Sanctuary Pinnacle for a day or two, after which four of us set off for the mountain which rose behind the Pinnacle to about 3,000 ft. which we named the 'Thumb.' We attacked it from a snow-slope leading to within 800 ft. of the summit from the side furthest from our tents. A conveniently placed bergschründ provided a good stance for safeguarding the move from the snow on to the rock. The rock provided a series of good pitches in its lower part, reminding me of the climbing on any one of the north face climbs on Ben Nevis. There was a fair amount of loose rock, though no more than we had now come to expect. After about 400 ft. of climbing we found that the only feasible route lay up a thin crack set at a steep angle. There were no obvious belays for 100 ft. of the crack, and rubbers were the order of the day. We could not make out any route above this crack leading to the summit, so we reluctantly decided to retreat, as the sky was heavily overcast and the upper parts of the mountain appeared to present climbing of increasing severity. In descending, we rappelled down 50 ft. of overhanging rotten rock and finally enjoyed a good glissade down the snow slopes.

The next day Walton and Latady took the dog team out for a run on the sea-ice among some rough blocks of ice, while Elliott and I pottered about exploring the possibilities of rock-climbing routes on Sanctuary Pinnacle and on a nearby crag that we called Pinnacled Ridge.

That evening, in camp, the weather was perfect, so we decided to set off at once on the long ascent of the largest mountain in the neighbourhood that we had contemplated climbing—the 5,000 ft. high Neny Matterhorn. At this time of the year, during the warmest hours of the day much thawing was taking place and the snow on the steeper slopes was prone to avalanche. As this was to be a long snow and ice climb we set out an hour before midnight on a perfect evening, with the low sun casting a rosy tinge on the surrounding snowbound mountains and a hard frost giving a marked nip to the air. We started off on ski and travelled for a mile on the sea-ice before we left it to ascend, with the aid of the skins, a low lying col (Rymill's Col, 800 ft.) which joins Red Rock Ridge with the mainland. Roping up, we then ascended gently up a glacier behind the Thumb for a further 800 feet and left our skis on a rocky ridge. We proceeded on foot more steeply up the glacier, passing some vast crevasses, partly bridged and filled in by snow drift, until we reached a saddle at 3,000 ft. From here the angle of the ascent steepened to about 45 degrees and we soon put on our crampons, finding a convenient narrow crevasse on which to sit while we altered our footgear. We had underfoot 12 ins. of soft, powdery snow with hard ice underneath. Latady, with his fine snow and ice technique, led and found it necessary to cut steps in the green ice when the angle had steepened to 60 degrees. We kept to a snow arête, with a cornice on our right. At 6 A.M. we found ourselves on a little platform below a 20 ft. vertical ice wall, festooned with icicles. This appeared to be the upper wall of a drift-filled bergschrund situated a few hundred feet below the summit of our mountain. We had been climbing in the shadow and were feeling bitterly cold. The temperature must have been about -15° F. We were compelled to attempt either a direct ascent of the vertical ice wall, or a long traverse to the left, which would entail much step-cutting, in order to turn the obstacle; both alternatives would involve several hours of relative inactivity for all except the leader and we were already too cold to welcome the prospect. In addition, by the time we should have been ready to descend, the heat of the sun would have begun to loosen the snow on the steeper slopes. Unfortunately, while climbing, we had to use leather boots, which, unless immensely roomy, are too cold at low temperatures and, in addition, we had ascended the initial 4,000 feet rapidly so that I, for one, had sweated profusely. A subsequent period of relative inactivity, when perspiration tends to freeze, has a marked chilling effect. Again we were forced to retreat, but not before we had absorbed the scintillating panorama that stretched before us in the early morning sun.

Looking out across the sea-ice that filled Marguerite Bay, we could see, 100 miles away, the 8,000 ft. mountains of unexplored Alexander the First Island appearing almost within a hand's throw, while behind



VIEW NEAR SUMMIT OF NENY MATTERHORN, LOOKING SOUTH TOWARDS ALEXANDER THE FIRST ISLAND. MOUNTAIN IN CENTRE IS THE BLACK THUMB (not mentioned in text of article).



↑
NENY MATTERHORN
5,000 FT.

↑
THUMB
3,000 FT.

↑
SANCTUARY
PINNACLE
1,200 FT.

FROM THE SEA ICE OF NENY FIORD.

[To face p. 202.]

us the unnamed coastal mountains and the 6,000 ft. high Graham Land Plateau, stretched to the north and to the south. It was one of those ecstatic moments cherished as a gem in the memory.

After we had descended the upper steep portion of the climb we enjoyed a fine glissade down the ridge to the shoulder, where we were able to get into the sun's welcome warmth. After picking up the skis, we had a good run down to the camp, which we reached about noon. The midnight sun, even though it was hidden from us by the mountains, and the reliable January weather, had ensured good conditions for an Alpine climb.

The next day our party split, as the Americans had to do some geological work at the head of Neny Fiord. Walton went with them and they subsequently enjoyed a fine climb in the early morning up the 6,000 ft. escarpment on to the Graham Land Plateau. They climbed the first 2,000 feet on skis with skins, and then changed to crampons. They found a route on to the actual plateau summit where the cornice had broken away and a snow-drift had formed a convenient ramp. The view that they had from the edge of the plateau was magnificent. In descending they were able to enjoy 2,000 feet of glissading before reaching their skis for a perfect ski run in powder snow down to their camp.

In the meantime, Elliott and I remained at the camp below the Pinnacle. We had one day's excellent rock climbing on Pinnacled Ridge, the rock ridge leading down from the Thumb. This ridge rose by a series of gendarmes to twin spires, at about 800 ft. above the sea-ice. We traversed almost the whole of the ridge and were turned back by the final crack leading to the summit. To gain the crack we had to traverse an exposed wall on minute toe holds, some of which broke away as I crossed it. The crack itself overhung slightly, though Elliott maintained that it 'eased to vertical' in parts. The rock was apt to crumble, and though Elliott climbed about 40 feet up the crack, a further 100 feet remained and our fingers were getting cold, as we were by then in the shade, so we rappelled off the rock face. It was necessary to do this as the rock was very sheer and insecure.

The next day Walton returned and was persuaded to lead up a wet, icy and rotten vertical chimney for about 100 feet, which led up to the twin spires from a different approach. This he did most commendably, though his rope dislodged a stone on to my head, momentarily concussing me. Fortunately, I was securely belayed half way up the chimney. The spires themselves proved unclimbable. In our wanderings on this side of the crag we stumbled across a Snowy Petrel's nest with a fledgling enthroned. He showed his resentment of our intrusion by spitting at us an undigested prawn, two inches long, from quite a distance.

Having by now worked out most of the possible routes on the Pinnacled Ridge, we decided not to molest it further, and we attempted another route on the Thumb the following day. We commenced this climb immediately above the Pinnacled Ridge, from which side the



SANCTUARY PINNACLE AND THE CAMP BELOW.

Thumb presents a rock face for its entire 3,000 feet. We were fortunate in finding an excellent climbing route on a sloping rock-shelf leading to a scramble up a buttress, interspersed with short pitches of difficult climbing. The rock, however, was rotten and crumbled readily in many places. We climbed to a shoulder at about 2,000 ft., directly overlooking the Sanctuary Pinnacle, when the character of the mountain changed to a sheer rock face with only one fault—a vertical ice-filled cleft. A high wind had sprung up and although it was delightful to bask on the sun-warmed rocks when out of the wind, it was not a suitable day for difficult rock climbing. We accordingly descended until we found a snow-filled gully, which provided a good glissadé and route off the mountain. There is no doubt that the uppermost part of the Thumb presents great difficulty to the climber. During the year most of us had flown over this group of mountains several times and had studied possible routes from the air as well as from the ground, and from all angles it appeared to be a very steep rock climb.

This was our last day of climbing and the next day we struck camp, lashed up the sledge and drove the dogs back to the base. The fortnight's climbing had been a great success, if enjoyment is the criterion of success, though we were very disappointed by our failure to achieve all that we had set out to climb. Inevitably, we wasted a lot of time in exploring the most feasible routes on each crag and mountain, so that a more concerted effort on fewer mountains would probably have given better results. As it was, we were lucky in having five mountaineers together in the same locality in the Antarctic, and able, simultaneously, to escape from the official tasks of our respective expeditions. Life on an Antarctic expedition does not lend itself to large scale mountaineering exploits, which can only be fitted in when man-power is not in demand.

BOURRIT'S ATTEMPT ON MONT BLANC BY THE AIGUILLE DU GOÛTER IN 1784, AND THE FIRST ASSENT OF THE DÔME DU GOÛTER BY HIS GUIDES

By T. GRAHAM BROWN

NARRATIVES or accounts of climbing achievements have played so important a part in the development of the sport that the origins of its literature are of interest. As far as the English language is concerned, probably the earliest story of the conquest of an Alpine peak is that given in a translation (1775) of a book written in French by Marc Théodore Bourrit, the Genevese miniature artist, journalist and