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AMADABLAM MINGBO
IN THE FOREGROUND
Photograph by courtesy of World Book Encyclopedia, Chicago





THE ASCENT OF AMADABLAM

MICHAEL WARD

THE MAIN PURPOSE of the Himalayan Scientific and Mountaineering Expedition 1960-61, sponsored by World Book Encyclopedia, Chicago, and led by Sir Edmund Hillary, was an investigation of the long-term effects of high altitude on man. We had not come to the Mingbo valley looking for difficult peaks to climb. The winter that we spent at the Silver Hut was in many ways the most remarkable part of the expedition. We were working in conditions of comparative comfort at 19,000 feet, in a laboratory brought half-way across the world, and erected on the edge of a glacier in the midst of some of the finest mountain scenery I have ever seen. We were well fed and well housed, and were carrying on work that seemed, only a few months before, quite impossible. We were finding that we could work at about sea-level capacity although with more effort. Our results appeared to be good and we were all very well.

Our party was a mixed one. It was led by Dr. Griffith Pugh of the Medical Research Council, who originated the idea of a Scientific Expedition. In addition there was John West of the Medical Research Council Respiratory Unit at the Post-Graduate Medical School, Hammersmith, and Jim Milledge, also of the Medical Research Council. Dr. S. Lahiri, an Indian Physiologist, worked in Calcutta — he had previously spent one year at the Department of Physiology at Oxford studying for a D.Phil.; Michael Gill, a New Zealand medical student, had just finished a year's B.Sc. course in Physiology at Dunedin. Capt. Motwani was an Indian Army Medical Corps officer seconded to us; Wally Romanes, another New Zealander, was an electrician and engineer; Tom Nevinson, who left in the middle of January, was from the U.S.A.F., stationed at Brooks Air Force Base in Texas. Barry Bishop of the National Geographic Society, a glaciologist, was to do a study of the glacier on which we lived and make a map of the Mingbo valley, as well as to

carry out meteorological observations. Lastly, myself, a Senior Registrar in General Surgery at the London Hospital, who had experience of this type of work when on Everest in 1953, when I had helped Dr. Pugh.

Of this party four, Bishop, Gill, Romanes and myself, could be counted as mountaineers. Pugh was an expert skier, having taken part in the 1935 Olympics, whilst Milledge and West were proficient skiers and had done some climbing. Lahiri and Motwani had been on the mountaineering course held in Darjeeling as a preparation for the expedition.

After three months spent wintering at the Silver Hut we had got used to the steep and impossible-looking mountains around us; they were in our back yard. Across the Rakpa Glacier, Amadablam dominated us and our surroundings. Meantime, at the foot of its South East Ridge (climbed to about 20,000 feet by Cunningham, who was stopped by an overhang), we had placed the Green Hut (17,500 feet), a possible site for our physiological work, but used now as a staging point. Mingbo, our Base Camp, was at the foot of its South Face. It was really impossible to ignore the peak, even if it had not been so beautiful and looked so inaccessible.

One Sunday in February Mike Gill and I climbed Rakpa Peak, a very steep ice peak just over the way. Its upper 200-300 feet appeared to have a 50-60° slope, yet we managed to get up and down in almost Alpine time. Admittedly we were very exhausted on our return; but the upper slopes of Amadablam only appeared to average 45°.

At the end of February Wally Romanes and Gumen Dorje went to have a look at the lower part of the South Ridge of Amadablam. Wally is not given to exaggeration, and when he returned after three days he was not hopeful: he had got to the Yellow Tower that turned back Cunningham, and when asked his opinion about the route he said it would be a good climb in the New Zealand Alps. A few days later it became difficult to work in the Silver Hut as a series of space-consuming experiments was going on. After a talk with Griff Pugh, Barry Bishop and I decided to go and have a further look at the Yellow Tower. I also confirmed with Griff that we had permission to climb mountains in the Mingbo Valley. This is of interest in view of subsequent events.

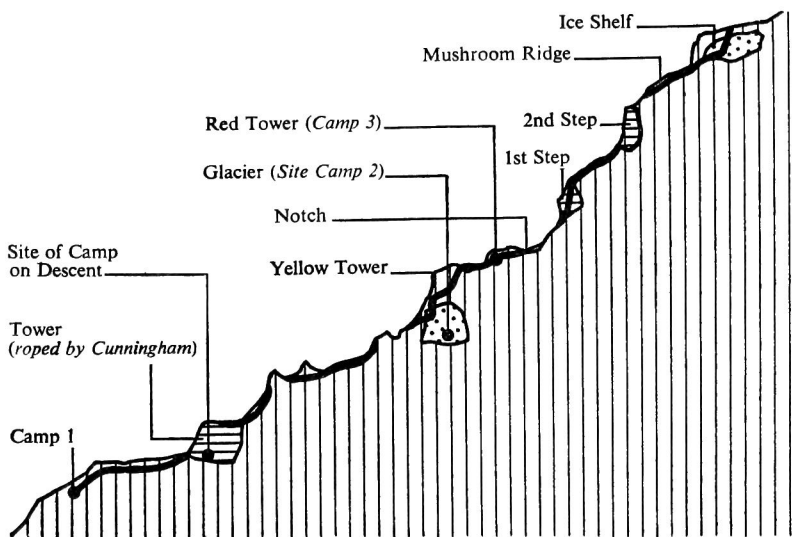
We took two Sherpas and after a night spent at a camp below the crest of the ridge we climbed along to the Yellow Tower. Our first surprise was the character of the ridge. This had been casually

mentioned by Wally as being fairly difficult; there was in fact no alternative. Several places were difficult, a Tower on which a nylon rope placed by Cunningham flapped listlessly, a gully with an overhang. Beyond this the ridge became a series of ragged and jagged turrets; in and out of these the route wandered first on one side then on the other; on the West it was in the shade, cold, sunless and windy, while on the East, where luckily all the more difficult pitches were, the sun warmed the rocks. At the foot of the Yellow Tower a small hanging glacier, 20 yards square, nuzzled. Just before we reached this a narrow piece of ridge along which we progressed *à cheval*, followed by a proper finger and toe traverse, enlivened the route.

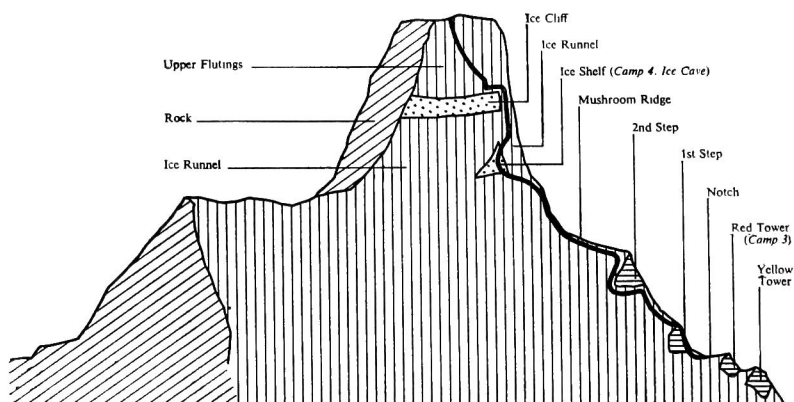
By now Barry and I were most impressed. The mountain was showing its calibre; however, what would happen if we had a snow fall of even 2 inches? On the small glacier, a natural and fine camp site, we had our lunch. We then climbed fairly easily up to the ledge on the Yellow Tower from which the difficult climbing started. We now understood what Wally meant by it being a good route. Beyond the right-hand edge of the ledge on which we stood we could climb straight up over an overhang on to the ridge again. Once on the ridge there was 30 feet of difficult rock before easier ground was reached. Alternatively, we could traverse upwards and to the right across the face of the Tower. This was steep and most exposed and looked very fierce.

We thought on balance however that we should try the traverse first. I started off and after a most awkward 10 feet and three pitons landed on the top of a diamond-shaped rock. From here I could still either go straight up over the overhang or continue right. To the right a smooth 10 feet barred the way from what appeared to be easier though exposed rock. I could find no good crack for a piton; so I continued upwards to the overhang. I could not get over this and so returned to Barry on the ledge. I found that climbing of a fair degree of difficulty could be carried out providing that one got one's breathing right. Breath-holding at 20,000 feet is difficult and cannot be prolonged.

Barry continued up to the overhang, and managed to climb it using some *étriers*. He put in a piton above and after having a good look came down; he said he thought we could get to the crest of the ridge. We had spent a considerable time on our attempt and decided that it would be best to pitch a camp on the glacier next day so that



LOWER PART OF SOUTH RIDGE AS SEEN FROM WEAR GREEN HUT



AMADABLAM

we could tackle the Tower when fresh. This we did on the 25th February.

On the 26th Barry and I returned to the attack. To start with I went up to and over the overhang using *étriers*. Above, the rock was very loose, and even if we got to the crest of the ridge there were still considerable difficulties. I returned to the ledge on the top of the diamond-shaped rock. After a search I managed to find a fairly good crack for a piton and by using an attenuated foothold put in a further piton, on which I hung an *étrier*. I stood in this, moved up a rung, made a further long stride and was across the difficulty. Somewhat selfishly I now belayed, onto a really firm piton, and invited Barry to continue across the face, up to the top of the tower some 50 feet away. The first 30 feet proved relatively easy, then the rock began to overhang again. Barry retreated, banged in another piton and then went up. He put in another piton clipped in a karabiner and then rested on the tight rope; a further few contortions and he was up. I followed; the last 10 feet or so before the ridge were most awkward and exposed.

From the top of the Yellow Tower we made our way easily over another tower of reddish rock (the Red Tower) and were soon in the notch. From the notch a vertical step seamed by a crack led to what appeared to be an easier ridge. This led to a further tower, and, beyond, we could see the upper slopes of the mountain. This vertical step, which we called the First Step, was obviously going to be difficult. We returned to the top of the Yellow Tower and traversed down its crest until we found a convenient spot to put a wire ladder. This just stretched to the ledge. From then on we used the ladder for our ascents and descents of the Tower.

That afternoon, Wally, Pemba Tensing and Gumen Dorje arrived at Camp II—at the foot of the Yellow Tower.

Next day Wally, Barry and I climbed the wire ladder and continued into the notch. There, an ice-slope led to the foot of the First Step. We cut steps up this slope, unfortunately now in the wind on the west side of the ridge. The vertical crack for which we were now aiming was just sheltered from the fierce wind. The fact that all the really difficult climbing was done out of the wind and in the sun was of the greatest help.

The first portion of the crack overhung and was about Severe in standard. Further up it became a great deal more difficult. Wally started on this whilst Barry and I sheltered behind the crest of the

ice-slope and enjoyed the tremendous view downwards. The wind boomed and shrieked over our heads, every now and then blowing the rope horizontally. Wally continued upwards for about 30 feet, and then started traversing right out of the crack. He put in a few rather insecure pitons and came down. Barry went up and spent a long time trying to put in some more reasonable ones. Evidently the crack would go but pitons and crack size did not coincide — some *coins de bois* would have helped. We descended, and next day Barry climbed up, put in a few rather shaky pitons, hung some étriers on and climbed the crack. I then took over the lead and went up the ridge above. The climbing was a good deal easier but most exposed; again the thought of a few inches of snow was unnerving. We got to the foot of an ice ridge leading to the Second Step. There we left some rope and ironmongery. On the way down we put in pitons at convenient belay points.

At Camp II that night we found Mike Gill; he had come up from the Silver Hut, after being the last subject for a series of experiments on cardiac output on which Griff Pugh was working. On March 1st Wally and Mike continued up the ridge and got to the top of the Second Step; this they managed by traversing left across the foot of the Second Step and climbing a very rotten snow gully. Higher up the snow improved, but this section of the route was always the most dangerous. At the top of the Second Step a mixed snow and rock ridge led to the proposed site of our last camp, a hanging glacier at the foot of the upper ice flutings of Amadablam.

Barry and I spent the day taking up reserve supplies to the ledge below the ice ridge leading to the Second Tower, and putting a wire ladder down the First Step. Next day Barry, Wally and I descended to the Green Hut while Mike stayed up and consolidated the route. This sudden interruption may appear peculiar; but our climbing on Amadablam was still a reconnaissance. A plane had managed to land on the airfield at Mingbo but in doing so the tail had been badly damaged. On the wireless Griff had asked me to go down and see what I could do to help. I descended to Mingbo, whilst Barry and Wally spent a few days working at the Green Hut.

When I arrived at Mingbo the plane was unable to take off due to cloud. We spent an anxious day waiting for a clearing which never came. The tail had been mended by the pilot and Tony Hagen, who were both suffering from the altitude. Early next morning the mist cleared and the plane took off safely.

After this break we were ready to continue with the attempt on Amadablam and I had to make a decision whether we could spare the time and whether it was safe. After a further talk with Griff Pugh we decided that as they were still getting on very slowly with the work at the Silver Hut we could spare the time. The question remained whether it was safe enough. We had four climbers, incidentally two New Zealanders, Mike and Wally; one American, Barry; and myself, an Englishman. There were only two Sherpas who were really good and who could be spared, Pemba Tensing and Gumen Dorje. What would happen if we had an accident? The remainder of the party would not be able to mount a strong rescue operation; we would therefore have to be entirely self-supporting. Amadablam was technically difficult so far. On the whole route there was nowhere where we could relax in any way. All of the climbing was by pitches, and the Sherpas, never particularly keen on belaying, had to be thoroughly drilled and indoctrinated in their use. In fact both Sherpas were very apprehensive of the mountain; its reputation after 1959, its difficulty and its inaccessibility made them say it was a "Sahib's path" and not a "Sherpa path". Sherpas are not strong in the arm and most of them do not excel in rock-climbing. So far Amadablam had been a continuous rock climb of difficulty and they did not like it much. It was also the wrong time of year (February) and many prophecies of snow were made.

I decided, therefore, that any final attempt should be made by the four of us together. In this way we would be mutually supporting. Another safety factor was our easy and direct communication with the Silver Hut through our portable radio. The fact remained, however, that we four were the only mountaineers in the wintering party, and we should have to fend for ourselves.

On March 6th, then, Barry, Wally and myself rejoined Mike Gill at Camp II below the Yellow Tower. Mike and the two Sherpas had improved the route between I and II and also had taken 100 lbs. of food and equipment to the Notch. Mike also had a suggestion which was a good one and which we followed: that we should move our camp from below the Yellow Tower to beyond the Red Tower, just before the notch. His reasoning was that by the time we had climbed the two wire ladders the initial impetus to getting to the ice shelf had run down.

Next day we woke to see with concern 3-4 inches of snow on the rocks. This cleared towards midday, and the six of us spent the whole

day moving our camp up 200 feet and along a quarter of a mile of the ridge. Our new site was not so comfortable, but after the Sherpas had spent a day or two improving it (they did not come above this camp) it became quite comfortable.

On the 8th Mike and Wally set off to get through to the ice-shelf whilst Barry and I took up more loads to the ledge below the Second Step. We also put more ropes and pitons in to safeguard the route. In the evening Mike and Wally returned and looked very depressed; they had gone to within 100 yards of the ice-shelf but here had faced a typical Himalayan Ice Ridge, tottery mushroom-like towers balanced precariously on a narrow ice ridge. They reckoned it would go but would take longer than we had either time for, or food and equipment.

From the details they gave me I did not agree with them. We all discussed the matter fully and next day I decided that Barry and I should have a look at it before finally retreating. We set off early and climbed quickly. The gully by which we traversed the Second Step was most unpleasant and loose. The initial part of the ridge above the Second Step was not too difficult. We got to the mushroom area at about midday. It looked most uninviting; beyond it the edge of the ice shelf was vertical for about 20 feet, and would, we thought, have to be climbed by artificial means.

In order to keep up our morale we started off immediately. The ice towers were of fantastic design, often overhanging on both sides; they were balanced on a steep-sided ridge along which it would take too long to cut, so we had to go over the towers directly. We found that we could usually belay safely in a crevasse at the end of each pitch. Some of the towers were very rickety, and we climbed them as nearly in the line of the crest of the ridge as possible. After some time we found we were at the foot of the ice-shelf, which luckily did not look too formidable. This we climbed using some ice pitons and ice-screws and an *étrier*; next day Wally, choosing a different route, managed to get up without resort to artificial aids.

The ice-shelf was a sloping snow field, about an acre in extent. The consistency of the snow was ideal for an ice-cave. The views were impressive, looking down the South Face and into the Dudh Kosi. Thyangboche and Namche Bazaar we could just see, with beyond the range of mountains south of Namche. Double-headed Numbur stood out most impressively.

Looking upwards, the immediate problem was an immense ice-

cliff stretching completely across the South Face. About 150 feet high, this threatened our camp site and would be impossible to climb or traverse beneath. A broad highly polished ice-swept runnel swept down from this cliff and bounded the shelf on the west. Obviously some ice, too, got swept down a narrow runnel on our right. The apex of the shelf divided the two runnels. We would have to cross the right-hand runnel but as it was only 30-40 feet wide the danger would not be great; the ice-field showed no evidence of avalanche debris and was therefore, we reckoned, quite safe.

The upper slopes did not look at all steep; this however may have been pure relief. We were still 1,500 feet from the summit, and the only breach in the ice-cliff above was between its right end and the edge of the East Face where there was a horizontal snow ridge. Up to this ridge a snow slope led and this was plainly our first objective; it looked like the key to the upper slopes.

We spent about half an hour on the ice-shelf, then fixed a rope over its edge and abseiled off. As we descended, the weather, which had been unsettled, looked very threatening, and black clouds began looming up beyond the Dudh Kosi. A mist obscured the peaks south of Namche and a few snow flakes fell. As we reached the ledge Wally and Mike climbed up to us in search of some kerosene. We told them our news and swiftly descended to our camp on top of the Red Tower.

Later in the evening the weather cleared and that night the stars came out. Throughout these last few days the weather had not been particularly settled and we would watch with anxiety the mountains to the South-West. It seemed that, contrary to experience in the European Alps, the appearance of high cirrus did not necessarily presage a front, whereas towering cumuli often meant a snow-storm.

We decided not to take the tents for our last camp but to rely on a snow-cave, which would of course lighten our loads. We had, however, to get to the shelf early, to build an ice cave, which would be tiring after a full day's climb at 21,000 feet; this meant that our loads could not be too heavy.

I also felt that we should rope the gully by which we avoided the Second Tower, plus a few more difficult pieces on the ridge beyond; this would make our retreat in the event of a bad snow-storm a great deal easier. Next day, therefore, Wally and Mike took some loads up the ice-shelf and also fixed ropes on the portions above the Second Tower. Barry and I roped the loose gully.

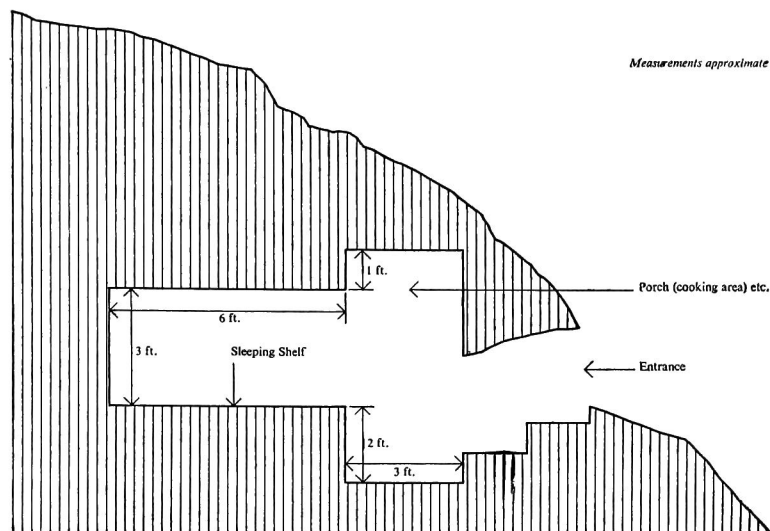
On the 11th we all four set out and carried up to the ice-shelf. When we arrived at 4.0 p.m. we started to build an igloo — but it was obvious after a time that an ice-cave would be better, so under the direction of Wally, an expert, we made one. To begin with only one person at a time could work, which each of us did at full throttle for 10 minutes. The entrance then widened out and we could work two at a time with the other two recovering debris. We used a light aluminium snow-shovel, and a special ice-block cutter (actually a short saw with two cutting surfaces, one being jagged and the other sharp). It was a gorgeous sunset — I remember Menlungtse especially standing out — but we were far from finished. In fact, after between five and six hours' hard work we had just managed to make a sleeping shelf wide enough. We cooked a sparse meal and being squashed close together spent a warm if relatively uncomfortable night.

Next day Wally and I reconnoitred the first half of the route to the summit. We cramponed up the first 200 feet of the ice runnel to a natural ice-cave.

To cross the runnel we cut steps and emerged quickly on the far side. We climbed a small rock buttress which gave onto the snow slope leading to the right edge of the ice-cliff. The top of the snow slope was a narrow ridge; its far side fell steeply into the monstrous precipice of the East Face. To our left the ice-cliff was broken, and we could sidle around it, cross a narrow ice gully and get onto some rocks. This short section was menaced by the ice-cliff, and as quickly as possible we cut steps across and got onto the safety of the rock on the other side. We climbed up this for three rope-lengths and then traversed onto the snow above the hanging glacier. By now we were both tired. As far as we could see the main difficulties between us and the top were a series of snow and ice flutings; if these were in good condition we should get to the top.

On our descent we fixed some more ropes and got back to the ice-cave. Here Mike and Barry had spent the day enlarging the cave and making it more comfortable. We got everything organised for the next morning and went to bed after a good meal.

At 8.30 a.m. we set out from our cave. We quickly gained height and were soon at the bottom of the flutings. These were very impressive as they swept in parallel silver lines towards the blue sky and the summit ridge. The weather appeared to be more settled and



ICE CAVE

although there was the usual cold wind we stayed sheltered throughout most of the day. At the foot of the final slope we found a convenient fluting which appeared to run diagonally across the others; this started at the bottom right-hand corner and swept up to the centre of the summit ridge. We followed this the whole way. The consistency of the snow varied considerably with height. For about 40-50 feet it became very icy and steep, some handholds having to be cut; in general the angle was between 40° and 50° and on the whole less steep than the upper part of Rakpa Peak. Wally and I had been leading from the start and after a few rope lengths we handed over to Mike and Barry. We gained height steadily, and as is usual the slopes appeared to lengthen rather than shorten. At about 2.30 p.m. we saw the front pair disappear from view and heard a short yell. In a few minutes we were gathered on the top. Instead of the narrow ridge we had expected, this turned out to be a snow-cap, seamed by a crevasse, of about 100 yards by 30 yards.

We looked for but found no trace of Mike Harris or George Fraser. The upper part of the North Ridge looked very difficult and the final hundred or more feet of the ice-cap appeared very steep. The Silver Hut we could just make out. The Everest Group overpowered all the other mountains. From the top of Amadablam we

could see a really formidable array of the world's highest peaks — Everest, Makalu, Lhotse, Nuptse, Cho Oyu, Gyachung Chang — and a host of others. Unfortunately most of the summits of these peaks were hidden by menacing cumuli.

A sobering thought struck me as we stood taking photos — we were the same height as the foot of the Lhotse Face.

We did not stay long on the top, and descended quickly taking our fixed ropes with us. At sunset we regained the ice-cave.

Early next morning we descended to Camp II, clearing the rocks of the pitons, fixed ropes and other impedimenta on our descent. The Sherpas were genuinely pleased to see us, for they had been very apprehensive. That night we talked to the Silver Hut; they had seen us for a fleeting moment on the top. We arranged for Sherpas to come up next day to carry our gear off. We planned to meet them at the foot of the Yellow Tower; Wally and Mike would rig up an aerial ropeway down which to send the loads, and at the bottom would load up the Sherpas, while Barry and I, Gumen Dorje and Pemba would ferry the loads to the ropeway.

All went according to plan and soon we had the loads hurtling down with gay abandon; a suggestion that we should follow them was not taken up. By midday the last loads were down; Pemba and Gumen Dorje followed, then Wally dismantled his fine ropeway and we abseiled off, knocking out as many pitons as we could.

We had seen our two Sherpas set off with immense loads, I must admit with some misgivings. We all took on quite heavy rucksacks and started down. About a quarter of an hour down the ridge, just before the toe traverse and the *à cheval* ridge, I came across a frightened group of Sherpas. In their midst was Gumen; he said he had broken his leg. He was right: the foot was at a right angle to the knee. There was a thin trickle of blood coming from the fracture site. Around, the Sherpas sat stunned, their morale at rock bottom. I quickly twisted Gumen's leg straight. I saw that the Sherpas had been carrying some High Altitude rations in cardboard boxes; I tore the cardboard up and with puttees made a serviceable splint to above the knee. I had no morphia on me, but Wally had, and we gave Gumen a shot, also some sulphonamide. I gave the morphia into his abdominal muscles, as the skin is often warm there when the limbs are cold; the morphia therefore acts more quickly and readily. The tension, that always eases after climbing a difficult mountain, returned with relentless pressure.

On questioning Gumen we found that a rock had broken under him; he had no chance with his heavy load and his leg had snapped like a brittle twig. The main problem was now to get him off the mountain. He was heavier than any of the other Sherpas and they would not and could not carry him. Normally climbing involves as much balance and co-ordination as pure strength, and Sherpas are very strong except in the arms. But to take Gumen, who weighed about 120 lbs. (heavier than the other Sherpas), along the ridge would need as much brute strength as anything else. Mike and I were the strongest in our party; we therefore fashioned a sling out of the climbing rope and started to carry him on our backs. Any other method when climbing a horizontal ridge is out of the question. Wally went off with Penuri and a note for Griff telling him about the accident and asking for food, morphia and a wire splint. We of course were out of food and fuel, as we expected to get off the mountain to the Green Hut that evening. Once Penuri had got to Camp I Wally returned to help. Barry was to get the loads off the mountain with the help of the other Sherpas, who were still in a trance.

Mike started by carrying Gumen, whilst I belayed him. Our progress was extremely slow and after 5-10 minutes he was quite exhausted. For about an hour or so we alternated our carries. It was too dangerous, and we were getting progressively more tired. Wally then appeared, having made very rapid time. We now evolved a system that either Mike or I would carry Gumen, while Wally did all the rope work and reconnoitred the next few feet. We worked out each step and hold, found the best belay — the best rest spot. Our limit was 10 minutes. The carrier was helped during his carry by the non-carrying Sahib and Ang Pemba; they steadied him, made footholds, protected Gumen's leg and generally made life as easy as possible. Only Wally and the carrying Sahib were roped.

Behind us, Barry was exhorting the Sherpas to get our loads off the mountain and carrying immense ones himself. It soon became obvious that we would not get off the mountain that day and as the afternoon wore on we looked for a camp site. There was only one which would serve, just before the Tower roped by Cunningham's party. About one hour before sunset we reached this site and snow began to fall.

We just managed to scrape two rudimentary platforms and put up two tents. Wally pressed on to Camp I to extract from there a

reluctant Sherpa, sent up by Griff (contacted that afternoon by wireless) with kerosene and food. He returned, a Yeti-like figure, with the supplies and disappeared like a wraith in the swirling snow. In the meantime Barry had got most of the loads to our Camp. We settled in for the night. Gumen's general state was very good; he had never become shocked and the morphia kept him relatively happy.

We woke next morning to a really grisly outlook. There were about 6 inches of snow on the rocks and it looked as if more was on the way; it would be extremely dangerous to move in those conditions, so we waited. The sun did in fact come out and soon began stripping the rocks. The problem of the Tower we decided to overcome by penduluming across its face. This was Gill's idea; the normal route over the top was still snow-clad and too dangerous.

We fixed the rope to the top of the Tower, where Wally manipulated it, and, leaning well against the rope, Mike carried Gumen across in an arc. I held his feet in doubtful places. This was most spectacular; we had, however, no alternative. After a few more hours of alternate carrying we got to easier ground about 100 yards short of Camp I. Here one of the Sherpas took over.

The weather now broke again, and at 3.0 p.m. it started to snow. There was still a lot of large boulders to get through, and I asked Da Tensing II, who was carrying Gumen, what he thought. He was all for going on, saying that the snow would get worse. He then did a very fine carry over the most fiendishly slippery snow-covered boulders; another Sherpa and myself steadied him.

In the meantime the others plus some more Sherpas had managed to get all the loads off the mountain. We finally made our camp in a dismal waste of boulders, with over 4 inches of snow on the ground.

In the morning we attempted to get Guman carried on a stretcher. Both he and the Sherpas refused, so a very dirty and tough customer called Tenzing, from Dingboche, chose to carry him almost unaided to Mingbo. Tenzing was immediately booked for Makalu and was in fact one of the so-called low-altitude Sherpas who cheerfully went to 26,000 feet to get Pete Mulgrew off.

That afternoon we arrived at Mingbo. Two days later Gumen was in the United Mission Hospital at Shantah Bhawar, in Katmandu. His X-ray showed no displacement of the fracture, this being a tribute to the efficiency of cardboard and the Kramer wire splint. His general condition throughout remained very good, due to

adequate morphia, adequate warmth (we kept him in a big down jacket all the time) and his own constitution.

After these strenuous few days we returned to Changmatang, where by stint of solid eating and sleeping we put on weight at a pound per day.

Amadablam seemed to be a mountain of Alpine calibre; the route by which we climbed it was a very good one — “devenu classique”. It provided climbing of every variety. The lower part between 19,000 and 21,000 feet was predominantly a rock ridge with a series of towers and rock steps. By and large the difficulties had to be overcome rather than avoided. There were sections of artificial rock climbing and of artificial ice climbing. From the ice-shelf to the top was a very fine snow and ice climb with an average angle of about 40-45°.

In length, character and variety I would compare the climb with the routes on the Italian side of Mont Blanc. The solitary situation of Amadablam, the great beauty and character of the mountain, the tenuous line of the route and the Alpine standard of difficulty made this a most memorable climb on an outstandingly lovely peak.

CLIMBING NOTES

From Camp I to the Yellow Tower the route has pitches of III.

Yellow Tower:

The main difficulty was an ascending traverse about 120 feet in length, grade V and A.1.

First Step:

Crack 50-60 feet, grade IV and A.1.

Above, about 400 feet of climbing (grade III) to the foot of an ice ridge below the Second Step; climb the ice ridge, then traverse left under the Second Step and ascend by a loose gully. Traverse right onto the top of the Second Step. Mixed snow and ice ridge to the foot of the Ice-Shelf. Climb onto the Ice-Shelf (20 feet); this was climbed by artificial means (once climbed without artificial aid by a different route).

Ice-Shelf:

See drawing of ice-cave.

To Summit:

Cross a narrow runnel and ascend to a small rock buttress. Climb this (III) and ascend the snow slope to the right of the ice-cliff (300 feet). Creep around the right-hand edge of the ice-cliff and climb some rocks. This leads to some gentle slopes before the final ice flutings, which are followed to the top. Average angle 40-45°.

Equipment:

1,500 feet of rope used as fixed ropes.

Two wire ladders.

Numerous pitons (rock and ice) and some ice screws.

SKILLS AND SAFETY

ROBIN HODGKIN

At times during the climb . . . our one ambition had been to get off alive . . . but having completed it successfully we quickly forgot the discomfort. . . . We remembered only the pleasure of climbing warm, rough granite in magnificent situations, the beauty of the view and the intense excitement of searching for a route where no one had been before.

Christian Bonington,

writing on the Central Pillar of Frêne, in the *Observer*.

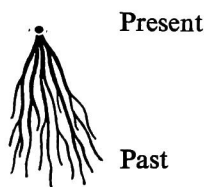
HERE ONE OF THE most skilful and daring mountaineers speaks in words which would be echoed by any other adventurous traveller. Millions of people, especially in urban, industrial society choose to undergo hardship and danger for the joy it brings: joys associated with elemental things, rock, snow, speed and sea. The origins of this urge are obscure. It springs probably from instincts as deep as those of sex and survival, but it has been given its modern direction by the easing and dulling of social and economic conditions. The gradual extension of monotony and security in the centres of civilisation drives people out to the edge, where they find outlets for this force.

Certainly some qualities of health and character will be brought back from these adventures, but a price is paid in terms of death and injury. Some price perhaps is inevitable, but mountaineers would agree that far too many accidents stem from personal failure in men of moderate skill and should therefore be avoidable. This is a serious problem, especially to anyone concerned with teaching boys or girls to live adventurously. This article is an attempt to analyse part of the problem and to suggest ways in which it can be met. My main contention is that a greater emphasis on craftsmanship and a proper understanding of the psychology of skills are the keys which make safety compatible with danger.

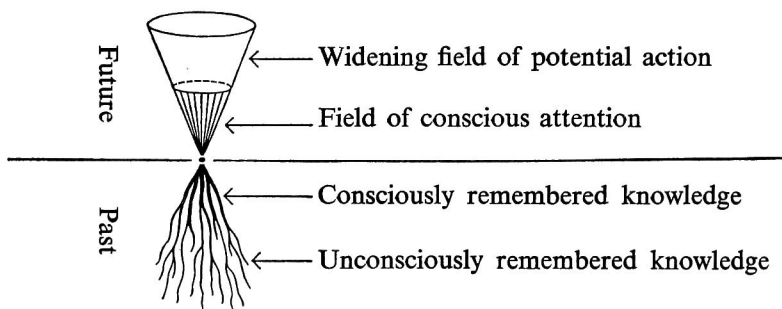
UNCONSCIOUS SKILLS

A skill is the ability to perform a difficult action correctly, not by virtue of consciously held precepts but by unconscious knowledge of innumerable earlier performances and attempts. A skill can best be

understood therefore as a focussed phenomenon — one act in the present deriving from innumerable past sources. This may be diagrammatically shown thus:



The dot represents a precise act made possible by profound and extensive past experience. One can develop this diagram in various suggestive ways, though like all diagrams it needs regarding with due scepticism. It may be usefully completed by indicating that the skill, as well as having roots in the past, opens up a limited field of freedom in the future:



If I am the user of the skill my immediate attention is on the horizontal line. The field of potential action stretches ahead into the future. The near part of this is shaded to indicate the field of my immediate attention, where I know, more or less, what is going to happen. But my skill runs not merely through a temporal dimension, it also has a psychological dimension, its roots running back into the past but also 'down' into the unconscious storage circuits of my mind. These facts can also be conveniently indicated on the other side of the diagram.

It has often been observed that any skilful performer needs to have a relaxed attention fully focussed on his acts. At any moment the performer will have a focal awareness of one part of what he is doing or about to do; the rest is left to unconscious control. This matter is fully discussed by Polanyi in his *Personal Knowledge*:

"When we use a hammer to drive in a nail, we attend to both nail and hammer, **but in a different way**. We **watch** the effect of our strokes on the nail and try to wield the hammer so as to hit the nail effectively. When we bring down the hammer we do not feel that its handle has struck our palm but that its head has struck the nail. Yet in a sense we are certainly alert to the feelings in our palm. . . . These feelings are not watched in themselves; we watch something else while keeping intensely aware of them. I have a **subsidiary awareness** of the feeling in the palm of my hand which is merged into my **focal awareness** of my driving in the nail."

Polanyi then turns to a common cause of failure:

"Subsidiary awareness and focal awareness are mutually exclusive. If a pianist shifts his attention from the piece he is playing to the observation of what he is doing with his fingers while playing it, he gets confused and may have to stop. This happens generally if we switch our attention to particulars of which we had previously been aware only in their subsidiary role."

Stephen Potter, at a rather different level of scholarship, has commented on such phenomena in his observation of Gamesmanship. "Analyse your opponent's putting", he advocates, if you want to undermine his morale.

A self-conscious analysis of a skill may have its value in developing or teaching the skill once it has been mastered; but if self-conscious analysis creeps into the execution of a skill it will effectively block its expression. The effect of ill-timed self-consciousness can be observed in such relatively simple skills as boulder-hopping in rough country or in driving a car. An unspoken word of self-approbation or self-analysis is often the precursor of a slip or miscalculation.

These are simple illustrations of the way in which psychological factors can influence skill and safety. Not only does the whole mental 'set' of a person have bearing on whether he is accident prone or otherwise, but the degree and manner in which his self-consciousness intervenes in a skilful act is of considerable importance. The competitive element so evident in many games should have no place in dangerous sports, for this too builds up self-conscious tensions and assertiveness which may be fatal. One wonders how many drivers work themselves into an accident-prone frame of mind by

meditating on Grand Prix Champions. (Cf. Thurber's *Walter Mitty*.)

An inexperienced climber sometimes entertains ambitions which are not far from fantasy. The safest climbers are probably those in whom a high measure of skill is allied to moderate ambition. But this is not the whole story, for it has often been observed that accidents rarely happen to a climber when he is undertaking a really taxing ascent. It is not uncommon for mountaineers who are aware of this fact to utter a word of warning after a difficult ascent has been completed and an easy descent begun. It is not merely fatigue that makes this a dangerous time. Over-confidence and a condescending attitude to the terrain may make climbers succumb to the less impressive dangers of easier ground.

INTELLECTUAL DECISIONS

Polanyi's insistence that maximum awareness is necessary to the execution of a skill can be extended. The 'safe' mountaineer must certainly be capable of channelling much skill and energy into the overcoming of a physical difficulty; but he must also be capable of dealing with another kind of crisis, that which is involved in the making of intellectual decisions. The total time taken in coming to such decisions may be small but a choice of route or objective, the assessment of a party's diminishing resources of energy, or a decision to continue or abandon a climb, often affect life and death. It is important to realise that the exercise of such intellectual decisions involves a distinct break with the predominantly unconscious skills of physical effort.

Before considering these crucial moments it may be useful to note a primarily physiological experience which demands a similar decisive change in mode of apprehension. If a climber is making steady progress over broken ground he needs to keep his visual attention within the cone of sight available to him by the movement of his eyes alone without any independent head movement. If he moves his head to see beyond this cone he will set up a disturbance, presumably in the semi-circular canals, which may seriously interfere with his balance. If therefore he needs to turn his head to admire the view or to take stock of the more distant parts of his route, he should stop. The important point here is that he needs to be aware of the limits of his unconscious mechanisms, relying on them fully when

they can serve but changing into an entirely different mode of conscious perception and balance when they will not.

On a small scale this illustrates a more general principle which will affect many decisive moments in the life of a mountaineer. During a long expedition the largely unconscious rhythms and skills may have been carrying him upwards for hours. It is possible while this is in progress to turn his mind periodically to other matters without danger. These matters may include problems and decisions affecting the climb. But I rather doubt if this is the best way of making such a decision. Probably the best procedure in such a case is to say "yes, we will stop and think about this." The halt may be brief but it will demand a special effort to summon all the available data. Map, compass and watch will be consulted. The fatigue of the party, its resources for a bivouac, and the known and unknown aspects of the route ahead will be allowed for. Opinions will be shared and food will be consumed. To an experienced climber this will all seem very obvious, but I believe that many people find it difficult to make a decisive break in their physical rhythms and to change gear, as it were, into the intellectual effort which such situations demand. Here too, of course, the quality of the decision will depend on the climber's power to exclude irrelevant considerations such as saving face, getting 'value' from a brief ration of mountain days or doing better than the other party, as well as his power to marshal the relevant facts quickly.

TEACHING SAFETY

Teaching methods range widely in the degree to which they involve precept and analysis on the one hand and example and experience on the other. Manual crafts and physical skills like games or mountaineering rely much more heavily on experiential methods. Much of contemporary thinking about teaching is concerned with communicating intellectual skills. But if we are to advance our methods of teaching mountain skills and mountain safety we must learn from the methods of craft teaching, and consider the learner more as an apprentice than a pupil and the teacher as an exponent first and as an explainer only second.

Polanyi points out that the passing on of traditional craft skills can only take place effectively where there is a close personal relationship between master and apprentice (the training of Alpine

guides is still largely based on apprenticeship which lasts for at least three years):

"To learn by example is to submit to authority. You follow your master because you trust his manner of doing things even when you cannot analyse and account in detail for its effectiveness. By watching the master and emulating his efforts . . . the apprentice unconsciously picks up the rules of his art, including those which are not explicitly known to the master himself. These hidden rules can be assimilated only by a person who surrenders himself to that extent uncritically to the imitation of another."

The rate at which young climbers develop today is often alarming, and parents or teachers who can prolong any one stage of the learning process will help the development of safe skills. It is not a question of saying "don't do it" but rather of saying "do more of it — at the appropriate standard."

Various general conclusions emerge from this dual conception of skills, as things which make possible difficult acts and, additionally, as things which shape the personality of the actor in ways which can increase his propensity for safety. One suggestion concerns a person's attitude to his craft, another concerns his attitude to goals and a third concerns his frame of mind in a crisis.

Pride in the craft, not pride in the achievement, should always be encouraged in the young climber. Interest in equipment in all its aspects, in the history of the craft and in its multifarious background is not merely useful for the practical knowledge that it gives but also because it helps to form the widespread unconscious network which is the essential of a broadly based skill.

Secondly, it is important to use any means which help to relate ambition to the appropriate level of skill. In a school or training course any well-graded system of achievement tests, each one leading to greater opportunities, will help to make boys and young men conscious of the vital relationship between skill and objective. Further, wherever such hurdles encourage the amassing of experience of 'easy' climbs and expeditions they will help to build up the broad unconscious base on the practical side, just as knowledge builds up the informational base for the skill. The comparison with flying is helpful. Pilots under training always have to amass a lengthy period of flying hours which often seems irksome to the precocious young student but is very necessary to his later safety.

A person's behaviour in a crisis is notoriously unpredictable. But here again the ground can be prepared. Practice with rescue equipment has obvious, direct value. It also has value in encouraging people to explore possible lines of emergency action in imagination before this may be called for in practice. But the kind of crisis that I have in mind is the small **crisis of decision** that we discussed above, not the accident which may result from wrong decision. How can we heighten the habit of cool and effective decision-making?

Something may be done on Outward Bound schemes and in C.C.F. operations to encourage leaders to write down a retrospective analysis assessing as many factors as possible in a crucial decision. But I think more is needed than this. If a ship in the Navy is damaged as a result of some human error there will always be an official enquiry. This is not merely a deterrent to gross negligence but it must also have a strong psychological effect in bringing home to the man who wields responsibility the grave and complex nature of small decisions. It will help to form a habit of full appraisal which can be brought into action even when fear and fatigue make it difficult. One should, I think, consider whether perhaps the public is not too kind to people who make silly or muddled decisions in mountains. The police and the coroner may know little of the special circumstances. The survivors are probably nice and rather pathetic; and anyway the damage has been done. I am not suggesting that any drastic measures should be taken against people who have made such 'human' errors, but rather that more should be done to establish the truth of what happened in an accident and that such truth should be disseminated, in the press and in the climbing journals. It is not fear of consequence but **sustained consciousness of responsibility** that needs heightening.

There is a final point which some people will feel to be irrelevant but which for others will be of central importance. One might discuss it in psychological terms but the words of religion are more apt. How can one consciously become **unselfconscious**? A man cannot step outside himself in a moment of crisis and attune himself to its demands. And yet the very act of letting go of fear and launching out with one's whole being on a dangerous but skilfully chosen act is akin to both art and prayer. "Not in my strength alone!" "Into thy hands, oh Lord!" Acts of commitment are doubtless commonly performed without any conscious religious thought and many mountaineers will admit little or no relationship between these two

fields of action. But the Christian who utters a prayer in the midst of danger is not asking for any miraculous help; he is asking (? willing) that whatever power and wisdom is available throughout his limited but complex being may be free to flow into his action, unimpeded by fear, self-consciousness or any other irrelevance. Any mountaineer who has explored even the shallow margins of prayer will see the connection between spiritual and physical effort; but he will also recognise that here is a frontier zone where few have travelled far and that experience not verbal description is the only effective guide.

In all our thinking about safety we are right to be concerned with externals, with equipment, with rescue apparatus, with safety codes and standards, but the biggest problems are psychological and internal. The attraction of dangerous situations lies in the demands they make on a man's whole being, and his safety depends on the total response of body, mind and spirit, all harmoniously attuned.

TRAINING FOR THE SPORT OF ADVANCED ROCK CLIMBING

COLIN MORTLOCK

TO BECOME AN EXPERT in any sport demands constant training. Exceptions to this rule are few, and advanced rock climbing is not one of them. Herman Bühl trained in the Eastern Alps, where the objective dangers are few; Brown and Whillans trained on gritstone, Boysen on sandstone. Judging by their results this training is highly successful. But does it necessarily follow that this type of training is ideal for the multitude of "aspirant experts"? The method should be carefully examined, as far as is possible in what is virtually an unknown field.

The athlete can read textbooks or consult coaches in order to determine the type and extent of training best suited to his ability. The climber can do neither. He must, perforce, think for himself.

The initial question must be "What qualities are needed to become an expert rock climber?" In order of importance the answer is probably:

1. *Mental control* (we are all familiar with the rock gymnast who can overcome formidable technical problems a few feet off the ground on some outcrop and yet cannot lead a long climb of less technical difficulty).

2. *Technical ability*
3. *Physical strength and endurance* } (these are interdependent).

The extent of the necessity of each is largely dependent on the type of climb. Red Slab Direct, Cloggy, demands more technique than physical strength, whereas the First Pitch of Surplomb, or Cemetery Gates, demand more finger strength than technique. Also some overcome problems by sheer physical strength where better climbers rely more on technique.

The second question must be "Can each of these three pre-requisites be trained, and if so what are the best methods?"

Mental control: there is no simple method of training this key faculty. Perhaps the majority improve most by constant and gradually progressive exposure to more and more difficult climbing situations, and in particular by learning to making more difficult "moves" gradually further away from the nearest running belay. However, many readers will be aware of those climbers who despite any length of experience will never make a "difficult" move more than a foot or so from a runner. And if they do they do so in a panic; being "gripped up" they have no mental control, and thus their effort is reduced to dangerous or, at least, non-expert climbing. What is the remedy for this? Some climbers will never find one, in the same way that people can never break habits. The fear complex is so great that reason cannot prevail. Many climbers, however, improve mental control by improving technique to such an extent that it engenders more confidence, and thus control. This is particularly true of those fortunate few who live within the close environs of outcrops, where they can learn to develop technique to the full without having to bother with unnecessary exposure. This form of training is obviously excellent, as it follows the general rule of training, "Always attempt to train in an environment as similar to the actual sport as possible." But what of the many who live in areas too remote from the hills or outcrops? Can they hope to become experts? — always excepting of course the occasional genius who is found living in the heart of London. It is certainly more difficult for them to learn to acquire this mental control.

Perhaps my own experience will furnish a possible answer. While at Oxford I climbed happily at Very Severe standard. When I did — or more often failed to do — routes of a higher calibre I became a nervous wreck while climbing, all enjoyment gone, because generally I lost mental control and climbed by forcing myself to go on, without being able to think clearly or coolly of the immediate problem only. Practice on outcrops only partially solved my difficulty. Eventually I achieved a much more reasonable degree of control by a winter spent in weight training and week-end outcrop climbing in all weathers. The increased physical strength, in particular, gave me the confidence essential to the control of my nerves on the more sustained climbs.

Thus perhaps the following may be inferred. Expert rock climbing can only be pursued competently and enjoyed if one has the necessary mental control, a control stemming from confidence based on a

successful balance of one's technical and physical abilities and experience.

Technical ability:

On the training for technique the answer must be as much practice as possible on outcrops or on climbs where protection is excellent. The aim here is progressive practice in all types of climbing, with the intention of making each move as automatic as possible. And *not* practice on the end of a rope with a wire brush, but either soloing or leading. As the aim of this training is competence in leading long routes, it is essential that the trainee has the maximum practice in making quick decisions as whether to continue or to descend. Hard-won experience through jumping or falling a few feet, or almost doing so, on an outcrop is the best method. The worst method is that adopted by several University Clubs and many other climbers who will spend whole week-ends "top-roping" outcrop climbs, or even one climb, in order, at best, to lead that climb. Admittedly this gives practice in harder routes, but the routes must be above the standard of the climber concerned; he is trying to run before he can walk, trying to force his body to do something it is not capable of without the help of a rope. In other words he is admitting he cannot lead problem "x" until he knows all the holds by heart. This he can never hope to do on climbs other than problems. And surely the basic joy of climbing is the feeling of satisfaction at having conquered not the rock but yourself (even if it is transitory). You cannot accept such a feeling if you have to rely on a rope, rather than on your own abilities.

All technical achievement is related to that basic ingredient of a successful life: "rhythm". The acme of rhythmic climbing — or economy of effort in climbing — might be Joe Brown. He can "flow" up a route of high calibre making the sport an "art" as well as a "science". This should not detract from other rhythms. Perhaps the most common among the experts is the short staccato series of movements, which is typical of the climbing of say Harry Smith. The general rule of this would seem to be "Think of the move ahead for as long as necessary; then act as quickly as safety permits and rest as soon as holds and technique allow." Above all avoid "fighting" the holds, and avoid resting in exhausting positions (when possible); acquire, through constant practice, the habit of using an energy minimum. Thus there are many climbers who climb first and

think afterwards, who grip a handhold with all their might when a light touch would suffice.

Physical strength and endurance:

The use of the fingers leads to the third requisite, that of physical strength and endurance. Opinions vary considerably as to the merits of any training other than on rocks. From successful experience — though I may be abnormal — I must support systematic types of training other than on rocks, yet always accept the fact that weight training, or any other form of training, is no substitute for experience gained on the rocks. Considerable physical strength and endurance can be acquired, all of which is directly employed in climbing moves. But the training must be done systematically and according to the generally accepted precepts governing it.

Where is the strength needed? The general answer is overall development of the body musculature: the use of the legs is obvious; the stomach muscles for any contracting and lifting of the legs, and in particular for drawing the legs up when the whole body, except for the hands, is divorced from the rock; the upper back for drawing the body upwards; and the obvious use of arms and fingers. Methods of training are numerous, e.g. weights, use of body weight, dynamic tension, springs; all have merits, though weights can be used most scientifically. They all have the same idea of a progressive overload system by which the muscle concerned is subjected to a gradual overload. Training must also be regular (two or three times a week); food of a correct proportion of carbohydrates, fats, proteins, and vitamins, and of sufficient calories for the work of the body; and sleep of eight to nine hours a night. Further discussion here is unnecessary, as there are many books available on the physiology of muscular activity and on general methods of training.

The specific strength necessary is in the tendons of the fingers, the muscles concerned being located in the forearm. Most readers will be aware of the times when they could not move up because of lack of finger strength, or when their forearms tightened to the point of aching after a day's strenuous climbing; or when they fell off because their fingers failed to hang on. As with all skeletal muscles two types of progress are possible — in the endurance or strength of the muscle, or both. By endurance of a muscle is meant the ability of that muscle to perform many repetitions of a movement involving a light weight, whereas strength is the ability of a muscle to perform

a few repetitions of a movement with a near maximal weight (for that particular muscle). In climbing examples this could be the comparison between a thousand feet of slab angle finger-climbing with 50 feet of finger-work on an overhanging face. Both are obviously a benefit. Finger endurance can be developed by constant climbing at a week-end, as practised for example by Nat Allen: he climbs all weathers all week-ends, starting when fresh with the high calibre routes, and, as each day progresses and he becomes more tired, instead of brewing he climbs routes of less difficulty. He does this not because he is a fanatic but because he enjoys all types of climbs, and the result is a skill and technique of the highest class. Incidentally any activity involving the fingers, such as plumbing, pull-ups on door lintels, or traverses on beams in a gymnasium, all further this endurance, and ensure that muscle tone essential to first-class performance. (By the latter I mean climbing a route safely, because it is not what routes you have done but how you have done them that counts.)

Finger "strength" improvement needs a progressive overload. Thus pull-ups on a door lintel, doing six times five repetitions each time, would be increased by adding iron boots and weights to the feet. This sounds rather strenuous, if not futile, but has definite results. It can lead to being capable of pulling up on excrescences on vertical or even overhanging rock. Without such training such moves are generally not feasible, providing of course that technique cannot overcome lack of sufficient physical strength.

In conclusion several factors should be noted. No amount of training in a non-rock environment is a substitute for training on rocks themselves. Physical strength, however, can improve mental control through increased genuine confidence. Technique can often replace physical strength, but a high degree of both is the best weapon of the expert if mental control is based on it. Nevertheless no scientific analysis of the factors involved in advanced rock climbing can ignore that subjective psychological feeling that "I can do it" or "It won't go". On the other hand there is no doubt that, to a degree not required by most sports, advanced rock climbing, like advanced mountaineering, demands not only complete control of the mind and body (in that order) but a specialised strength of the fingers as well as "bonne chance."

SOME THOUGHTS ON SKI MOUNTAINEERING

F. R. BROOKE

"I HEAR YOU ARE going ski-mountaineering. You must be very good at skiing."

"No", I explain, "I have knocked around on ski quite a lot, but compared with the toddlers of any alpine village I am no good at all."

This question of technique can be all too dominating. The sight of the ski instructor descending the slopes by apparently effortless hip wagging (Wedeling) seems to blind one as to what can be done by cruder methods.

Some years ago a friend of mine did the famous High Level Route from Chamonix to Zermatt when he could only do a stem turn to the right. If the snow or the slope were not to his liking, or it was necessary to turn to the left, he stopped and did a kick turn. But he got there just the same.

I do not recommend quite such complete incompetence, as it is obviously better value to ski well enough to enjoy the run down, instead of regarding it as an unfortunate necessity, to be got over somehow, after a pleasant climb on skins. But if you can do a stem turn, or stem-christie, and side-slip you can go anywhere. The main thing, as always in the mountains, is to know your limitations and to ski within them. Many falls, particularly when carrying a heavy rucksack, will quickly exhaust the strongest. It also puts an unfair strain on a hidden and unsuspecting snow bridge over a crevasse to do a heavy sitzmark in the middle of it.

In a recent holiday, Mike Banks and I toured the Ötztal. Starting from Obergurgl, and with the help of prolonged fine weather, we knocked off a regular peak a day, finishing with the Wildspitze and the long run down to Sölden. It was all too easy and became almost monotonous. The peaks were there, the way was obvious and well tracked, and we just bashed up them. Lack of technique did not hinder our descent. Some of the glaciers were so gentle we could just

point the skis downhill and let them go — no need to bother about turns. Anyone who had taken their ski-mountaineering text books to heart would have been staggered to watch the dozens of light-hearted people skiing over the glaciers. The peaks and glaciers must have been as safe as houses. They were certainly safer than the piste where we spent the first few days of our holiday and saw one or two casualties each day.

After this we went to the Bernina group. This was a very different kettle of fish. Here was a compact group of high peaks. There were glacier passes as well, but no long series of interconnecting glaciers to tempt one away on long glacier traverses as there are in the Oberland or Pennine Alps. The peaks dominated all. Their shapely glistening forms invited the mountaineer despite a formidable array of defences in snow and ice ridge, crevasse, serac, and icefall. We started with the Piz Palü, together with a vast concourse of Swiss. We left our skis at a high shoulder and cramponned up the East Peak. We were surprised to find that only one party followed our footsteps to the central and highest peak.

Then, having gleaned some useful information from the local guides, we went up to the Tschierva hut in the magnificent cirque formed by Piz Bernina, Scerscen and Roseg. For the first time that holiday we enjoyed a hut to ourselves. Next day, we climbed Piz Morteratsch and enjoyed a grandstand view of all the local giants, and a mountaineer's view of the hut — looking down on the roof. But what drew our attention most of all was the Biancograt leading to Piz Bernina. Of course we had wanted to climb Piz Bernina, the highest peak in the range, but the skiing route was generally considered to be too crevassed to be safe for a party of two in mid-March. I had always had an idea that the Biancograt might be a feasible winter climb but I had failed to find out anything about it before leaving home. When it had been pointed out on the way to Piz Palü, a Swiss had said "Impossible". It consists of a long narrow snow or ice ridge. We could see it was snow, and from what we had seen of local snow, and bearing in mind the long spell of fine weather, we felt it would be in good condition. But first we must find out whether it was possible to reach the ridge from the Tschierva hut. We decided to do a reconnaissance as far as the ridge next day and a full-blown attempt the day after.

Unfortunately next day I was suffering from a severe chill, and we only went far enough up the glacier to see that we could reach the

ridge up steep snow and that skis would be no help to us. I had recovered by the following morning. We left the hut by torchlight at 0430 and reached the ridge at the Fuorcla Prievlusa soon after 0800. Unfortunately, in our optimism and much shortened reconnaissance, we had failed to take into account that between the Fuorcla Prievlusa and the start of the snow ridge of the Biancograt proper there was a 400-foot rock step. In summer it is, no doubt, no more than an amusing interlude, but now — it faced north — every ledge and cranny was plastered in snow and ice. The ice was hard and slippery; the snow was granular and loose and added its measure of insecurity. Our feet and boots froze. Our vibram soles felt as hard and slippery as the wooden soles of the hut clogs. Our limbs felt stiff and our bodies were as clumsy as our ski boots. Above all we were not mentally prepared for this seemingly exposed and insecure ground. In an hour we had gained less than a hundred feet of height. There was not a hope of completing the climb that day. We turned back with the usual mixed feelings as to whether we were being prudent or merely suffering from cold feet — in both senses. Bitterly did we regret that it was our last day. We felt that with steps up to the col, a start timed to reach the col at day-break, plenty of warm clothes and a determined assault on the rocks the summit might yet have been ours. We shall have to try again another year.

Looking back over these few days in the Bernina Range, I see that skis have fallen into their proper place — an item of equipment in the mountaineer's toolbag, like crampons or piton hammer, to be taken or left behind as the mountain and conditions dictate.

POEMS

J. M. EDWARDS

Fragments of an unfinished poem. (After his brother's death, 1933)

Come softly lest he hear. You were ashamed of me.

Lay your hand over me and look us grow, up from the land. Let
Not who I am my dear . . .
Lean your head back and I'll
Speak softly lest you hear.

I feel more than he does and may not forget.

Yes you were beautiful and strong
And I'd not ask that you should know me
Lean your head back and I'll
Speak softly lest you hear.

Then he flickered and died, wearily torn from that poor carcass.

He was beautiful and so strong,
Drawn by the grey sky, over it a canopy.

Heavy-coloured soil, dead and powerful, the weight of it upon my
people.
When they laugh it is as the earth laughs, when they play it is the
earth playing.

Oh my heavy people, my so huge people, that
Are so kind, so heavy-coloured and so soiled.

Poem

July 1935

My chest is heavy in the day.
Up in the mountains when the climber'd gone
A heart still moves, and there
Are sounds the wind can't tear away
Sounds of a forest left to sigh
Among the cliffs. Why did he weep, my son?
Why were his eyes unhappy when he went?
Heavy and open like the sky?
Yet I must stay a-growing in
The hills. Yes, both alone with longing that
The winds can't break nor bear away,
Whose chest weeps heavily within.

Poem

March 1935

The sky is hard above the land,
Deep blue: the empty shell of it
And even that, so far beyond the grasp,
Warns me to keep my glances down
To where the sunlight cuts the land
Among the barren detail of the hills.

My love is wandered in the mountains
Somewhere to climb. He's gone alone
To gather berries on the heights
And gaze away to where the sea . . .
His coat is there between the tufts
And I can carry it with me.

The waters of the mountain tarn
Stand idle in the heart, and yet
The shallow stream careers and chafes
Against the shifting. All the heights
Lie knocking on the flank, and so
The shallow stream proceeds, proceeds and chafes.

Poem

May 1936

And in my eyes waved cypresses and love, half seen:
The land: its winter: there's snow on the ground
And far off the sun tints the sea with gold and green:
And calls: and beauty: and—the proud eye drowned.

But let the clouds their beauty. Let their shelf
Crest shadows, let that dark throne wave.
The mind must thresh them glorious from herself,
Carve: and for fabric have her grave.

But if you think those tears she wept
For me, could nothing lock,
Then place me tombstones where each stepped
And go. But cut them rock.

Go.

There the thin light tries
The gap again.
Where last Sunday
I stood to claim my Gods
In Paradise.

Poem

Undated. Probably about 1936

He was like a stormy sky on a flat land. For
It was a wide space, and there were pine trees on it
And other trees. And there were places where men dwelt,
And a road. There was a break among the clouds,
And the sullen cloud piled on it, with the winter's
Sun shining in, among the edges of it. And there
Was yet no rain, and there was little water.
And it was as seen from a height.
The end of so much and the beginning of so much

NUPTSE

CHRISTIAN BONINGTON

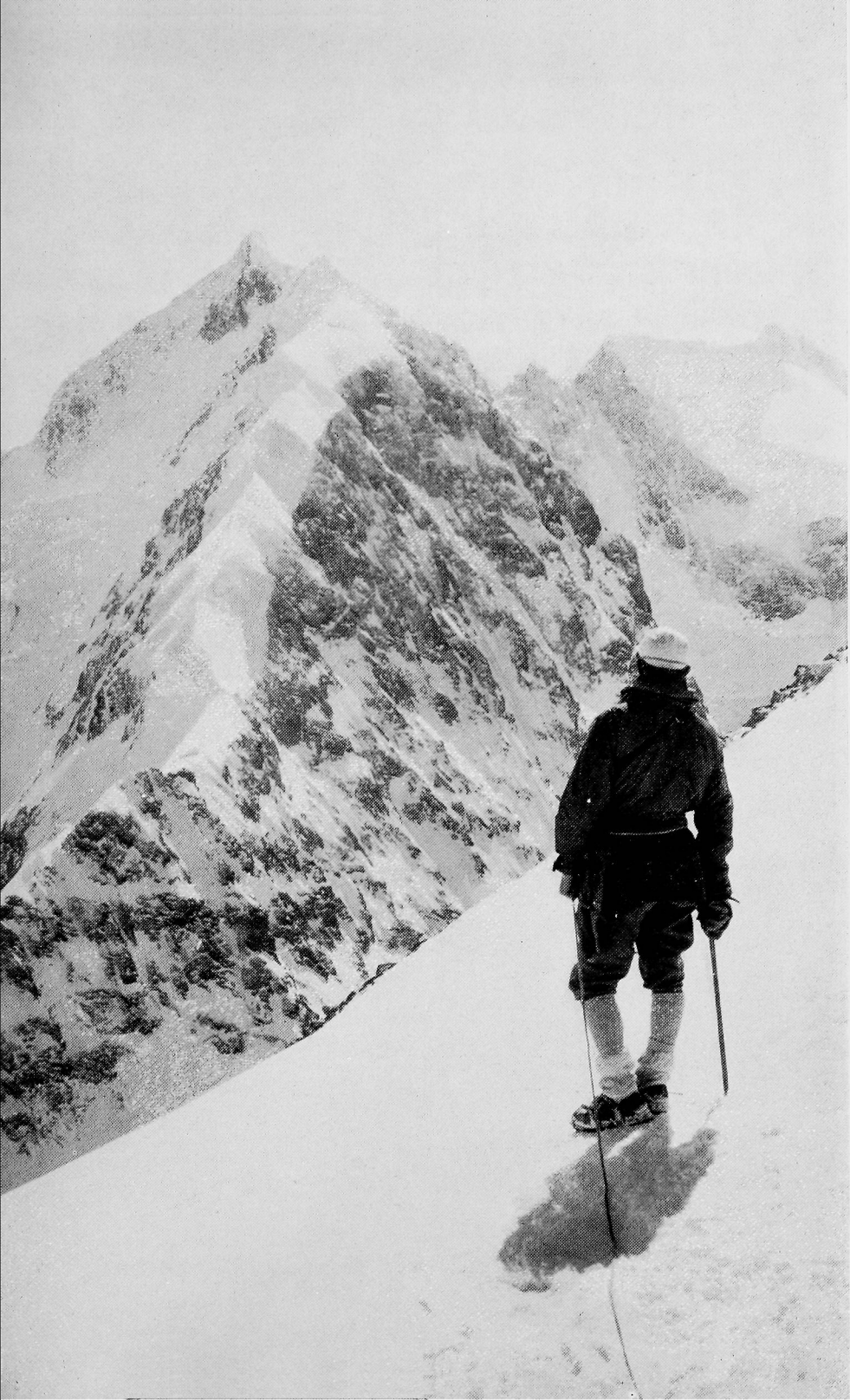
THE SOUTH FACE OF Nuptse was before us, a great wall of hanging glaciers, ice arêtes and rock buttresses, stretching for five miles from the West ridge of Lhotse. Everest, a squat black pyramid veined with snow, was just visible above the crenellated wall of Nuptse. There was no obvious weakness in the defences of this great natural fortress. Previous parties to the Everest group had used the gateway of the Western Cwm; no one had attempted to scale the outer walls.

From an examination of the face, there seemed two possibilities, neither over-hopeful. The end ridge of Nuptse, running down to the Khumbu Glacier, looked as if it might be just possible. This would, however, have meant an extremely long route, with much dangerous ground low down. Well to the right of the summit was a conspicuous snow rake, which ran up towards the summit ridge. Its upper part, however, was barred by rock walls, and from its top a long traverse, all above 25,000 feet, would be necessary.

On closer examination, we saw another possible line. To the left of the summit was a conspicuous and safe-looking couloir, leading down to a snow slope below the summit rocks. Below this was a rock band, about 500 feet high, up to which led a snow arête. If we could climb the rock band; if it was possible to reach the easy-looking snow arête, from the foot of the face, which was still out of sight; if the hanging glacier clinging to the summit rocks, immediately above our route, was secure; perhaps we should be able to reach the top. There were a lot of "ifs".

The first task was to make a reconnaissance to decide which of the three routes to choose. Once embarked on any one route, we could not hope to retreat, and have time to try another, before the arrival of the monsoon.

The party assembled at Thyangboche, only 10 miles from the South face, numbered nine British climbers and six Sherpas. Joe Walmsley, an electrical engineer from Manchester, was leader of the expedition. He had previously led an expedition to Masherbrum in 1957, getting to within 200 feet of the summit. The remainder





of the party all had wide experience in the Himalayas, Andes and Alps. Dennis Davis had already been twice to the Himalayas, in 1955 to the Rolwaling and in 1957 to the top of Annapurna IV and on Distaghil Sar. Simon Clark and John Streetly had climbed in the Andes, the former making the first ascent of Pumasillo. I had reached the top of Annapurna II in 1960, and had done such routes in the Alps as the S.W. Pillar of the Drus and the Direct on the Cima Grande. Les Brown, the youngest member of the party at 24, had climbed the Éperon Walker. Trevor Jones had done the West Face of the Blaitière, amongst other routes.

We were also extremely lucky in getting good Sherpas. Tashi, the most experienced, had taken part in the pre-war Everest expeditions. In 1955 he had carried to the top camp on Kangchenjunga and in 1960 had been with me on Annapurna II. He was a magnificent mountaineer, having behind him a wealth of experience, and his sound judgment could always be relied upon. He also had a superb physique, and was always cheerful. I shall always remember Tashi, early in the morning with a gale blowing, after a poor night's sleep, waking us up with "Tea Sahib", and peering into the tent, grinning broadly. We also had with us Nang Dorge, who went to the top of Dhaulagiri in 1960. He also was an extremely competent mountaineer and, for a Sherpa, was unusually good at handling the rope.

On 5th April Joe Walmsley and I set out with Tashi and Nima Tenzing to make our reconnaissance. The remainder of the party was to wait at Thyangboche for four days, sorting and checking equipment, before following us. I felt happy and elated as we walked up the valley beside a fast glacier river, towards our goal. On the right towered Ama Dablam, a shapely spire of ice. That night we camped at Bibr, a collection of rickety yak shelters, at a height of 15,000 feet. It was very pleasant being a small compact party.

To decide upon our route we now had to walk up to the heads of the three glaciers flowing from the South Face of Nuptse. This involved some long, tiring walks up to a height of 18,000 feet, stumbling over glacier debris. This gave us some unpleasant, though effective, acclimatization training.

After four days of hard walking we had reconnoitred every possible approach. It was not easy to decide which was the least objectionable of the three possible routes but we finally fixed upon the Central route. It was the most direct, avoiding the long high traverse offered by the other two. The difficulties seemed to be

concentrated in the lower part. If we could climb the ice arête leading up to the snow, and then climb the rock band, we had a chance of success.

We found a site for Base Camp on the west side of the Nuptse Glacier, at a height of 17,500 feet. We were some way from the start of the climb, but it was a pleasant position, being sheltered, and on solid ground below the snow line. Sitting that night by a boulder outside the base tent, gazing up at the face, so vast, so very steep, so full of the unknown, I was afraid. Here at Base Camp we were safe and comfortable. In only a few days we should be working our way up that tottering ice ridge. Would we find any camp sites? Once in the middle of the face, just how stable were the ice cliffs clinging to the upper rocks?

Across the glacier was the snow arête leading up the middle of the face. Our first problem was to climb this. On the morning of the 12th April, Walmsley and Brown set out to make a route up to the foot of the arête. They had to cross the glacier, and then climb up an easy-angled snow basin to the foot of a steep rock wall leading to the arête. The route to the col was extremely loose, and they were stopped a couple of hundred feet below the crest by a loose chimney. Meanwhile the remainder of the party, with a group of local men, carried loads to a dump on the glacier.

On the following morning Dennis and I set out intending to make a route to the col at the foot of the arête, and to spend the night there, ready to attack the arête itself. We avoided the loose chimney by cutting up an ice slope. As dusk fell we were able to put up our tent. It was a glorious evening. We were able to cook outside, soothed by the still night air, the great mass of Makalu to the east slowly being engulfed in the gathering darkness. Across the glacier was a light, where the others lay at base camp. We were alone on the mountain and now at peace. The fear was gone. Above us the line of the arête was lost in a maze of rock walls and tottering towers of ice. We were excited by its challenge, and looked forward to the morning.

For the next two weeks we fought our way up the arête. The difficulty never eased. A rock wall, 60 feet high, presented the first serious problem. A narrow dièdre, roofed by a formidable overhang, offered a possible line. I kept on my crampons. They scratched ineffectively against the rocks, as I worked my way up the crack, panting hard. With the aid of a piton, I was able to pull up over the overhang. The standard was about V.S. It all seemed too hard for the

Himalayas. Above, the ice reared above us savagely. It was hard clear ice all the way, demanding all our energy when step-cutting. We slowly made our way up, edging round and over bulges of vertical ice, fixing ropes on every pitch.

Each day the routine was the same. Crossing the route made on the previous day, with ropes fixed and steps cut throughout, progress was quite fast. Once new ground was reached, progress dropped to a snail's pace. Moving one at a time, cutting steps in the hard ice, knocking down tottering séracs, we often wondered whether we should ever get up. The arête was more like a difficult Alpine mixed route than a climb in the Himalayas. Once ropes were fixed, however, the route was safer than most Himalayan climbs. We never roped up when carrying loads, but simply clipped a karabiner attached to the waist loop into the fixed rope. This meant that a stretch which had taken several days to pioneer would later be climbed in a matter of hours.

Meanwhile the remainder of the party were carrying the loads across the glacier to Camp II at the foot of the arête. Camp I was pitched on the snow basin, to save walking from base camp each day. After 1,000 feet of climbing and four hard days' work the ridge levelled out, and we were able to find a camp site on a lip of ice clinging to a rock prow. We succeeded in putting two tents on this. Throughout the ascent of the ice arête camp sites presented a great problem.

Beyond Camp III the route was even more complex, winding its way through delicately poised séracs, along knife-edged arêtes, and even through snow tunnels. The ice was like a rotting banana skin, ready to peel from its rocky flesh at the least touch. Gaping holes appeared beneath the blows of the axe. At times, though we were 60 feet below the crest of the ridge, it was possible to peer through a hole, looking out onto the other side.

We were becoming seriously worried about the amount of fixed rope and ice pitons we were using. We had brought out about 5,000 feet, mostly of Courlene, a new plastic fibre, lighter than nylon, and ideal for the job. We had already used up a large part of this, and we were still only half way up the ice arête. Walmsley sent an urgent message to Katmandu asking for more rope. Meanwhile he brought some thin, rather suspect hemp rope, from the Thyangboche Monastery.

The struggle on the arête dragged on for over two weeks. Les Brown and John Streetly relieved Davis and myself, and established an intermediate camp three-quarters way up the ridge. They exhausted themselves hacking out a camp site in hard clear ice. Since they were not acclimatized Simon Clark and I moved up to take over. On the 26th April we started out at eight o'clock in the morning. We traversed across to some rocks, and, working our way up rock walls and ice slopes, we were able to reach the final ice slope leading to the top of the arête. We came out onto a little col. Everything opened out before us. On the arête below, we had always felt exposed and constricted; the view ahead was always restricted by the next tower of ice or rock gendarme, while below the slope dropped away steeply to the gaping crevasses of the Nuptse Glacier 3,000 feet below. Now the arête swept up in a majestic crescent, to a great prow of ice immediately below the rock band. Although we were still at only 21,000 feet we felt we had overcome the main problem.

Up to this point the weather had been perfect. However it now changed, bringing daily snow falls. Davis, Brown, Swallow and Clark with two Sherpas were established at Camp IV, at the head of the ice arête. It was difficult to make any progress at all. It was fortunate indeed that we had fixed so much rope, since without it the route would have been completely impassable. Even so, it was extremely difficult to keep communications open.

Progress was now very slow. Davis and Swallow established Camp V, only 600 feet above IV. They now tried to make a route to the Prow and up it. The party below, at IV, were completely bogged down. Down below on the lower part of the mountain it was still harder to make any progress.

Although it was only in the second week of May, we began to fear that an exceptionally early monsoon had arrived. Fortunately on the 10th May the weather began to clear, and Dennis Davis, who had been showing great perseverance at the front, was able to establish Camp VI on top of the Prow with Tashi. On the following day he climbed up to the rock band. From the Camp site a diagonal line, not obvious from below, offered a possible route through it to the snow slope above.

Davis and Tashi edged their way across rocks covered in soft snow, until a rock groove lined with ice and coated with newly fallen snow barred their way. Davis made a bold lead up this, balancing over the snow-plastered bulges. He had no protection from

the rope, for Tashi's rope management was never very reassuring. It was then getting late, so they returned, happy that they had solved the final great problem on the route. If only the weather held we should reach the summit.

That night Brown, Swallow, Pemba and I reached Camp IV. We had a council of war in our sleeping bags after supper. We had just sufficient food to make a fast bid for the summit. We still had a long way to go. Camp VI was only at 22,000 feet. It was agreed that Brown and I should move up to Camp VII and make the route to the final couloir. Davis and Tashi should do a further carry to VII and then move through to make a route up the couloir.

On the night of the 13th Brown and I were lying, precariously, on a narrow ledge we had laboriously cut in the snow, at a height of 22,700 feet. The mountains to the south were at last dropping away below us. Ama Dablam was lost in the background of ice and rock. We had not cut a large enough ledge, and as a result the tent was badly pitched and flapping wildly, threatening to take off at any moment. We had little sleep that night, and were glad to get away from the scene of our discomfort.

Our way now lay across the steep snow slope below the rocks of the summit ridge. We had to cut steps across the 45° slope for nearly a mile. Constantly bent over to swing the axe, it was harder than climbing upwards. Every now and then a spur of rock presented extra difficulties. Both of us were feeling the altitude and our progress seemed desperately slow. At last, at about four o'clock in the afternoon, we reached the foot of the couloir. It was getting dark as we staggered back to Camp VII. We were glad to find Davis and Tashi waiting for us. We piled into their cramped little "C" Meade tent, and Tashi served us with some welcome soup. We agreed to carry the tent and food for Davis the next day. They would then make the route up the couloir.

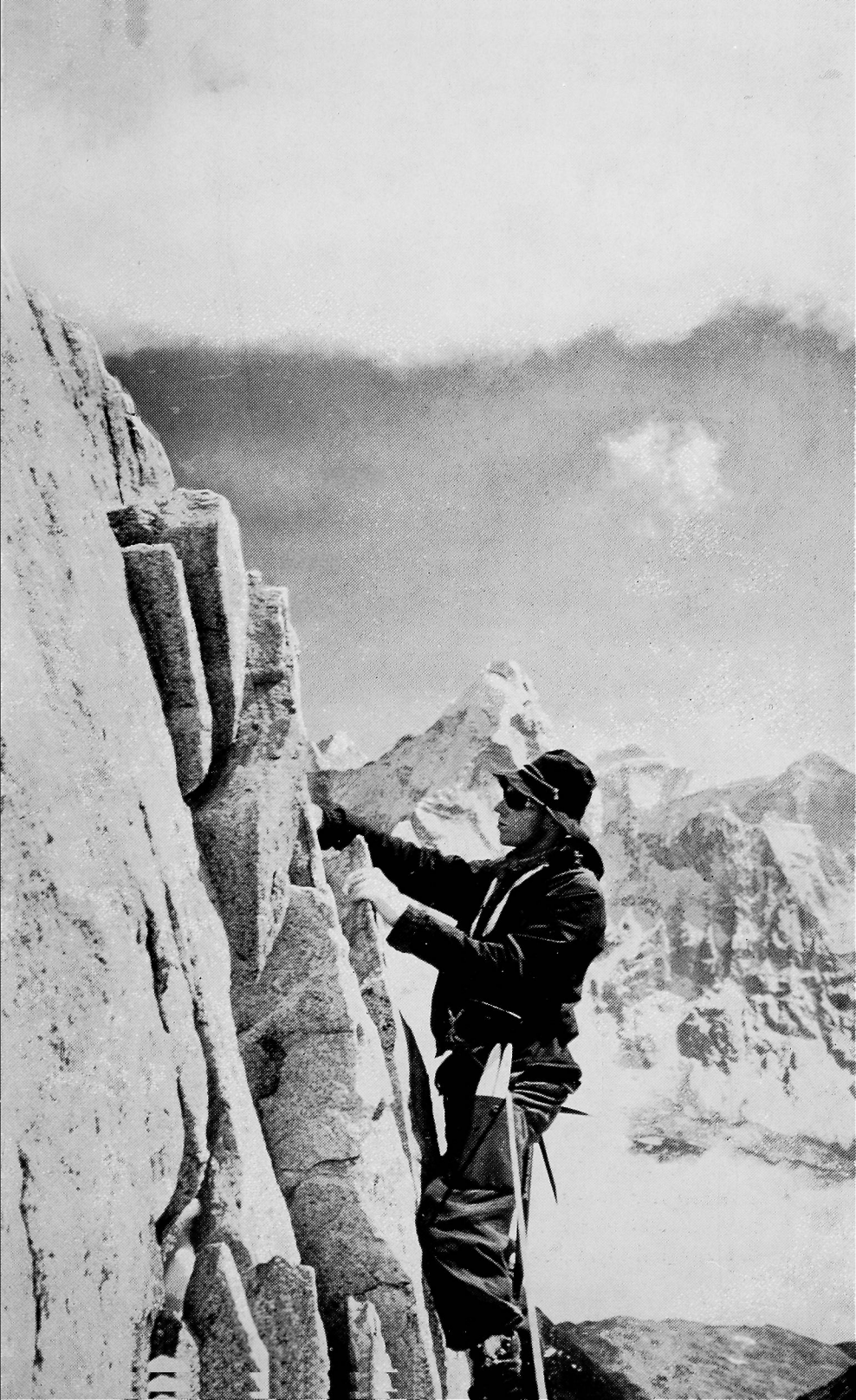
On the night of the 15th we left Davis and Tashi hacking out a camp site perched amongst the rocks on the side of the couloir. They spent an uncomfortable night, and at six o'clock the following morning started up the couloir. This stretched for 2,000 feet up towards the crest of the ridge. They cut large bucket steps all the way to protect their retreat. They led through. It was desperately cold in the shade; the top never seemed to get closer. It was one o'clock in the afternoon when they reached the crest of the ridge; the summit of Nuptse seemed temptingly close. Davis wisely decided

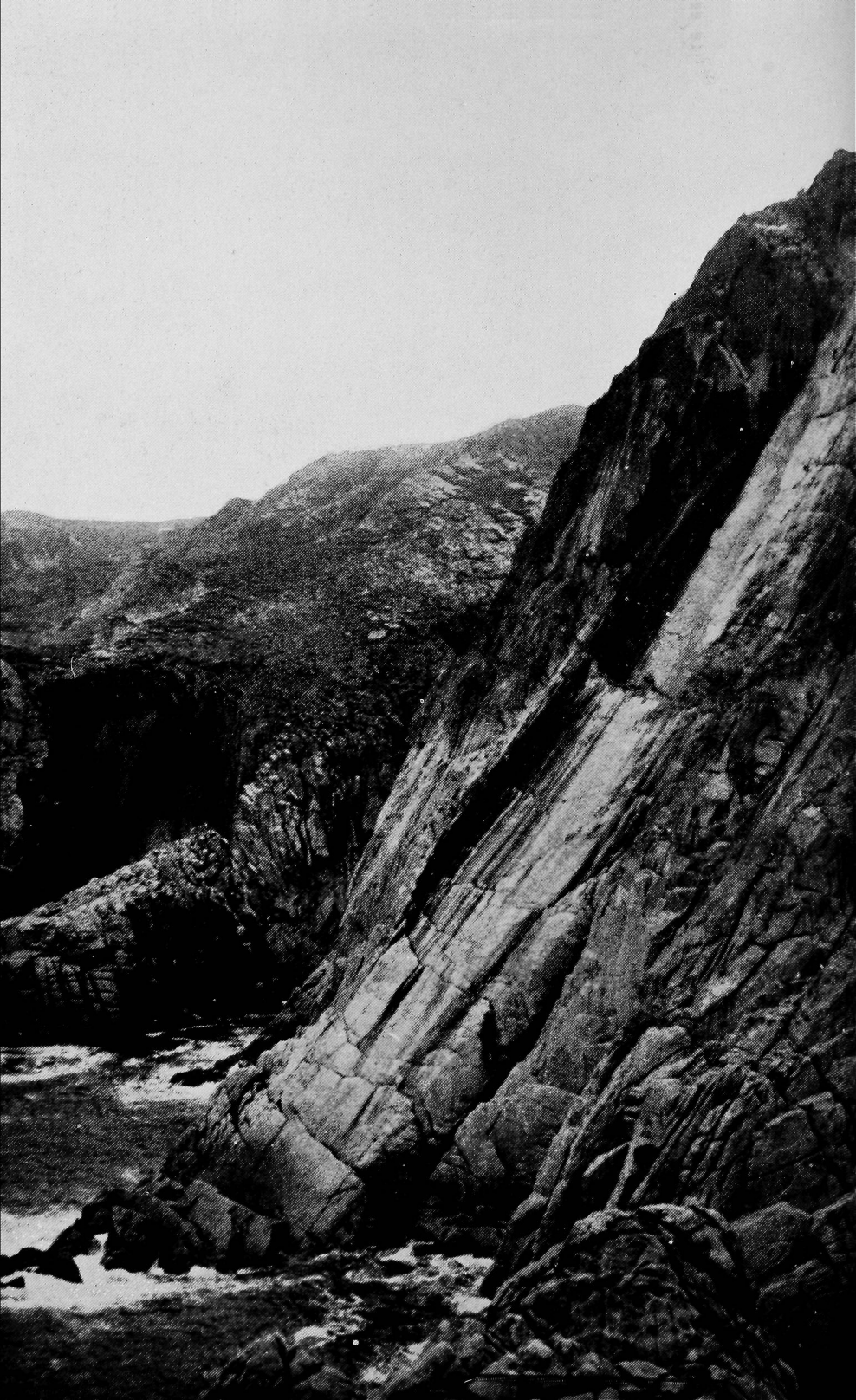
to attempt to reach it that day. He had already done a magnificent job in cutting steps up the couloir. The summit ridge proved quite easy; and at last, at 3.30 in the afternoon, they were standing on the top of Nuptse.

Just across the Western Cwm, only 3,000 feet higher, was the pyramid of Everest. To the North stretched the rolling brown sea of the Tibetan plateau, broken here and there by a white cap of snow. To the West was the jumbled mass of Cho Oyu and Gyachungkang.

The two weary climbers got back to Camp VIII at 6.30 that night, after dark. Swallow, Brown, Pemba and I were waiting for their arrival, having come up to the top camp that day. We were deeply relieved to hear them arrive, and shouted our congratulations from our two tents pitched below their site. On the next morning, the four of us quickly climbed to the summit, using the steps so conscientiously cut by Davis and Tashi. It was Pemba's first expedition as a high altitude porter, and a great achievement on his part.

The ascent of Nuptse had given us magnificent climbing. There were none of the monotonous plods through soft snow associated with the Himalayas. The climb was consistently difficult and full of technical interest. Although all the great giants might have been climbed in the fifties, there are hundreds of peaks and faces of every standard of difficulty for the mountaineers of the sixties.





A RECONNAISSANCE OF LUNDY

K. M. LAWDER AND E. C. PYATT

The *Journal* for 1960 contains a report on our exploration of the northern coasts of Devon and Cornwall from 1956 to 1959, and in 1960, besides visiting other areas, we paid a hurried visit to Lundy by tourist steamer which gave us a couple of hours on the island. In order to assess its prospects we rushed round as much of the top of the cliffs as we could manage, and indeed had to do the last mile and a half at a smart double to catch the boat for the return trip. What we saw made it clear that this is a very worthwhile area, and we decided to make a reconnaissance of it in 1961. When we started to organise this visit we thought that perhaps the authorities on the island might not be keen on the idea because of its "bird sanctuary" aspect, but application to them showed that this is not the case and that they welcome any responsible climbers.

Lundy is an island in the Bristol Channel 23 miles from Ilfracombe and 25 from Bideford — and about the first thing we learnt is that it must not be called Lundy "Island" for the "y" in its name means "island" while "lund" stands for "puffin".* It is about three miles long by half a mile wide, lying very nearly North and South, with a coast-line of granite rocks and cliffs for all except a very small portion of the southern end. The general appearance, in fact, is very similar to that of the Bosigran area of Cornwall. The top of the island is a plateau about 400 feet above sea level, three-quarters of which is cultivated and stocked with sheep, cattle and ponies. There is a small beach at the south-eastern corner where one lands by boat, either from the Ilfracombe paddle steamer or from a fishing vessel from Bideford, and bad weather may make this impossible.

Being so inaccessible and having such good natural defences the island had a wild and piratical history until comparatively recent times. On account of its position it was a great hazard to shipping, and early in the 1800's a tall lighthouse was built on one of the

*But see Ekwall, *Oxford Dictionary of English Place-names* [Ed.]

highest points, with the idea that the light would show over both the northern and southern ends of the island. It was found, however, that the lamp was often obscured by clouds, and eventually two new lighthouses were built, one at each end at a much lower level. The Old Light is now leased to the Lundy Field Society and is equipped in much the same way as any of our huts. The permanent population of the island is about 20, while the paddle steamer every two or three days in summer lands a couple of hundred trippers for about two hours — but they can't spread far in that time. Besides the few houses there are a small hotel and a general store, which latter has the "local" attached to it, and this last has no closing time. There is also a fine church, built in 1897, of which the vicar of Appledore is priest-in-charge, but it has suffered a certain amount of storm damage. Services, of course, are rather infrequent.

The island is a favourite place for birds on migration and a lot of research is done in the periods during which this is taking place. Numerous seabirds also nest on the cliffs so that climbing in the areas they frequent is not desirable in July, when young birds will be active but still unable to fly. From time to time animals have been imported and there are now deer of various kinds, goats and Soay sheep more or less wild as well as more ordinary farmyard stock.

When the sailing programmes were issued in the early spring of 1961 we picked on 2nd to 10th June for our visit. The party consisted of K. M. Lawder, P. B. Lawder and E. C. Pyatt together with C. E. Keys, J. Logan and R. Shaw, but owing to family commitments not all of them were there all the time. It was purposely not a strong party as we only wanted to make a reconnaissance of the climbing possibilities. Most of us set off from Bideford in the fishing vessel *Lundy Gannet* at 9 a.m. on 2nd June together with a few other passengers (the boat being licensed to carry 12) and miscellaneous cargo of all sorts. The journey takes about three hours and can be very rough, but we were lucky in our weather. The owner of the island, Mr. A. P. Harman, was on board, and as we reached the anchorage he fired a rocket to signalise the arrival of what was thought to be the first-ever climbing party. Later on we found that Dr. Tom Longstaff had been there in the nineties and had climbed on St. James' Stone in 1903 and again in 1927. Having got ashore with our baggage we were glad to find that a tractor had come down to take up the gear of visitors who were staying at the hotel, so we were saved three-quarters of the carry up to the Old Light.

In the following rather brief report the names used for crags, except in one instance, are taken from the map and are traditional.

The biggest climb, though not the hardest, is the DEVIL'S SLIDE (K.M.L. and J.L., repeated R.S. and K.M.L.). This is a smooth granite slab, about 400 feet high and 50 feet wide, rising from the sea to the top of the cliff, mostly at an angle of 50° but with the upper part approaching 60°. Holds are nearly all frictional and in the upper part it was necessary to lead out 80 feet or so before coming to a crack that would take a peg for belaying. To reach the start we got on to the slab at about half-height and roped down to the foot, as we didn't seriously try to find a way to cross the zawn and climb the retaining wall of the slab. Right at the top wild goats traverse across on very small holds, and jump the last 6 or 8 feet — we had to do it more cautiously. Presumably there is an exit at the top right-hand corner where the goats come in, but we didn't use this and traversed across the slab to the left, which is a better finish. We graded it as Hard Very Difficult with the last 100 feet or so Hard Severe.

ST. JAMES' STONE. This is a promontory of rock which is reached by walking over the neck connecting it to the land. There are some gullies which enabled us to climb down to sea level, and from there traverses to right and left took us to the starts of several climbs. A good deal of exploration was done here and there are numerous possibilities of routes from Difficult standard upwards. Most of the party climbed in this area, but pitch by pitch records were not kept.

Near the northern lighthouse, and rising from the land, is THE CONSTABLE, an impressive pinnacle about 40 feet high on the upper side and more than twice that where the ground falls away on the other side. The upper face was climbed by J.L. and R.S., using two peg runners, and they found it technically hard. The other face was far above the capabilities of our party.

The DEVIL'S CHIMNEY took some time to find as it is a pinnacle in a little bay below a tremendous cliff. Access is by a break in the cliff on the western side of the bay, and then over boulders which can be crossed at nearly any state of the tide. It provides 130 feet of Severe standard and was climbed by J.L. and R.S. (leading through), the route going up the western side, then working across the northern side on a ledge, inside a pinnacle on the corner, and up to the top by

the eastern side. Pegs were used, and it was necessary to descend by abseiling as time was pressing.

GANNET BUTTRESS is the name we gave to the crag on land opposite to Gannet Rock. The latter is an island to which we did not go and the landward faces look very hard. Ascent by the seaward arête should be fairly easy as in the old days it was used by people collecting seabirds' eggs, having landed from boats. On the Buttress J.L. and R.S. (leading through) made a 240-foot Very Severe route, starting at high water mark, and working up towards an open chimney with triple bulges. From there a large detached pinnacle was climbed to a ledge, thence a traverse was made to the right to an arête, and by an awkward move into an open recess and on by a slab to the top. Some of the ledges that are crossed lead round to the sides, thus providing escape routes.

The NEEDLE ROCK is a pinnacle rising from sea level, which is approached by scrambling down behind a pinnacle on the cliff opposite it. The tide was fairly low when we were there, so we don't know if it is accessible at high water. The route goes up the seaward face, starting with an awkward corner from a huge block, and it is really a one-pitch climb of 40 feet, Hard Difficult, exposed and on small holds. The remaining 25 feet to the top are easy. (K.M.L. and E.C.P.)

GOAT ISLAND is probably not accessible at high tide. Its northern side is quite easy, but there are distinct possibilities on its southern side. A route was made down through an open cave and then up via some overhangs. (K.M.L. and E.C.P.)

The DEVIL'S LIMEKILN at the southern end of the island is a fantastic funnel-shaped hole 370 feet deep and 250 feet across at the top. We took one look at this and went away, as Dr. Longstaff had done many years ago. The walls are much vegetated and seem to be loose.

Besides going to the places described above we scrambled around a great deal, and saw enough to convince us that Lundy is an area with great possibilities and an important climbing discovery. We also felt that it has an atmosphere of its own and we can strongly recommend others to go there — it is indeed something in these days to be on really good rock with no one else in sight and no other climbers within a hundred miles or so.

For full particulars of sailings, hotel accommodation, permission to camp or to use the Old Light, etc., write to

The Resident Agent,
Lundy,
Bristol Channel,
via Bideford,
North Devon

YOU'RE NOT EVEN FIT, FITZGERALD

Some Recollections in Tranquillity

KEVIN FITZGERALD

IT'S A LONG TIME since I first took a square-faced open Morris-Oxford from Mold to Madryn and talked to a group of Welsh farmers about high productivity grass. In those days it was all right to puff a bit as you came to a demonstration field just below the 2,000-foot contour and to say to the farmer "It's a bit slippery in these shoes, Mr. Jones", to which he might reply "Slippery all right, isn't it". And that was that. None of this nonsense about "Well, we've only been out nine hours and I don't see any point in getting back to P-y-G just because you want to make a beast of yourself; who wants a drink on a lovely frosty night like this"?

They can't surprise me now. It's a power of years since a dear, never-to-be-by-me-forgotten girl at P-y-G went crying to Mrs. Briggs "They've taken him out *again* and he'll come back tonight all old and exhausted. They'll *kill him* Mrs. Briggs. Please don't let them". Yes, they'd taken him out again had Hilton Jones, Moulam and a nameless gritstone specialist from Sheffield University. It was an easy day. We walked from Helyg to the foot of Amphitheatre Buttress, which I reached as near finished as it is possible for a man to be while still on his feet. I came off on the third pitch, or whatever that bit is where you emerge from a little sentry box, on the wrong foot, and find yourself hanging over the valley. I tried to explain to Moulam, who was hauling me upwards, and to Hilton Jones, who was talking me upwards, that I was too exhausted to get back on to the climb. At the stance I hung on to a bollard (facing inwards) until it was time to try the next pitch. I came off on that as well and they took me away. Hilton Jones said he'd walk back with me while the others went on. Half-way up the col I fell over pointing out that I very much doubted if I could go any further. Hilton Jones explained that there would be no volunteers for a tunnelling party and that as

he could not carry me by himself I had better get up and walk. "When you feel a bit rested, of course" he added. The next thing I remember I was talking to Trevor Matthews' mother outside P-y-G. I can still hear her saying "How late it is; what a lovely long day you all must have had".

It was soon after that that Hilton Jones thought we ought to attend a mass protest meeting in Beddgelert about the threat to Snowdonia from people walking over Crib Goch or fishing in Lake Idwal or leaving sardine tins on Tryfan. I can hear him now as he said "We'll drop on the meeting from the clouds, FitzGerald; get your boots on". Many hours later we had done all that and it was time to go home. There were scores of motor cars leaving for P-y-G, or points adjacent, but they were not for us: we were out for a walk. Hilton Jones made the return easy for me — we are, after all, what is laughingly called friends — by sticking to the road but at something known I believe as the Commando Jog or similar words conveying fast roadmastership. This time I got nearly to the top of the old road, with P-y-G as it were almost in my sights, before crumbling in a heap beside the hedge. That was when I heard it for the first time. "You come out for a breath of air in these little Welsh Hills and you're not even fit, FitzGerald".

I was to hear it often again. There is hardly a summit cairn in Snowdonia which has not been a silent witness of reproaches levelled at my physical condition. I have heard them when up to my waist in snow or my knees in water. They have rung out in shameful circumstances as climbs were abandoned or amidst general laughter as I picked my way across some scree-littered face on my ankle-bones. I once came down from Snowdon on the railway and was made to feel like a man in brown shoes at a Hunt Ball.

"I don't remember him going as well as this ever before" Longland Senior once remarked to Hilton Jones on another of these Amphitheatre Buttress larks. While they were all climbing it two doctors (one of science and one of medicine) came and sat beside me. I wasn't so bad that time. I was able to set out for Helyg after less than two hours.

There used to be legends about "happy fit parties" — I quote — "lying out on Heather Terrace eating bilberries in the glorious autumn sunshine". I have not heard so much about these lotos-eaters since I was able to make my own more or less regular way along that bleak gash in the side of Tryfan. As everyone knows who

has been there, the entire forbidding area is the acme of discomfort, and as far as I know it is always raining. Once, not content with dragging me there, via an initial pipe opener with Moulam on Little Tryfan, they led me to higher ground along a kind of elevated sewer appropriately called Basket's Gully. On the way down (deserted as usual by my fast-moving friends) a rather nice-looking chap in a decent blue suit and a bowler asked me if there were any good walks round about. I said no, not really, not unless he was fit.

I think I got a bit better as the years went by, and things began to seem natural which, to non-members of this Club, might be a trifle bizarre, like walking up Snowdon three days running in case one of my friends wanted to go "out" at the week-end, or going on to the top of Tryfan "because it would be pleasantly more difficult, then, to decide which way to go back", or spending so much time on the summit of Lliwedd because the smog bank over Liverpool was so beautiful in the February sunset that it took four hours to get down in the slippery frozen dark.

How it all comes back to me as I sit typing this. The wet, the cold, the slush, the longed-for going down which is always worse than the endless going up, the roping-up and the being roped down, the scree running, the winter glissading, angry dogs, frightened sheep, a wonderful pig which scared three "tigers" but quite liked me, wading rivers and struggling up waterfalls, eventually and after many years doing the traverse on Geoffrey Winthrop Young's climb which I had once watched done in four perfect styles by four perfect rock artists, losing my trousers on Pulpit Route on the Milestone and hearing David Cox say as he used my head for a foothold on Stanage Edge "This is a classical situation; what a pity I'm not wearing nails".

And some lighter moments. Catching endless undergarments during a five-hour wait at the foot of Monolith Crack: four parties did the Zig Zags while I stood there, one of them eating my packed lunch just after six o'clock. Lying on a stretcher on Bangor platform while face after face peered down at me saying "Fell off something, that's what he done", each face getting the reply "The doctor thinks it's lumbago". Night trips up with Lorimer Richardson and the bliss of bird watching in ordinary flannel trousers and walking shoes.

Some people. The old bar at P-y-G full of blackbearded foresters matching each other in trials of strength at two in the morning; a young man swathed in rope consulting an altimeter on top of

Glyder Fach; a woman screaming through the fog near the top of the Snowdon Zig Zags; Maurice Guinness persuading men old enough to know better into what he calls "Deeds"; some of the climbers who are not with us any more and some who just got tired of it and disappeared from our lives.

And the nonsense. There must be dozens of engagement rings lying about in Snowdonia hurled there by ladies who saw in time that the cliff always comes first. The lower road from P-y-G to, say, the lane up to the power house has been the scene of more consultations, recriminations and beginnings - again, I should think, than any similar stretch of track in the world. There are crags everywhere which are the very sounding boards of love. It is not safe to plead a cause "twixt stance and stance on Chimney Route" lest your secret be boomed into the ears of cynics reclining by Cloggy Lake, and this is true of most of the climbs in Cwm Silyn and all of them round the Devil's Kitchen.

I've been on a lot of mountains since I first learned how to give the full "Chatterley" flavour to words like Pig Track, Bwlch Moch, Craig yr Ysfa and hundreds more. I cheated on them all of course, using trains, motor cars, the arms and legs of friends and any local help in bottles that happened to be lying about. But I've been on Hymettus and Parnassus, on Blue Mountain Peak in Jamaica, and Soldier Summit in the Rockies. I have walked on the wonderful Skyline Ridge in Virginia (none the worse for having a Freeway to 6,000 feet and for being one of the great tourist attractions of the United States), and I have seen the Mile-High City of Denver from a mile above it. And all of that, and the Pyrenees too (for I do not count Switzerland in the twenties, footling about on skis when I might have saved the money and learned to climb), began with the first abortive attempt to walk up Snowdon with the first of scores of mountain friends all united over the years in demonstrating the truth of that first despairing cry from Hilton Jones "You're not even fit, FitzGerald".

THE CARN GALVER MINE

JOHN AND RUTH NEILL

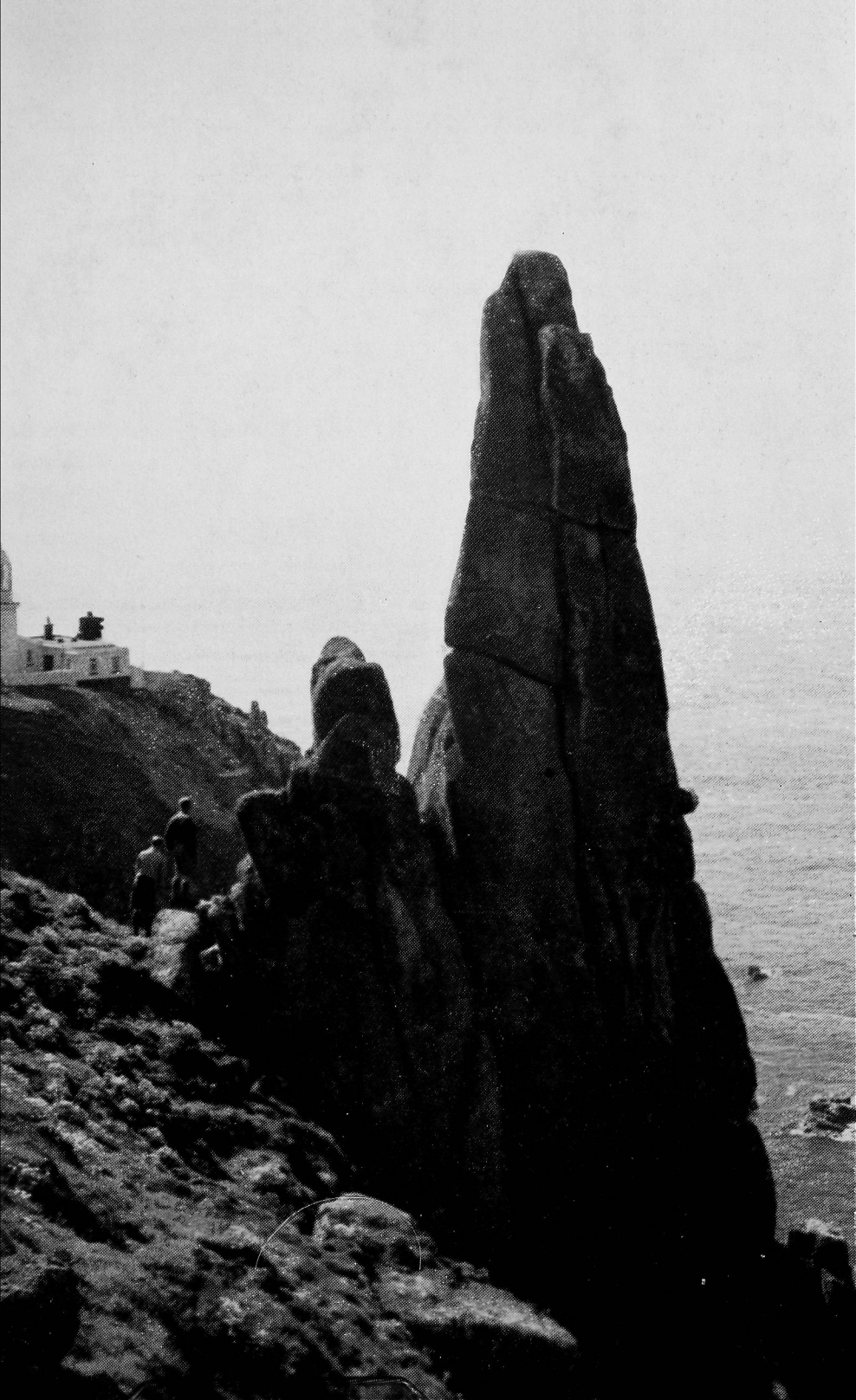
EDITOR'S NOTE: I am indebted to my wife for doing practically all the work in the preparation of this article. We have been interested for some time in the history of mining activities in various climbing districts; the present article concerns a mine which will perhaps be that of most interest to members of the Club, in view of the past association of our Cornish hut with it. Next year, if all goes well, we hope to deal with the copper mines on Snowdon.

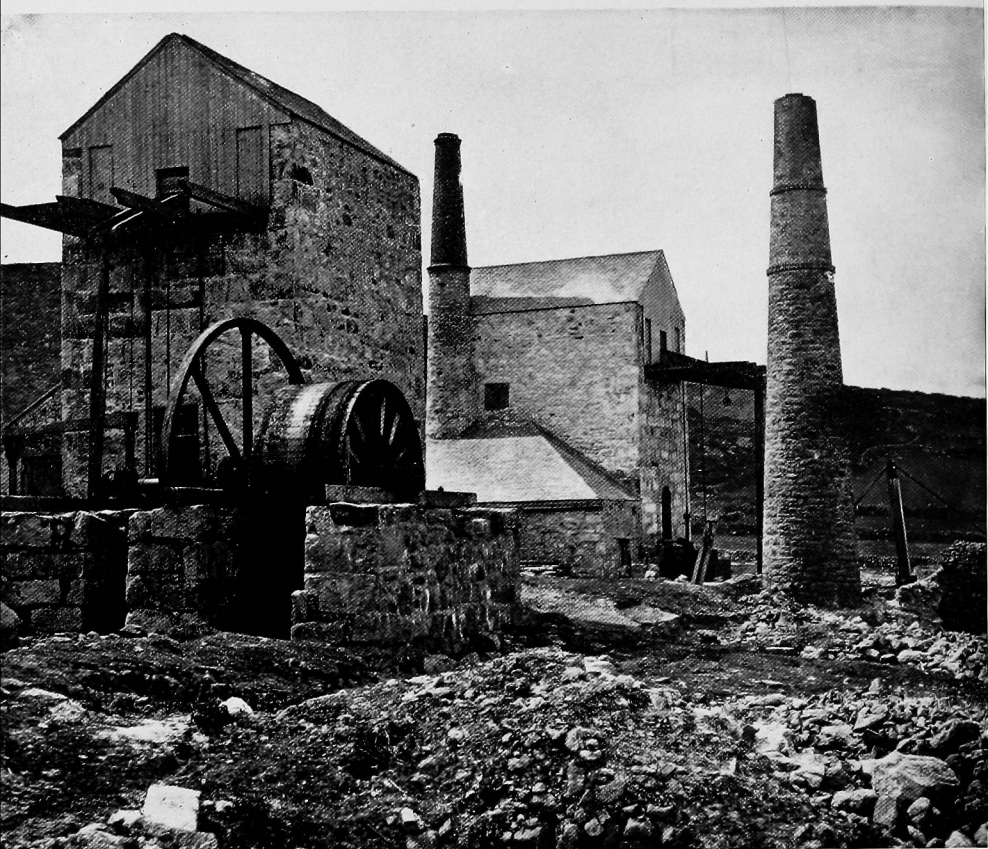
The building now known as the Count House, Bosigran, and used as a hut by the Climbers' Club, was originally the counting house of the Carn Galver Mine, a small mining concern operating during the middle years of the 19th century.

The common between Watch Croft and the sea is honeycombed with mine workings. It is uncertain how old many of them are, for tin workings in the parishes of Morvah and Zennor are mentioned by writers in the 17th and 18th centuries and tin and copper have been mined in West Penwith since prehistoric times. The earliest tanners worked in from the cliffs wherever the tin lodes were exposed, or else dug into the veins from the surface where they outcropped.

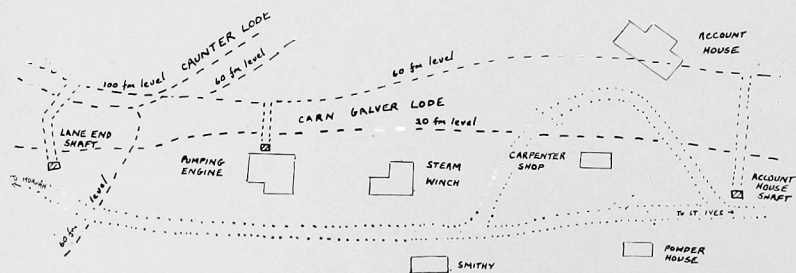
Deep mining was impossible until the introduction of pumps driven by steam power, for water was the miner's greatest enemy. The ruined engine houses which once pumped water and hauled the ore to the surface may be seen all over Cornwall, and there are two outside the Count House, besides those on Watch Croft and Morvah Cliffs.

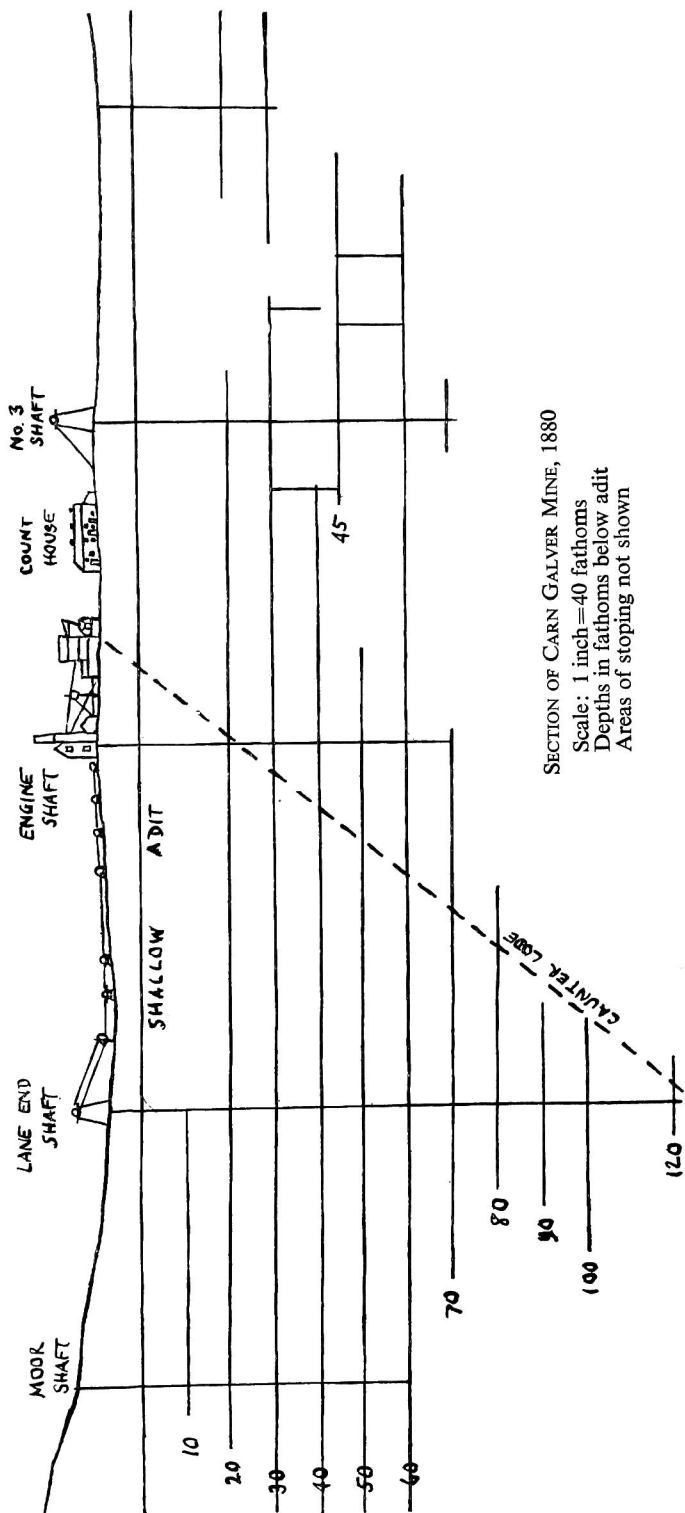
The Carn Galver Mine consisted of workings on two tin lodes, Carn Galver Lode, named after the ridge to the east, and Caunter (i.e., counter) Lode which crosses the main lode roughly at a right angle. The course of Carn Galver Lode is N. 30°E.; it is crossed in the middle by Caunter Lode, N. 8°W. The shafts on Carn Galver Lode are still visible, although blocked up for safety. The first, Roscorla's Shaft (20 fathoms), is 200 yards S.S.E. of Rosemergy on the slopes of Watch Croft, then come Moor Shaft (60 fathoms deep); Lane End Shaft (120 fathoms), on the north side of the road; Engine Shaft (70 fathoms), beside the engine house; Account House Shaft (70 fathoms), beside the eastern driveway to the Count House;





CARN GALVER MINE
IN THE LATE NINETEENTH CENTURY
(Taken from outside the Count House)





Flat Rod Shaft (30 fathoms), on the opposite side of the road. The depths of these shafts are given *below adit level*, the adit level being for drainage purposes and the working levels being driven at intervals of 10 fathoms below it. As the adit level is at about 10 fathoms below the surface Engine Shaft, for example, is actually about 780 *feet* deep (a fathom is 6 feet). No shaft is exactly vertical because the lodes dip about 18° and the levels are driven along the course or strike of the lode.

Little is known of the earliest mining company to work at Carn Galver. In 1838 a 40-inch pumping engine was in use, and more than 100 persons were employed in the Morvah and Zennor mines, but it is not until 1851 that a specific reference to the mine is made. In that year a new company leased the mine, the principal adventurers being Messrs. Coulson and Wallis of Penzance. Coulson was a grocer, but had interests in other mines in the district. He was also something of an engineer, for he invented a "hydro-pneumatic ventilating apparatus" for use in the deep adit which the new company was driving southwards from the cliffs in Porthmoina Cove. According to the *Mining Journal*, 13th October, 1855, "In applying this to the adit end no light would burn owing to the atmosphere being so foul, and the air tube was consequently carried in, in perfect darkness, the men feeling their way. After the apparatus had been set to work six men went in with their candles when it was found that at 4 feet from the end the current of air was so strong that the lights were blown out."

A condition of the lease was that the mine should be worked on the cost-book system. The adventurers (men who were willing to invest their money in a mine), having first secured the lease of an area of mineral-bearing land, would then decide on the number of shares each would take. A call of, say, £1, would be made on each share, and that amount of money could then be used in working the mine. If at some later period more money was needed then a meeting of the adventurers was called and a further call made on each share. This went on until the company either failed because the shareholders would advance no more money, or made a profit. Profits were shared out among the adventurers, and nothing was kept in reserve for the mine to pay its way if the price of metal fell. Many mines in Cornwall were abandoned because funds came to an end in this way.

The grant of the mineral-bearing area, or sett, allowed the company to "erect count-houses and engine-houses", so the present

Count House probably dates from this period — the 1850s. The earlier plan of the mine, which is not dated, shows the building much as it is now. The present main room was a store for materials and the coal store was the stable. Between them was the count house, where the mine records and accounts were kept. Outside, near the road, stood a carpenter's shop. Beyond this but on the other side of the road was the powder house, one wall of which still stands. A further small building near the stream whose remains are still visible was the smithy, where repairs to ironwork used in the mine were carried out.

The two engine-houses shown on the older plan were apparently demolished between 1850 and 1880. The shafts beside them were blocked up. The two large ruined buildings to be seen now are the engine-house and steam-winch shown on the 1880 plan of the mine. The steam-winch raised tinstuff from the deep levels up the Lane End Shaft to the surface. The other steam-engine worked the pump draining the mine, raising the water to the adit level so that it might drain away into Porthmoina Cove.

Tin ore is mixed with other minerals when it is taken from the lode; the removal of the tin proper is a process known as "dressing". Up until about 50 years ago women and children, as well as men, worked on mine dressing-floors as the work was fairly light. The women, known as "bal maidens", usually wore distinctive clothes of long dress, long white apron and large cloth bonnet. Several were employed at Carn Galver.

Before the ore could be dressed it was broken up with hammers into uniform pieces and then carted off to the stamps for further crushing. The stamps were a series of hammers worked by steam or water power which crushed the ore into fine particles like sand. The tin was then separated from the other minerals by washing processes and settling tables. The stamps at Carn Galver were by the stream between the road and the cove. The dam which can still be seen held the large quantities of water necessary for the stamping and dressing. Just above the spot where the stream falls into the cove are the extensive ruins of the water stamps, together with the obvious wheel-pit of the water-wheel which worked them.

The resulting "black tin" (as opposed to "white tin" or smelted tin) was taken by road to the smelting works run by the Bolitho family at Chyandour, near Penzance. Some records of sales from Carn Galver

Mine have survived; in 1874, for instance, 15 tons of black tin were sold at prices between £50 and £57 per ton.

A paybook of the years 1874-5 has also been preserved, and records the wages of the various miners and surface workers. Wages were paid monthly. The agents or "captains", who managed the work above and below ground, were paid from £2 to £8 a month; tindresser (man) £1/12/11, (woman) 14/-; a woman named Catherine Thomas "for attendance at the Count House", 10/-. Various expenses are listed — a Poor Rate to Zennor Parish, £1/7/-; the Cornwall Candle Co., £3/18/9 (work below ground was done by candle light); 50 tons of coal at 8/4d. a ton were purchased from the nearby Ding Dong mine.

The workers below ground were divided into small groups who worked together. They were known as either "tut-workers" or "tributers". Tut-workers worked a length of a level for a sum of money which had been previously agreed upon at the beginning of the month, which might be entered in the paybook as "Thomas Jenkin and Co., driving the 60 fm. level 2 fm. 3 ft. 0 in". Tributers worked for a proportion of the value of the tin they actually mined, so one finds entered "Andrew Eddy and Co. Tin £8/12/11". The tributers might earn far more money than the tut-workers if they happened to be working a rich lode, but if the lode should suddenly fail they might well receive no pay.

The dangerous nature of the work of these men is reflected in the deduction of a few pence each month for "doctor" and "club". The miner did not have to pay these, but if he did so he would receive free treatment from the mine doctor, and if he should be obliged to cease work for a time because of injury he would receive money from the club. Injuries were only too frequent in the mines. While there was not the danger of gas explosions which occur in coal-mining there was the possibility of blasting accidents, falls from the ladders by which the men descended into the mine, or roof-falls in bad "country". The burial registers for the parish of St. Just show that for the decade 1840-9 the average age of the 600 males who were buried there was 25 years 8 months. This was mainly due to the insanitary and overcrowded dwellings in which the men and their families lived, with various pulmonary diseases being the chief cause of death. The standard of living was low, the chief item of diet being bread. Meat, the poorest quality costing about 11d. per pound

at this time, was a great luxury for a poor family, hence the Cornish Pasty, which contained vegetables and little or no meat but made a convenient lunch for the labourer.

The western mines began to decline in the 1860s, mainly due to the great discoveries of tin and copper ore in the Americas and their introduction upon the world markets. Prices of Cornish ore began to fall steadily, and during the 1870s mines closed all over Devon and Cornwall. The Carn Galver Mine was run by the adventurers until 1875, but then underground working ceased and only tin ore derived from "leavings" and "burrows", i.e. rock hitherto waste from the dressing floors and dumps, was sold. This was of a very low quality and was produced by a few labourers working together — Edward Winnan and Co.

Some time after this the smelting firm of Bolitho took over the mine, together with Ding Dong Mine and others in the vicinity. In 1880, however, they abandoned all working, and the plans of the mine were deposited at the Mining Record Office in London, as was required by the Mines and Quarries Act, 1872. The 1880 plan shows that extensions had been made to the Count House, besides indicating the full extent of the underground workings.

No further mining was carried out after this, although a London syndicate was apparently considering doing so in 1908 but nothing came of it. During the 1939-45 war the mine was named in the general Development Plan as being worthy of investigation, but no work was actually undertaken.

ACKNOWLEDGEMENTS

The photograph of the Carn Galver Mine is reproduced by kind permission of A. K. Hamilton Jenkin, from his book *Mines and Miners of Cornwall*.

The plan of the mine is reproduced by kind permission of Mrs. Inez McNeill, part owner of the mineral rights, and of the Mining Record Office, Ministry of Power, London.

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The Mining Journal.

MOELWYNION

An interim guide to the lower crags

J. R. LEES

EDITOR'S FOREWORD

Some historical notes are called for to introduce this guide. The first known climb in the Moelwynion was on Cnicht, apparently the South-east Buttress (not covered in this guide), being referred to by G. B. Bryant in 1894. Climbing in the Moelwynion was mentioned in 1919 by G. D. Abraham but it is not clear what his party did; apparently their activities were confined to the unsatisfactory north side of Moelwyn Mawr. In 1928 C. F. Kirkus put up on Clogwyn-yr-Oen one of the best routes in the district, which has since become known as Kirkus's Climb. He returned the following year for two routes on the upper cliff of Moel-yr-Hydd (not covered in this guide). In 1932 R. Elfyn Hughes, as a schoolboy on holiday at Blaenau Ffestiniog, started a series of visits to the cliffs, during which he climbed Kirkus's Climb (which he was not then aware had been done before) and put up a large number of routes on nearly all the cliffs of the area, to which he returned and added more in the 50s. In August 1934, too, C. W. F. Noyce as a schoolboy climbed on Craig-yr-Wrysgan and made a climb of Very Difficult standard, but cannot now remember exactly where he went.

In 1948 Showell Styles started exploring the cliffs with parties of Boy Scouts and others, and made many routes up the obvious and easier lines. In the early 50s the Snowdon South and West guide was first projected, and Styles produced a draft section on the Moelwyn group for this. At this time, however, Climbers' Club members began to devote attention to the cliffs and to try more difficult lines, the impetus largely coming from A. J. J. Moulam; on one day during the Club's Easter meet in 1953 14 new routes were made here. Local Welsh climbers, from the Clwb Dringo Porthmadog, also carried out exploration, in particular being responsible for three good routes on Craig-yr-Wrysgan. To take account of these developments Styles produced a revised draft of his guide-book section, being helped on the harder climbs by C. M. Bramfitt, D. P. Davis and others. But the exploration of other parts of the Snowdon South and West area continued, and the material available became too great for one volume. As a start an interim guide to Cwm Silyn and Tremadoc was produced, and plans were made for three final volumes instead of the original one; the first, *Snowdon South*, was published in 1961. These developments, and continued explorations, caused repeated postponement of the appearance of a guide covering the Moelwynion. So Styles' draft guide-book section was never utilised for publication; but his efforts were not entirely wasted, as copies of it had some circulation and have led others to the cliffs to repeat old climbs and make new ones. Our sincere thanks are due to him for his labours on behalf of the rest of us — which have provided a basis for the present guide.

Since these events of 1953 Climbers' Club parties have continued to visit the cliffs and add new climbs, mainly on Clogwyn-yr-Oen and Craig-y-Clipiau (the main south crag of Craig Nyth-y-Gigfran), but on the other cliffs too. Others have come, repeated old climbs thinking them new and so giving them new names, and added new climbs. Thus R. James started climbing on Craig-y-Clipiau around 1955, with R. L. Roberts and also with his "Gannets", and repeated and renamed most of the existing climbs there, also doing new ones, of which Mean Feet and the Girdle Traverse are among the finest and hardest climbs in the area. R. L. Roberts and others of the Mountaineering Club of North Wales, particularly G. Dwyer and A. F. Mason, went to Craig-yr-Wrysgan and put up a completely new set of lines. Thus on this crag there were three conflicting sets of routes, made by Clwb Dringo Porthmadog (and Styles), Climbers' Club and Mountaineering Club of North Wales parties. A difficulty in compiling the present guide has been to reconcile these (as also on Craig-y-Clipiau, and with nearly all R. Elfyn Hughes' routes); but an attempt has been made to describe the best lines, irrespective of their history, but to give credit to the earliest party on a particular climb and to use their name for the climb where appropriate.

Other arrivals on the scene have been the University College of North Wales (Bangor) Mountaineering Club, with their hut in Cwm Orthin, and J. R. Lees with the R.A.F. Valley Mountain Rescue Team. Lees found the Moelwyn cliffs of particular value in training the men of his team, and for their use prepared duplicated notes on the climbs; he has added new climbs and improved the lines of old ones. Finally, in 1961 J. Brown visited the area and contributed his typical Overhanging Crack on Craig-y-Clipiau.

It will be a year or two yet before *Snowdon East*, the permanent guide including the Moelwynion, can be published. In the meantime Lees has made his notes available, in the form of the present interim guide, for which he earns our gratitude. Exigencies of space did not permit inclusion of all the crags on the east side of the Moelwynion; thus the upper cliff of Moel-yr-Hydd is omitted, and of the cliffs forming Craig Nyth-y-Gigfran only Craig-y-Clipiau could be included, but all the best climbing is on the crags which are written of here.

JOHN NEILL *May 1962.*

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MOELWYN GROUP

POSITION AND CHARACTERISTICS:

The Moelwyn ridge runs roughly south to north in the rugged country between Beddgelert and Blaenau Ffestiniog; Moelwyn Bach, Craig Ysgafn, Moelwyn Mawr and Moel yr Hydd, in that order, are the summits. Beyond Moel yr Hydd to the north-east across the deep gap of Cwm Orthin is Craig Nyth-y-Gigfran. All the climbing lies between the 1,250-foot and 1,750-foot contours on the eastern flanks, except for some short climbs on the west face of Craig Ysgafn.

The eastern crags may be considered as in two tiers, those under the summit of Moel yr Hydd (the upper crags), and those running south-west to north-east just below the level of Llyn Stwlan, the lake which forms a convenient landmark above the southern end of the crags (lower crags). The lower crags form seven distinct buttresses.

The rock has characteristics differing sharply from those of the northern areas. It is usually sound, steep, and extremely rough, with incut holds. Grass and lichen grow freely, and in wet weather the holds are greasy. The positions are good and the outlook wide and exhilarating, though it has to some extent been spoiled by power schemes.

THE LOWER CRAGS

The crags stand above the new road which leads from Blaenau Ffestiniog to the Llyn Stwlan dam, and are described from right to left. When approaching from Tan y Grisiau the first crag, *Craig yr Wrysgan*, is readily identified by the old quarry incline running up to and through its south-western end. Next there comes a large indefinite mass of rock which was once dubbed Craig Dau, but is now believed to be *Pinnacle*. Beyond the stream (67450), where the road becomes level, is one of the most imposing of these crags, *Clogwyn yr Oen*. Higher and to the left of it lies the *Quartz Slab*. Then comes the vertical *Clogwyn y Bustach*, beyond which the hillside becomes broken by many small outcrops. The road now rises in hairpin bends and almost comes up to the foot of *Craig Fach*, which stands at about the same level as Clogwyn y Bustach. Above, near the N.E. shore of the lake, is *Craig Stwlan*. Carreg Blaen-lym, or Heather Buttress, a large crag, is broken and disappointing, lying on a spur of Moelwyn Bach, about a quarter of a mile south of the dam.

Across the Cwm Orthin gap is *Craig Nyth y Gigfran*. This consists of three sections, a northern broken and vegetated buttress in depressing surroundings hard against the spoil-heaps of the Oakeley slate quarries, a central section (Clogwyn Holland) consisting of a large expanse of rocky hillside facing east and with one principal fairly solid crag directly above the bacon slicer factory in the valley below, and a south section, *Craig y Clipiau*, overlooking the Cwm Orthin gap.

CRAIG YR WRYSGAN (67954545)

"The crag of the scrubby growth (tree)"

This large crag extends from the tunnel of the quarry incline (on its left) to the Cwm Orthin gap. Just left of the centre is a large grassy bay with a big quartz slab above, surmounted overall by a vertical corner, Honeysuckle Corner. To

the left of this line are found many heathery ledges, while to the right clean rock provides most of the routes. Below and right of the grassy bay is an overhanging crack with a holly above it; there is a second holly in a recess 40 feet higher and to the right of this. Y Gelynen takes a line between these two. Much farther right is a huge green corner beyond which is a short steep buttress of three riblets with the obvious V-corner of Y Gilfach on the other side.

The climbs are described from left to right. On this crag it would appear to be possible to climb it by many lines to the left of the big quartz slab; therefore the only climbs described in this area are two of the earliest recorded, which do follow definite features: Y Drafel and Evasion.

1. Y DRAFEL. 295 feet. Very Difficult.

Takes the flat rib which is clearly delineated on its right by a grassy corner gully running down into the large grassy bay. The slabs of this rib are on a higher plane than the main quartz slab. The start is at a cairn 60 feet left of the steep 10-foot crack which leads to the grassy bay.

(1) 40 feet. Two short slabs trending left to a large ledge. Inserted chockstone belay on the right or a large flake higher on the left.

(2) 25 feet. From the flake move up, step left and then return to a small stance directly above.

(3) 60 feet. Go straight up the slab above, delicate, to a large flake belay overlooking the corner gully.

(4) 60 feet. Y Drafel (= the slate-trimming blade). The sharp edge of the pinnacle leads in 30 feet to a big ledge, with a block belay higher. One can scramble off here, or:

(5) 60 feet. The 15-foot wall above can be climbed by the crack, or avoided by scrambling a little right.

(6) 50 feet. The pleasant quartz slab above leads to the top of the crag.

First ascent: 2nd June, 1953. D. H. Jones, G. Williams.

2. EVASION. 175 feet or 235 feet. Difficult (harder variations available).

This climb goes up from the grassy bay and evades the challenge of the big quartz slab by an obvious fault going out to the left, left of the nose which contains this side of the big slab.

Start either by scrambling into the grassy bay or by climbing the steep 10-foot crack. Go left up grass from the top of the crack to a good thread in a short vertical corner.

(1) 80 feet. Step down and walk right to where the rocks above become more amenable. Up left across a slab to grass below the left corner of the big quartz slab. Belay in the Bluebell Bower, below big blocks.

(2) 40 feet. Step round the corner on the left and go up past the dubious blocks and a gorsebush. A tricky move leads to a grass ledge on the left, where one can belay to an unsatisfactory chockstone.

(3) 15 feet. Traverse left to another grass ledge and belays.

Now one can escape left 40 feet to easy ground or take the **DIRECT FINISH**, Very Difficult (2A):

(4a) 40 feet. Step up the overhanging corner into the shallow chimney and go up to a belay round a boulder.

(5a) 60 feet. Easy rocks to the foot of a steep tower, which is avoided on the left. Gain the final arête by a steep wall;

or, still better, one can take the TOWER FINISH, Hard Severe (2B):

(5b) 20 feet. Easy rocks to a stance below the steep tower.

(6b) 40 feet. Climb it up good holds on the front face. Not hard, just steep.

First ascent — original line: 15th June, 1952. M. J. O'Hara, S. Styles, D. Esmond.

direct finish: 3rd May, 1953. D. H. Jones, G. Williams.

tower finish: 23rd April, 1961. J. R. Lees, R. R. Wilson
(although R. L. Roberts had previously
climbed this tower a little further left — see
Agog).

3. AGOG start. Very Difficult.

Evasion can be improved by this variant; it is a more direct line to the chimney of Evasion Direct, and thus gives a separate climb when that variation and the Tower finish are taken, as on the first ascent.

There are two short walls set one above the other, between the easy way to the central bay and the start of Y Drafel. The upper wall has a vertical crack in it; this is the line taken.

Above this a walk left leads up to a slab which has a weakness running up to the stance below the Evasion Direct chimney.

First ascent: 29th June, 1958. R. L. Roberts, E. Thomas, G. Dwyer, K. Dwyer (although the same leader with other members of the M.C. of North Wales took a similar line on 5th April, 1958. The Final Tower was climbed a little to the left of the line described under Evasion).

4. DAUFAEN. 120 feet. Severe.

Goes up the left side of the big quartz slab. The name means "two stones".

Start as for Evasion, either by scrambling into the grassy bay or by climbing the 10-foot crack. Go left up grass from the top of the crack to a good thread in a short vertical corner.

(1) 60 feet. Climb the corner crack, then follow the slab above heading for some blocks and a ledge just above and right of the Bluebell Bower. There is an obvious break across the left edge of the big slab here.

(2) 60 feet. Move out right onto the slab again and go straight up good pockets to a long grass ledge, Y Borfa (Porfa = pasture). Belay at the foot of the vertical corner above. (At the other end of "the Pasture" is the belay at the top of pitch 4 of Y Gelynen.)

First ascent: Summer 1958. R. L. Roberts, G. Dwyer, E. Thomas.

This climb is best finished by

4A. HONEYSUCKLE CORNER. 60 feet. Very Severe.

Go straight up the corner, which overhangs at first. A good technical exercise.

First ascent: 29th April, 1961. J. R. Lees, Gwen Moffat Lees.

5. THE WHITE STREAK. 190 feet. Severe.

This climb takes the right-hand side of the big quartz slab. Start as for Evasion, either by scrambling into the grassy bay or by climbing the 10-foot crack. Move up to the right to a belay below a thin white streak on the slab.

(1) 60 feet. Steeply up a shallow groove to gain the slab. Climb the white streak and reach a triangular corner which breaks the right edge of the slab.

(2) 50 feet. Up the slab again to the right-hand end of the Porfa. There is a belay high in the corner crack. (Top of pitch 4 of Y Gelynen.)

(3) 80 feet. The last pitch of Y Gelynen makes a good finish — go up the wall above, zig-zagging slightly right, to finish by stepping round to the right onto the last few feet of Taith y Pererin. A harder finish is to walk to the other end of the Pasture, to the top of Daufaen, and climb Honeysuckle Corner.

First ascent: 5th July, 1958. G. Dwyer, R. L. Roberts (using Y Gelynen finish).

6. TAITH Y PERERIN. 435 feet. Hard Difficult.

The "Pilgrim's Way" is a tortuous but amusing route with much charm of position. It is on the right-hand facet of the crag.

Start: Immediately under the noticeable V-chimney with a rowan in its base, just right of the large overhang (and the overhanging crack containing the holly).

(1) 55 feet. Up to the rowan. Treat it gently.

(2) 90 feet. Traverse horizontally to the right and walk into a large corner; belays on the right wall.

(3) 35 feet. Up diagonally to the left, to a grass ledge with an inserted chockstone.

(4) 45 feet. Traverse diagonally left again, exposed but on good footholds, to a nose above the chimney (small line belay), then by an awkward step up into the big corner above, where there is a large belay high on the left. (This pitch can be split at the nose above the V-chimney if required.)

(5) 40 feet. Traverse along the ledge to the right until a step round an exposed corner leads to a nook. Thread belay.

(6) 15 feet. Up the corner crack to a thread belay, not obvious, on the left.

(7) 35 feet. Scramble up the groove above to a large grassy corner with an assortment of huge blocks — the "Great Corner".

(8) 60 feet. Step onto the steep slab on the right and ascend diagonally on good pockets to a grass ledge on the right. Continue easily up to the left, above the slab, and gain another grass ledge, broad, flat and green. A line thread was inserted here in June 1958, and since it is of nylon should not deteriorate appreciably.

(9) 60 feet. The obvious easy way to the top is ignored for a long diagonal traverse out to the left, exposed, to the top. 120 feet of rope are useful for belaying.

First ascent: 2nd June, 1953. G. Williams, D. H. Jones.

7. Y GELYNEN. 315 feet. Hard Very Difficult.

Comparable to Crackstone Rib, perhaps better.

Goes up the fine steep rib right of the central cleft. The name means "the holly".

Start: As for Taith y Pererin.

(1) 55 feet. As for Taith y Pererin.

(2) 80 feet. Traverse left from the end of the ledge and climb diagonally up the rib wall to the arête, which follow to a sloping stance. Belay up right round a holly.

(3) 50 feet. Keep just left of the holly tree and go up the rib until it eases (Mouton joins here) to the line belay under the steep wall above.

(4) 50 feet. Step up right and then almost immediately follow a ledge leftwards just above the second's head. Then climb the little overhang and the slab above to the Porfa (pasture) where there is a good thread in the corner. (A few feet right is the "Great Corner" which should be ignored.)

(5) 80 feet. From this pleasant stance below the final wall go up slightly right, and then deviously, to finish by stepping round right onto the last few feet of Taith y Pererin.

First ascent: 27th July, 1953. R. Davies, G. Williams.

7A. MOUTON, referred to above, was a climb made on 12th December, 1953, by A. J. J. Moulam and G. J. Sutton, which started as for Evasion then went up to the right of the big quartz slab to join Y Gelynen in the top part of the third pitch. The other lines described here make better use of the potentialities of the cliff.

8. REMUS is a Severe variation on Taith y Pererin. The V-chimney is climbed for a few feet and then a traverse is made out right, when exposed climbing leads to the stance and line belay above the projecting nose. From the big corner above (see pitch 4 of Taith y Pererin) a traverse right is made until the steep wall above can be climbed to the Great Corner. Now to the top by Taith y Pererin seems best.

First ascent: 15th June, 1958. A. F. Mason, G. Rees.

8A. Another severe line was followed the same year by R. L. Roberts, who climbed the V-chimney and then went up the easy slab to the left above, finishing by the final wall of Y Gelynen. Dorcon is much better.

9. DORCON. 250 feet. Very Severe.

A good line straight up the centre of the crag, following the V-chimney fault to the top. Unfortunately it is possible to escape onto Taith y Pererin from every stance.

(1) 50 feet. As for Taith y Pererin.

(2) 50 feet. The V-chimney behind the rowan gives interesting climbing to the nose where the Pilgrim's Progress pitch 4 comes up from the right.

(3) 20 feet. Easily into the big corner at the top of pitch 4, Taith y Pererin.

(4) 50 feet. The fault continues through the overhangs above. Follow it by going up a steep crack slightly left and then stepping onto the wall on the right of this crack. Climb up and across the wall to step right into the groove which is the continuation of the fault line above the overhangs. Up the groove to the Great Corner.

(5) 50 feet. Up the black corner and crack above to the line thread.

(6) 30 feet. The wall behind — hard.

First ascent: 17th April, 1960. R. H. Newby and J. R. Lees (only pitches 4 and 5 were new ?)

To the right of these climbs the crag becomes more slabby and less high, but then there is a huge V-recess, which has a vertical back wall, and is generally green. Forming the right wall of this huge corner is a short bulging buttress which is split into three rounded ribs. Each rib provides a route:

10. SPACE BELOW MY FEET. 120 feet. Extremely Severe.

The perfectly straight left edge of the left-hand rib gives a strenuous climb in a splendid position. The foot of the rib is overhanging; the groove on the right is climbed using tension from small line slings for the first 20 feet. After some hard free climbing a large ledge leads to the left, and the very edge of the overhanging arête is climbed on good holds. The edge is followed, quite sustained, to the top. There is a small flake belay on the edge above the first stance or one can continue up the bulge above to the grass and a belay 15 feet back from the edge.

First ascent: 9th July, 1961. J. R. Lees, D. W. Walker.

11. ROMULUS. 240 feet. Very Difficult.

The central riblet, starting from the lowest rocks, rather artificially.

(1) 30 feet. Go from the lowest point to a triangular grass corner.

(2) 60 feet. Climb the steep corner crack for 10 feet and then scramble easily left up mossy slabs to the foot of the rib. There is a pleasant small cave under the overhang with a good thread belay low on the right.

(3) 50 feet. Go up the left edge of the arête, with some neat moves over the bulge where the angle steepens, to a heather ledge and a minute belay. There is a good thread up in the corner on the right.

(4) 50 feet. Step left and go up the central rib.

(5) 20 feet. The corner straight ahead.

First ascent: 15th June, 1958. G. Rees, A. F. Mason.

12. BABYLON. 220 feet. Very Difficult.

The right-hand rib; better than Romulus, which has the same start.

(1) 30 feet. Go up the lowest rocks to a triangular grass corner.

(2) 60 feet. Climb the steep corner crack for 10 feet and then scramble left up easy mossy slabs to the tiny cave below the bulging foot of the central and right-hand ribs.

(3) 100 feet. Approach the rib direct and climb it on good small holds — unfortunately the crux can be avoided by stepping left onto heather. There is a belay in the corner on the left, on the highest of the heather, so that this pitch can be split. At the top bulge keep just right, then move easily left to a good thread.

(4) 30 feet. Straight on to the top by a lighter patch.

First ascent: 15th July, 1958. G. Dwyer, R. L. Roberts.

13. Y GILFACH. 240 feet. Severe.

A good technical exercise up the obvious V-corner on the right of the triple-rib buttress. It can be approached by the first two pitches of Romulus (and Babylon) and a little slab, or by grass on the right. A good expedition on a wet day. Y Gilfach means "the Nook".

(1) 30 feet. Starting from the lowest rocks go up to a triangular grass corner.

(2) 60 feet. Climb the steep corner crack for 10 feet and then traverse easily up left to a small cave under the overhanging foot of the rib. Good thread low right.

(3) 60 feet. Go out diagonally right over slabs to a belay where the corner steepens.

(4) 60 feet. It is almost vertical and gives fine climbing.

(5) 30 feet. Easily to the top (optional).

First ascent: 22nd July, 1958. R. L. Roberts, G. Dwyer, E. Thomas (although Roberts and A. F. Mason had before that climbed the first section and escaped out left).

14. LITTLE CORNER gives a hundred-foot Very Difficult pitch up the vegetated corner on the right of Y Gilfach. The whitish slab, and a crack, to the tree, then a step right and the corner lead to the top.

First ascent: 15th July, 1958. R. L. Roberts, G. Dwyer.

15. GANGWAY is the Difficult line to the right, starting on the rib below a perched block. From the block go steeply up by a rowan. The obvious way left then to a holly, whence a step right and up behind the tree finishes an interesting little excursion. A useful descent.

First ascent: 15th July, 1958. R. L. Roberts, G. Dwyer.

PINACL

"The pinnacle"

This is believed to be the local name of the large but broken crag (678453) originally referred to as Craig Dau, between the quarry incline left of Craig yr Wrysgan and the waterfalls stream.

16. WEEP. 250 feet. Hard Very Difficult.

The crag forms a broad rib with a steep scarp wall on the right, out of which grows a largish tree. The route takes this, approaching it artificially and finishing up a steep upper face. All the first section is artificial; the lowest of the walls here has a bottomless crack with a steep face to its right. Start as near to the crack as possible, on its right.

Tier I: (1) 90 feet. In three steps. Climb as far left as possible for steepness and difficulty. The little walls are easier on the right. Then grass to the foot of the rib.

Tier II: (2) 30 feet. Up above the belay and move right. A mossy slab soon leads up to a narrow grass ledge.

(3) 35 feet. Up on the left again to the foot of a thin crack. From here traverse diagonally up right until the centre of the buttress can be regained.

(4) 15 feet. Straight above to another grass expanse. Walk a little left to a pillar standing out from the top wall.

Tier III: (5) 20 feet. Climb the pillar, finishing up an overhang to a large, upholstered ledge.

(6) 20 feet. The large insecure-looking flakes lead to another ledge.

(7) 30 feet. Now on the left edge, a difficult move or two lead up to a stance on the arête, followed to the top.

First ascent: 16th April, 1955. A. J. J. Moulam, Miss P. D. Chapman.

CLOGWYN YR OEN (67354490)

"The cliff of the lamb"

Formerly known as Craig Dyn, or Pinacl. This crag has some of the finest rock climbing in the area, and is the most accessible. Its skyline as seen from the East, when approaching up the road, is the line of Kirkus' Climb, made in 1928. Left of this, an inclined terrace of grassy slabs, near the lower end of which is an immense perched boulder, breaks the S.S.W. face in two. The wall below the edge of this terrace is steep and has two hard routes. The Kirkus ridge divides the crag: the area of the terrace and boulder called the S.W. face, and the area to the right of the ridge, which faces S.S.E. and is known as the S.E. face.

The S.W. face is dealt with first.

17. ORANGE-OUTANG. 300 feet. Very Severe.

A good natural climb; the overhang is good in technique and position. It takes the lower wall which supports the sloping terrace by way of a conspicuous orange patch.

(1) 25 feet. The little fluted wall leads to a ledge at the bottom right of the orange wall.

(2) 70 feet. Step onto the orange wall and traverse to its centre. Climb straight up; eventually a belay above a little recess is reached.

(3) 60 feet. The centre of the wall ahead is climbed until it overhangs and holds become poor. Move left and up the overhang to a ledge by a block.

(4) 150 feet. Walk up to the rib on the right and follow it to the top.

First ascent: 12th April, 1953. A. J. J. Moulam, J. M. Barr.

18. PINKY. 170 or 370 feet. Very Severe.

Steep and open, with some very good holds, many of which are at present full of moss. Unfortunately it is broken by the terrace after two good pitches.

Start: 20 feet right of Orange-Outang, at the foot of a pinkish wall.

(1) 80 feet. Up the wall and over a bulge at 30 feet. Avoid the mossy scoop which lies to the right and continue on up the steep rib on good pockets, finally moving right to a stance in a heathery groove.

(2) 90 feet. Step back left and continue on in the same line to the terrace, the last 10 feet by a steeper little wall which is difficult.

From here one can go across right and traverse the crag by Waspie, or wander upwards.

(3) 120 feet. Scramble across and up the terrace to the centre of a very steep wall, which is split by a grassy corner crack.

(4) 50 feet. Up the crack with some assistance from the trees.

(5) 30 feet. (a) The left slanting crack from the top of the pinnacle-ledge, or (b) The direct crack above the centre of the ledge.

First ascent: 5th April, 1953. I. G. McNaught-Davis, C. W. Brasher, but on the same day pitches 4 and 5(a) were done earlier as a finish to Doctor's Dilemma by J. F. Mawe, D. Thomas, E. H. Herbert. Doctor's Dilemma is a poor route by the huge boulder's left edge, and is not worthwhile, except in the upper part, as the finish of Pinky. Pitch 5(b) was first led by D. P. Davis on 13th June, 1953.

19. HOLE AND CORNER CLIMB. 235 feet. Mild Difficult.

Starts either below and just left of the toe of the Boulder, taking the easy line of the gully, or 60 feet right where a grassy staircase comes down: The higher of two letterboxes is entered and a sidle in pitch darkness beneath the boulder and up a chimney leads to a junction with the left start above the chockstone. Thence up and walk right until grassy slabs lead to a belay under the centre of an overhang. This is turned on the left, when pleasant slabs lead to the top.

First ascent: 7th October, 1951. S. Styles, H. Morris.

THE SOUTH EAST FACE

This is bounded on the left by Kirkus' Ridge and has several prominent features: a heathery gully capped by a square cut overhang at about half height; the large quartz slab above this; and the right-angled corner (in the upper part of the face) which bounds the quartz slab on the right. Above the quartz slab is a slanting grass ledge on which two separate perched blocks can be seen. Each has a mossy strip below it.

Chic goes up just left of the heathery gully and past the left-hand perched block, whereas Slick takes a line farther right which goes up the quartz slab to the other perched block. Bent route crosses Slick, ascends the right-angled corner and finishes by its right arête. Chic and Kirkus' are separated in their upper two-thirds by two huge grassy corners. All these climbs are very good but can be varied almost indefinitely; however, the lines described have become well-marked and are probably the most continuous.

20. KIRKUS' CLIMB DIRECT. 420 feet. Severe.

The route takes as direct a line as possible up the arête between the east and south faces. The following appears to be the best line but an easier line is also possible and is described afterwards.

Start: by the stone wall at the toe of the buttress.

(1) 35 feet. From the wall step right onto the face and go up steeply, and then more easily up the slab to a pillar.

(2) 35 feet. The slab directly above the pillar is climbed, turning a blind eye to the easier chimney just on the right. Step right across the top of the chimney onto some huge jammed flakes and belay below a small gully.

(3) 30 feet. Up the gully, which divides after 15 feet. Climb the right-hand crack and swing round onto a small stance and good belay on the front face.

(4) 50 feet. Up the slab keeping near the arête to a large diagonal grass ledge. Thread belay where a big block lies against the steep wall above.

(5) 90 feet. Move up and left to the shallow groove on the crest of the arête, which has now steepened considerably. Follow the groove to a corner about 60 feet up. Step up from its right-hand end and follow slabs easily, moving back left onto the crest to a triangular grassy stance.

Inserted chockstone or natural thread (wire) a little higher.

(6) 60 feet. The right hand of the incipient grooves above is taken, with a step left by a tiny rowan (which should be encouraged), followed by easier slabs to a large and mossy sloping rock ledge where an enormous block is lying.

(7) 120 feet. Scramble from here to the top of the crag.

First ascent: See after next climb.

21. KIRKUS' CLIMB by easier variations. 410 feet. Very Difficult.

Start: See above.

(1) 30 feet. The chimney immediately left of the wall to the pillar.

(2) 35 feet. Step down right and go up the deep-cut chimney onto huge jammed flakes. Chockstone belay above at the foot of the left-hand crack.

(3) 55 feet. Up this crack and the slab on its left, then step right and climb the easy nose to a large block lying a little further down the diagonal grass ledge from the belay of the Direct.

(4) 45 feet. Go up and left into a large groove round the corner. High thread.

(5) 55 feet. Up the groove, out leftwards onto the slabs and back to the crest to a fine triangular grass ledge with inserted chockstone (top of pitch (5) of Kirkus' Direct).

(6) 70 feet. Move out right and ascend the slab, taking a curling line back left to a large block on a mossy ledge — the more direct line is a little harder (pitch (6) of the Direct Route).

(7) 120 feet. Scramble to the top.

First ascent: 1928. C. F. Kirkus, C. G. Kirkus. This was by the easier variations, except that at the beginning the cave 15 feet left of the initial chimney may perhaps have been used, thus missing pitches (1) and (2). In this case R. Elfyn Hughes in 1932 may have been the first to do these pitches. In September, 1933, Hughes also took two lines near the bottom pitches of the Direct Route.

On 5th April, 1953, G. J. Sutton and R. Buckland started up the Direct Route, pitch (1), then continued up the easier way, and finished up pitches (5) and (6) of the Direct Route. On the same day I. G. McNaught-Davis and C. W. Brasher climbed pitches (1) and (2) of the Direct Route.

22. CHIC. 345 feet. Hard Very Difficult.

Start: Up the left hand of three ribs about 120 feet right of Kirkus', just left of the heathery gully. The climb goes up the left edge of the large quartz slab. (About 120 feet left of Slick rib, q.v.)

(1) 35 feet. Climb the low-relief rib, to a sloping grass ledge with a large belay above on the left.

(2) 60 feet. Up the right edge of the rib to a grass ledge below a steeper wall.

(3) 30 feet. Ascend the steep wall and move slightly left to a fine little bilberry ledge in a corner.

(4) 70 feet. Traverse left and then go up diagonally to the edge of the large slab. Climb it (left of the mossy streak) to the large perched blocks on the long grass ledge, just where the ledge opens out into the upper huge corner.

(5) 50 feet. The crack slanting to the right in the nose above is followed to a jammed block whence a step left is made onto the slab above. This slab is climbed direct to another grass ledge, where the easy crack of pitch (6) of Slick joins.

(6) 40 feet. Either (a) Scramble up the broken corner above to belay at the left end of a long flake.

Or (b) Climb the right-angled corner on the left (Hard Severe).

(7) 60 feet. The final wall, by the slab just right of a steep corner. The perched block cannot be pushed off!

First ascent: 13th December, 1952. A. J. J. Moulam, W. R. Craster, C. W. Brasher (the name refers to the theme song of this ascent — "California, here I come").

Variations by Moulam, J. L. Longland, J. V. Rusher; C. M. Bramfitt; many R.A.F. Mountain Rescue personnel. However, 20 years before them R. Elfyn Hughes wandered all over this face and climbed several routes; it is unfortunate that the later lines, and names, have often become better known, so that they are now used. Particular note might be made of his Central Slab — an obvious name for a simplification of Chic, Slick and Bent ! — and Ash Groove, the line of the corner left of Pied Piper; fine solo efforts which have not really received due recognition; nor similar ascents on the other crags of this area.

23. SLICK. 390 feet. Very Difficult.

A very pleasant line which goes up the centre of the face, using the large slab.

Start: At the foot of a compact rib with an overhanging left edge. The lower part of the rib is split by a prominent crooked crack.

(1) 70 feet. The rib to a large flake and ledge.

(2) 45 feet. Step off the flake and go up the little wall above to an easy scoop. Traverse horizontally left for 15 feet and then climb a broken rib easily to a good thread belay in a horizontal crack (not obvious).

(3) 45 feet. Up 10 feet to another thread. Avoid the easy ground leading into the overhung grassy gully on the left and step right onto and up a mossy little wall, continuing diagonally right to a thread in a corner at the foot of the big slab.

(4) 20 feet. Up the crack by the great blocks on the slab.

(5) 50 feet. Climb the slab above going to the right of a dubious spike. Back slightly left to the perched block and a thread belay on the grassy rake.

(6) 50 feet. Step left and climb the steep crack and its easy continuation.

(7) 50 feet. Scramble up grass right and then left to a long flake below a steep wall.

(8) 60 feet. The pock-marked wall either side of a little crack — a good finish.

First ascent: Some of this was done by R. Elfyn Hughes in 1932. The line described was climbed on 5th April, 1953, by A. J. J. Moulam, J. A. F. Watson, R. G. Hargreaves.

24. BENT. 315 feet. Mild Severe.

Starts up the centre of the face, crosses the large slab low down and finishes up the pinnacle and arête on its right in a fine position.

(1) 80 feet. Go up the flat slab between the ribs of Chic (50 feet to the left) and Slick (50 feet to the right) finishing just left of a crack.

(2) 40 feet. Straight on in the same line up an easy rib to a junction with Slick at the horizontal crack thread belay.

(3) 45 feet. Up 10 feet to another thread. Avoid the easy ground leading into the overhung grassy gully on the left and step right onto and up a mossy little wall, continuing diagonally right to a thread in a corner at the foot of the big slab.

(4) 50 feet. Go up the slab above the belay a little and traverse along a 2-inch ledge across the slab to the corner on the right. Up this to a cave and inserted chockstone belay.

(5) 30 feet. Up the corner a little further then climb the crack in the right wall to the foot of a huge pinnacle.

(6) 70 feet. Ascend the chimney behind the pinnacle and then the left edge of the nose above — hard and in a magnificent position.

First ascent: 12th April, 1953. A. J. J. Moulam, J. M. Barr. (R. Elfyn Hughes took a line similar to the early part as a start to his Central Slab in April 1932.)

25. SLACK. 355 feet. Severe.

A good climb which is forced left by the big overhang to a junction with Bent, below its last pitch; however, a separate finishing crack is available for Slack.

Start: At the foot of the slabs 40 feet right of Slick, beneath a large flake on a terrace 80 feet above.

(1) 80 feet. Up the slabs to the flake.

(2) 45 feet. Climb onto the right edge of the flake and step onto the steep wall above; up this and then left to a belay.

(3) 35 feet. Up the steep thin crack above, and scramble on a few feet to a thread belay.

(4) 15 feet. Go up diagonally left to a belay beneath the lowest part of the overhang.

(5) 50 feet. Traverse left horizontally to the nose. Up it, and then easily up right to a grass corner on the right of the huge pinnacle of Bent. Thread behind pinnacle.

(6) 80 feet. Up the right-angled corner above for 40 feet to a good ledge, continue up another corner and then easily to the top and a thread behind a block on a large grass terrace.

(7) 50 feet (optional). The slab above is easily avoided.

First ascent: Pitches 1, 2, 3 and 7: 5th April, 1953. A. J. J. Moulam, J. A. F. Watson, R. G. Hargreaves (this party then avoided the big overhang by a long traverse right and a walk back left).

Present line with pitches 4-6: 13th November, 1960. I. F. Cartledge and J. R. Lees (but pitch 5 was first climbed by R. Elfyn Hughes in September 1933, as a finish to his Ash Groove).

26. PIED PIPER. 280 feet. Mild Severe.

Goes up the broad rib just right of the prominent corner in the right-hand half of this face. Pleasant.

Start: At a cairn 80 feet right of Slick.

(1) 60 feet. Go up the quartz streaked slab and then scramble into a large grass bay.

(2) 30 feet. Ascend the corner to a dead tree and follow the crack out onto the face on the right.

(3) 80 feet. Climb the rib, at first in the centre and then by its left edge, until a step left can be made into a grass corner. Belay high above on the right.

(4) 50 feet. Up by cracked blocks and a mossy slab to a terrace (top of Waspie).

(5) 60 feet. Straight up onto the quartz face of a huge block. Traverse it to the left and climb the crack behind it to the top.

First ascent: 12th April, 1953. A. J. J. Moulam, J. M. Barr.

27. ONE FOR THE ROAD. 330 feet. Difficult.

Start: At the right-hand end of the buttress beneath a corner facing left, 20 feet to the right of Pied Piper start.

(1) 50 feet. 40 feet of easy quartz slab followed by grass into the corner. Small thread belay 8 feet down on the right.

(2) 45 feet. Climb the corner and the right-hand rib. 15 feet of scrambling lead to a cave at the foot of a crack.

(3) 85 feet. The crack and the slab above to a belay on a terrace.

(4) 50 feet. Up the cleanest quartz slab above, finishing right of the spiky rocks on the skyline.

The way off crosses here, but two good pitches remain.

(5) 20 feet of climbing. Walk up slightly right to the foot of the final face. Go up a gangway sloping left to a stance beneath a crack formed by a flake slanting up left.

(6) 80 feet. Go up the crack, then right to finish up the centre of the face.

First ascent: 11th April, 1953. A. J. J. Moulam, J. M. Barr.

28. WASPIE. 375 feet. Hard Very Difficult.

A fine girdle. On the left of Kirkus' ridge is a huge grassy corner above the Boulder.

Start: From under a rowan and a holly in this corner.

(1) 50 feet. Step up onto the top of a large flake, cross the mossy wall and then go up a few feet to a good triangular stance (top of pitch (5) of Kirkus' Direct).

(2) 60 feet. Descend diagonally rightwards past a gorse bush. Make a long step down onto the top of a big flake and follow the stepped edge of the flake down to a large grass corner. (The belay at the foot of pitch (5) of Kirkus' Direct is 50 feet down the grass rake to the left.)

(3) 50 feet. Up and across the right wall to a fine thread on the nose, over the top of another flake and down its right edge to a pleasing stance in a little bilberry corner (top of pitch (3) of Chic).

(4) 50 feet. Continue past the stance and then go up the rounded nose to the large blocks.

(5) 15 feet. Scramble to the right-hand blocks (top of pitch (4) of Slick).

(6) 40 feet. Diagonally up across the slab to the cave of Bent. Inserted chock above.

(7) 30 feet. Out round the corner and slightly down to a ledge. Belay above.

(8) 80 feet. Up right to the overhangs, continue across the top of the slab and go round the corner to a stance and belay. One can then scramble off.

28A. Or, DIRECT FINISH, Very Severe:

(8) 80 feet. Up right to the overhangs, but instead of traversing round the corner climb the wall above the slab just right of the overhangs. One can continue

above with the last pitch of Pied Piper, or, another finish to that climb, up the mossy slabs to the right of the block, and the steep slab above.

First ascent: 10th October, 1959. J. R. Lees, R. H. Newby.

But not all the pitches were new. The right-hand end was climbed on 3rd August, 1959, by three R.A.F. Valley Mountain Rescue Team ropes (Lees, Pearson; Cartledge and Dempster; Bray and Gordon).

Direct Finish: 11th September, 1960. J. R. Lees, P. R. Janney. The last part of pitch (8) was probably taken on the first ascent of Slack, while the big flake of pitch (2) of Waspie is also climbed by variants on Kirkus' Climb.

29. On 16th December, 1953, G. J. Sutton, M. J. Bailey traversed the crag from low left to high right by a not too artificial line which they called the *Bandolier*: Hard Difficult, avoiding largest ledges.

QUARTZ SLAB (67284492)

This crag offers easy-angled slab climbing everywhere, but belays are not always easily found. It is hardly worth recording separate lines but the first route to be recorded in writing, *Pi*, makes the most of the opportunities.

30. *PI*. 280 feet. Very Difficult, or Moderate if the first two pitches are avoided.

(1) From the cairn at the lowest point go up and traverse left to grass. Chockstone at 40 feet.

(2) 80 feet. Get onto the slab from the top of the crack above, moving up and out right to a large grassy bay (a more direct way is severe).

(3) 30 feet. Climb the centre of the wall on the left and follow an easy slab left to a conspicuous flake.

(4) 100 feet. Easily onwards, slightly right, to a spike under the bulge.

(5) 30 feet. To the top.

First ascent: 1933. R. Elfyn Hughes.

CLOGWYN-Y-BUSTACH (67184485)

"The cliff of the ox"

This short but very steep face was previously known as *Craig y Stac*. It has a vertical left edge with a line of chimneys left of it, and a well-marked vertical crack on the right of the face above a huge detached flake.

31. *FLOATING RIB*. 145 feet. Difficult.

Follows the more or less continuous rib running up on the left of the line of chimneys. Clean, airy and artificial.

Start: 20 feet left of South Chimneys.

(1) 20 feet. A steep wall to a ledge.

(2) 15 feet. A similar pitch.

(3) 30 feet. Up the steep rib, with a slightly awkward landing at the top.

(4) 50 feet. Easy ground is below on the left but the rib continues steep and clean.

(5) 30 feet. The last curve of the rib.

First ascent: 15th June, 1952. M. J. O'Hara, H. Morris, D. Esmond.

32. FORK. 175 feet. Difficult.

Takes a less well-defined line of chimneys left of South Chimneys. Rather artificial.

Start at a large cairn 15 feet left of South Chimneys.

(1) 40 feet. Up into a grassy recess left of the Hearthstone, then up slanting left onto the rib above, and up this to a large grassy ledge (top of pitch (2), South Chimneys).

(2) 15 feet. Step left into the Tool Chest.

(3) 30 feet. Up the crack in its back to another large ledge, the Potting Shed.

(4) 40 feet. Step left across the top of the crack and climb the short chimney at the back of the grassy recess reached. Belay below another chimney a little higher.

(5) 30 feet. The chimney and rib above.

(6) 20 feet. Up the rib (end of pitch (5) of Floating Rib).

First ascent: 4th June, 1955. A. J. J. Moulam, J. Neill, Miss P. D. Chapman.

33. SOUTH CHIMNEYS. 180 feet. Mild Very Difficult.

Takes the line of chimneys left of the vertical left edge. A good climb.

(1) 20 feet. Climb the shattered face to a ledge at the foot of the chimney.

(2) 50 feet. Carefully over the projecting Hearthstone and up the chimney, to exit left to the higher grass ledge.

(3) 40 feet. The interesting chimney above to another grass ledge.

(4) 20 feet. Upwards.

(5) 30 feet. A short chimney with curiously awkward chockstones.

(6) 20 feet. There is a way off on the right but the Tallboy, straight ahead, makes a good finish. Or its right rib can be climbed.

First ascent: 7th October, 1951. S. Styles, H. Morris, avoiding pitch (3) by pitches (2) and (3) of Fork. Pitch (3) was done by the Fork party on 4th June, 1955.

34. FLAKE WALL. 140 feet. Very Severe.

On the main wall, by the obvious line, starting at the flake. A very fine climb.

(1) 30 feet. The left edge of the flake to its top.

(2) 40 feet. Step left off the flake and climb steeply to the top of a corner. Inserted chockstones.

(3) 40 feet. Traverse left and up to the edge of the buttress.

(4) 30 feet. Go directly up, still steep.

First ascent: 21st September, 1955. D. D. Stewart, T. Kellett.

35. CREEPER. 140 feet. Hard Very Difficult.

A vegetated crack line which splits the face on the right. A good climb.

(1) 20 feet. Scramble to the foot.

(2) 80 feet. The crack is strenuous but well protected.

(3) 40 feet. The steep layback crack above to the top.

First ascent: 5th April, 1953. M. J. Harris, J. Neill.

36. NORTH CHIMNEY. 75 feet. Difficult.

A good chimney, easier in descent.

First ascent: 30th September, 1951. S. Styles.

CRAIG FACH (66904445)

"The little crag"

This is a small slabby crag about 200 feet high standing above the third hairpin bend of the upper part of the Llyn Stwlan road. There is a boulder field-cum-gully on the left, at the top of which a ledge runs back down to the right across the overhanging wall. Top Plate is the easy slab which starts beyond this ledge; Orion traverses from this ledge across the crag at about mid-height to finish at the foot of the right wing. Milky Way commences from the left corner, while Mars goes up the centre (starting just left of a prominent purple and cream patch) to the highest point. Andromeda takes a parallel line up slightly more broken rocks farther right, but slanting left to near the highest point.

A pleasant little crag, with many good training climbs; the routes are near enough to be sociable!

37. TOP PLATE. 100 feet. Moderate.

The pleasant slab at the top of the rock slope under the left edge of the buttress. Two pitches, finishing up the vertical chimney at the top right-hand corner. (The T.P. of one of the party made a first descent of this slab and was rescued with difficulty from amongst the boulders.)

38. MILKY WAY. 220 feet. Difficult.

Start: Under the overhanging left edge of the slab, near its foot. Cairn.

(1) 55 feet. Swing up onto the slab edge and up the crack, trending right, to a belay on the slab edge.

(2) 65 feet. Up the knife edge above and continue up the slab to a grassy ledge. Belay in niche round the corner on the left.

Now either:

(3) 35 feet. Walk round the corner, then up a small chimney.

(4) 65 feet. The pitted slab above is climbed rather rightwards, heading towards the notch on the summit dome, a nice finish.

or:

Variation (3a) 70 feet. Step right from niche then up slabs and nose on right to the top (better).

First ascent: September 1932. R. Elfyn Hughes, more or less by this line. The line described was done by H. Morris, S. Styles, September 1951.

39. MARS. 180 feet. Mild Very Difficult.

Goes up the middle of the crag by the cleanest slab, moves left onto the slab on the right of Milky Way, and then goes back right to finish up a prominent crack. A pleasant climb.

Start: At a cairn on a pedestal about 60 feet right of the Milky Way start.

(1) 70 feet. Up the slab bearing very slightly left to a perched flake with a heather ledge and a good thread on the left.

(2) 60 feet. Move across onto the slab on the left and go diagonally left on good holds to its top. Up the weakness in the little wall above and the continuation slab, slightly left, to a grass ledge.

(3) 50 feet. Diagonally right to finish up the steep crack. Thread belay in a grass corner just on the right, about 10 feet from the edge.

First ascent: 4th December, 1960. I. F. Cartledge, K. C. Gordon, J. R. Lees.

40. ANDROMEDA. 160 feet. Mild Very Difficult.

Goes up the more broken rocks on the right of Mars; an interesting enough climb but not as good as Mars.

Start 40 feet right of Mars, at a flake cairn.

(1) 60 feet. The purple slab to a long grass ledge. Belay by the crack in the bulge above.

(2) 60 feet. Move left a little and then go on up slabs diagonally left to a heathery groove (spike), the walls of which are climbed to another ledge. Good inserted chockstone.

(3) 40 feet. Climb the wall just left of the belay to the top.

First ascent: 23rd June, 1957. S. R. G. Bray, M. Blamey.

Variations may have been done here much earlier; certainly the ubiquitous R. Ellyn Hughes went up the main slab in the middle of the crag in September 1932.

41. ORION. 320 feet. Difficult.

A pleasant traverse which can well be combined with the descent of Top Plate. Slightly artificial.

Start: By two cairns on a ledge 20 feet below and to the right of the foot of Top Plate.

(1) 15 feet. Swing out and up onto the rib (this is Very Difficult) to a good stance with a belay 10 feet above.

(2) 40 feet. Take the obvious line across the quartz slab and descend a knife-edge to a good stance (top of pitch (1) of Milky Way).

(3) 40 feet. Down the little crack behind the stance and cross the next slab to the detached flake. Thread high on the left (top of pitch (1) of Mars).

(4) 70 feet. Continue below the flake for 15 feet to a thread on the edge of a shallow gully. Cross this and climb the slab on its far side, ascending slightly to a stance in a corner (belay round block high left, or thread below the steep right wall).

(5) 55 feet. Go downwards below the nose and cross the next slab to a grassy corner. Break across the right wall and up to easy ground on the rib.

(6) 100 feet. Descend the easy rib by a diagonal line to the right-hand end of the crag.

First ascent: 4th December, 1960. K. C. Gordon, I. F. Cartledge, J. R. Lees.

CRAIG STWLAN (66704462)

"Stool crag"

This small but attractive-looking crag has a south-west facet directly above the northern shores of Lllyn Stwlan, and a south-east facet overlooking the main downward slopes. Closer inspection proves the rock to be too broken for long routes.

42. TOPPLING CHIMNEY. 65 feet. Difficult.

The lake facet has a central nose coming down to the lowest point of the rocks. Start 60 feet up to the left from this nose, where a broken arête goes up on the left of a noticeable 10-foot crack. An insignificant route.

(1) 35 feet. Up the arête to a perch under the chimney.

(2) 30 feet. The chimney, direct.

First ascent: Easter 1951. S. Styles, R. W. Willmer.

43. POCKED WALL. 105 feet. Very Difficult.

The prominent steep face right of Toppling Chimney. A very pleasant top pitch, but short.

(1) 15 feet. Up the corner between the foot of the face and a quartz little rib below to the right.

(2) 30 feet. Up left onto the main face, step right and up to a large heathery ledge.

(3) 60 feet. The steep part of the face lies above. Left up a gangway to the edge then traverse right, and up to the right edge on good holds; then to top.

First ascent: 12th December, 1953. M. J. Harris, J. Neill.

44. BRASSINGTON WALL. 90 feet. Difficult.

Start 40 feet up to the right from the lowest point of the central nose. Scramble up heathery slabs to the foot of the obvious steep wall.

(1) 70 feet. Up the wall, steep but with adequate holds, to a narrow grass ledge at its brow.

(2) 20 feet. Traverse left and up to easy ground. Scramble to top.

First ascent: 25th April, 1953. R. Ainsley, P. Barratt.

45. EASTER PARADE. 135 feet. Moderate.

Round the corner from the Llyn, at the northern end of the S.E. facet, a big square block obviously leads to the most continuous climbing on this facet. The crack on the left of the block, or its face, is climbed, followed by a pleasant arête and a slab. Three pitches; particularly suitable for novices.

First ascent: Easter 1951. S. Styles, R. W. Willmer.

CRAIG NYTH-Y-GIGFRAN

"Crag of the raven's nest"

The south section of this, overlooking the Cwm Orthin gap, is called

CRAIG-Y-CLIPIAU (683458)

"Crag of the bluff"

This crag is on the opposite side of the Cwm Orthin gap to the main crags in this district. The climbing is on the south-west spur, which has a south-west facet overlooking the quarry workings in the Cwm Orthin Gap, and a longer south-east facet overlooking Tan-y-Grisiau.

46. To the left of the south-west facet is a grassy funnel with a small buttress on its left. A pleasant short scramble is to traverse into the chimney behind the large block at the toe of the buttress, back up onto the top of the block and step off onto the main slab behind; this has been called Physicists' Pleasance (90 feet. Moderately Difficult. G. C. Curtis, M. J. Harris, 16th May, 1953).

The South-West Facet has a shallow depression up its centre bordered by a very low-relief buttress on either hand.

47. TARRY. 150 feet. Difficult.

This lies up the left-hand buttress, scrambling up to a large terrace below the steeper rocks, then turning the main section by a little crack round the corner facing north-west, and continuing up slabs to the top. Not of great consequence.

First ascent: 16th August, 1953. M. J. Harris, J. Neill.

The crack in the front face, immediately before the corner and much harder, was climbed by C. T. Jones on 21st February, 1959.

48. BETIMES. 155 feet. Difficult; the variation to pitch (2) is Very Difficult. A pleasant short route. Uses the central depression.

Start below the depression.

(1) 20 feet. Scramble up foot rocks to the steep crack forming the bottom part of the depression.

(2) 45 feet. Up big flakes left of the crack, then a slabby staircase to heathery ledges. Or:

(2a) Ascend the crack for 15 feet to a belay and poor stance where it steepens. Pull over the overhanging wall at the top on the left to land on the heathery ledges.

(3) 35 feet. Up the bed of the depression and pull over a large block onto a platform shut off by vertical walls.

(4) 55 feet. Escape over the left wall, traverse left to a corner and then climb the rib to the top.

First ascent: R. Elfyn Hughes took roughly the above line in September 1934. The line described was done by G. C. Curtis, J. Neill, M. J. Harris, on 16th May, 1953.

Pitch (2a) done by M. J. Harris, 16th August, 1953.

49. THIN WALL SPECIAL. 130 feet. Very Severe.

A steep and exposed route up the buttress on the right of Betimes.

(1) 20 feet. Scrambling as for Betimes.

(2) 15 feet. Up the crack of the harder variation of Betimes to where it steepens. As well to lead on:

(3) 55 feet. Move out right under and up some block overhangs; work up by a thin crack and go right to a good stance on the far crest.

(4) 25 feet. Straight up the edge.

(5) 15 feet. Either the edge again, or by the large flake on the left.

First ascent: 6th September, 1953. C. J. S. Bonington, C. W. Brasher.

50. WHILES. 115 feet. Very Difficult.

Follows the vegetated chimney just right of the Thin Wall Special buttress. A poor and messy route.

(1) 30 feet. Scramble up the foot.

(2) 20 feet. Back up the lower section of the chimney, then step right onto a heather ledge with a miniature tree.

(3) 15 feet. Continue up the chimney or climb the wall 10 feet right.

(4) 50 feet. Many possibilities; best keep left onto the buttress crest.

First ascent: September 1934. R. Elfyn Hughes.

The South-East Facet starts with the vegetated chimney of Whiles just round the corner from Thin Wall Special. After a broken belt comes a very large quartz slab, White Slab, with several small trees and much lichen, with two parallel cracks on the left leading to the rib of its left-hand crest. Farther to the right the face is hopelessly vertical until a vegetated chimney is reached. A tapering slab lies between this and another vegetated corner converging on it, bounded on the right by a sharp overhanging rib terminating the face.

51. The main weakness in the centre of the broken area has another chimney line between it and Whiles. Both this and the chimney line in the main weakness were climbed in September 1934 by R. Elfyn Hughes; mostly moderate scrambling.

Just left of the White Slab is:

52. REPTILE ROUTE. 120 feet. Hard Very Difficult.

Start at the foot of the secondary nose left of the two overhanging chimneys and the iron stake at the foot of Africa Rib. Cairn.

(1) 15 feet. Steeply up the wall, or go diagonally left from the iron stake.

(2) 15 feet. The nose above, turning it on the right.

(3) 50 feet. Continue directly ahead.

(4) 30 feet. Steeply to a break above left.

First ascent: July 1955. Miss P. Langley, R. James.

THE WHITE SLAB.

The very large quartz slab has three main lines up it, and has a complex history; it has been climbed in many ways, first in 1934, so records of other subsequent variants are of little point.

53. AFRICA RIB. 220 feet. Very Difficult.

Takes the left edge of the White Slab; quite good although escapable on the left. There are several starts:

(1) 80 feet. Step off above the iron stake onto the lower part of the pinnacle walling in the left-hand chimney; enter the chimney and gain its top by the pinnacle edge. Reach, awkwardly, the right-hand end of the steep face above then traverse right and up onto a large ledge with a rowan tree.

or (1a) — at the steep face use a crack at the left-hand end;

or (1b) — harder — enter the left-hand chimney from the bottom;

or (1c) — go left from the iron stake and up a heathery groove, moving right to the rowan tree ledge. The original and easiest start.

or (1d) — step into the right-hand chimney and climb it, awkward, to the ledge Vegetated.

(2) 70 feet. From the left end of the ledge climb the rib to a quartz platform; thence directly up the rib to a large block;

or (2a) a groove left of the upper rib;

or (2b) left of the rib all the way.

(3) 45 feet. Up the crack above, then the rib, to a large heathery ledge; or (3a) gain the rib from the left, a few feet up;

or (3b) traverse into the corner on the left, and climb the crack at the back.

(4) 25 feet. Climb the steep wall above the ledge, slightly left of centre; or (4a) easier — step round the corner to the left and a final pull up.

First ascent: September 1934. R. Elfyn Hughes, by (1c) and apparently using (2b). On 16th May, 1953, M. J. Harris, J. Neill, G. C. Curtis started up Usher's Dilemma and did pitches (2), (3), (4a) of this climb. The complete ascent by the main line described was done on 16th August, 1953, by R. Buckland, J. Neill. On this occasion (1a), (2a) and (3a) were also done. Variations (1d), (3b) by R. James, R. L. Roberts, July, 1955. The climb was thought to be new; (2b) was used and the finish was by pitch (4a) of Usher's Dilemma. Variation (1b) was done on 21st February, 1959, by C. T. Jones.

54. USHER'S DILEMMA. 220 feet. Severe (Hard).

Up White Slab, deviating onto Africa Rib to find stances. A good route.

Start: About a third of the way along the slab from its left-hand end, at a small pedestal.

(1) 80 feet. From the pedestal step up on small holds, keeping to the left-hand part of the slab. At 40 feet there is a sentry box with an awkward exit. When level with the rowan tree on Africa Rib, traverse to it.

(2) 70 feet. Up diagonally right, under the overhang behind the tree, to small ledges at 20 feet. Then back left to directly above the tree. Straight up on tiny holds, delicate, to reach the platform with the large block on Africa Rib; or, easier, traverse left to the rib and up it to the platform.

(3) 45 feet. Regain the slab by grass ledges on the right. The overhangs soon compel one to return to the rib and climb it to the large heathery platform of Africa Rib.

(4) 25 feet. Step to the right onto the last narrow reach of the slab, and up it on wonderfully rough rock to the top.

or (4a) Climb the back of the recess behind the heather ledge.

First ascent: Pitch (1) only, finishing by Africa Rib — 16th May, 1953. M. J. Harris, J. Neill, G. C. Curtis.

Pitches (2), (3), (4) added 16th August, 1953. R. Buckland, J. Neill.

Variation (4a) July 1955. R. James, R. L. Roberts.

54. EAGLE FINISH. 80 feet. Very Severe.

Makes a very fine finish to the climb. From the top of pitch (2) traverse the slab to its top right-hand corner, above which a stone eagle will be seen, leering down from the overhangs. Make a bold move up past it and go out right to the steep slab above. Delicately up this to the top; the last 20 feet are the original pitch (4).

First ascent: 15th April 1961. J. R. Lees, K. C. Gordon.

55. ASAHIEL. 160 feet. Severe.

(II Samuel 2, 18)

Was called White Slab by the first party, but this name is best used for the whole slab, with separate names for the routes on it. The name given by the second party is accordingly used. Asahiel takes a line up the right side of the

White Slab, keeping close under the flanking overhangs; it is quite interesting, but messier than Usher's Dilemma.

Start at the extreme right corner of the White Slab.

(1) 100 feet. Up the slab near the corner, stepping right then back left to avoid difficulties two-thirds of the way up.

(2) 40 feet. Continue up near the corner to just below the top overhangs, then traverse left and pull over the edge to join Usher's Dilemma pitch (3).

(3) 20 feet. Any line to the top.

The climb can be straightened out, if required, by taking the Eagle Finish to Usher's Dilemma (q.v.).

First ascent: July 1955. R. James, R. L. Roberts.

Pitch (1) was climbed direct by H. I. Banner, J. Neill, on 23rd June, 1956.

56. MEAN FEET. 130 feet. Extremely Severe.

Start: Below Double-Criss, below the left-hand vegetated chimney.

(1) 20 feet. Scramble up the corner below the chimney.

(2) 50 feet. A short crack left of the corner, then a semi-hand traverse diagonally left for 40 feet to a niche. Step down and round to the base of a steep lichen-covered V-chimney.

(3) 30 feet. (Crux). The chimney to a good stance.

(4) 30 feet. A large step up right.

First ascent: July 1957. R. James, P. Vaughan.

(An alternative finish probably lies round the corner left of the V-chimney.)

57. OVERHANGING CRACK. 115 feet. Very Severe (hard).

20 feet to the left of the final crack of Double-Criss is a thin overhanging crack running into a niche. An obvious feature.

(1) 80 feet. Climb the steep slab trending to the left edge. Continue up to the ledge below the final crack of Double-Criss.

(2) 35 feet. Step left and climb the overhanging crack to the top. Two slings for direct aid.

First ascent: 1961. J. Brown, D. Thomas bach.

58. DOUBLE-CRISS. 125 feet. Very Severe.

Goes up between the two vegetated chimneys at the right-hand end to reach the conspicuous short crack at the top of the crag. A good short route; very strenuous on the last pitch.

Start: Just right of the toe of the rib forming the left-hand edge of the tapering slab.

(1) 70 feet. Go up to a niche-ledge 10 feet up the crest of the rib. Then either (a) climb the slab right of the rib by pulling up a slight overhang, to reach the crest higher (the hardest move of the climb). Continue up the rib to a large ledge with trees.

or (b) from the ledge 10 feet up work left almost horizontally into the left-hand chimney. Higher up step right into the crack running up the face between the chimney and the rib, and climb the crack to a pinnacle on the crest of the rib where the other route joins.

(2) 30 feet. Up the upper part of the slab, here very narrow, to a large grass ledge below the top crack.

(3) 25 feet. Up the crack by jamming.

First ascent: 6th September, 1953. C. J. S. Bonington, C. W. Brasher.

Variation start: 16th August, 1953. M. J. Harris, J. V. Rusher, during an attempt on the climb.

59. INVERTED STAIRCASE. 100 feet. Very Severe (hard).

The obvious route on the buttress right of Double-Criss. Three pitches.

First ascent: 7th September, 1958. R. James, A. F. Mason, G. Rees.

60. GIRDLE TRAVERSE. 400 feet. Hard Very Severe.

Start: At a cairn 45 feet up the grassy gully from the wall at the left end of the crag.

(1) 40 feet. A little wall split by cracks, then boulders and heather to a rock ledge.

(2) 20 feet. Walk right along a terrace and up a short groove at the end.

(3) 30 feet. Traverse again for a few feet to Betimes and climb a steep chimney-groove to a stance.

(4) 45 feet. Traverse right (hard) round the corner and make a diagonal descent of the steep grassy wall to a grass couch.

(5) 50 feet. Climb over the belay and descend a small slab diagonally right to a good ledge leading out right round a corner onto the ledge of the White Slab (i.e., at Africa Rib). Climb a 25-foot crack on the edge to a cramped stance.

(6) 40 feet. From the stance descend 10 feet, then a downward trending traverse (as Usher's Dilemma reversed) across the slab to a small tree on its right edge. Peg belay.

(7) 30 feet. Climb the subsidiary slab behind the belay to an overhang.

Make an awkward step right and round a corner to a grassy nook, the Eyrie.

(8) 20 feet. Climb the groove behind the belay, grass, passing a raven's nest. A long stride round to the right to the top of pitch (3) of Mean Feet.

(9) 40 feet. Abseil down it. Peg.

(10) 40 feet. Down pitch (2) of Mean Feet.

(11) 40 feet. The groove and crack of the variation start to Double-Criss.

(12) 25 feet. The slab and groove of pitch (2) of Double-Criss to a good ledge.

(13) 40 feet. Crux. A very hard traverse across the right wall, then step across the corner onto a steep slab. Either diagonally or directly up the slab to easy ground.

First ascent: 6th April, 1958. R. James, J. M. Benson, P. H. Benson.

NEW CLIMBS AND NOTES

I. WALES

C. T. JONES

GENERAL

One of the outstanding problems on Clogwyn du'r Arddu, the girdle traverse of the Pinnacle, was completed last autumn. The long-awaited guide-book by H. I. Banner and P. Crew is expected to be published in the early summer. A nucleus of young climbers repeated some of the hard older climbs (Shrike, The Thing, Suicide Wall and The Mostest), as well as originating new ones of a similar standard. B. Ingle, P. Crew, N. J. Soper, B. Brewster and M. Boysen have been responsible for some of these developments.

Nearly ten routes have been added on the Tremadoc Cliffs. Characteristically J. Brown added most of them. Nimbus is probably the best and is on Milestone Buttress. Vector has had a fair amount of traffic, although the number of falling leaders is excessive; the principle that to fall off while leading shows bad judgment is still valid.

Present trends suggest that the Carneddau may perhaps be the next area for large-scale modern development. As a start the big groove in the centre of Llech Ddu has at last been climbed.

Snowdon East guide-book will embrace the Moelwynion and the Lledr valley. J. R. Lees has completed an interim guide to the lower cliffs of the Moelwynion and this is being printed elsewhere in this *Journal*; extra copies will also be available for sale.

Certainly one of the most significant events of 1961 was the solo ascent of Diagonal Route on Dinas Mot by L. J. Griffin.

Probably there are no routes in Wales which cannot be climbed by at least six leaders. In view of this unprecedented situation it is suggested that no present climb should be considered as falling into the Exceptionally Severe grade. Classification can then stop at Extremely Severe, until it is agreed by general assent that a significant step forward has been made similar to that made by J. Brown in the early 1950s.

The supply of new crack climbs is running out and the future trend could be to lines on walls between fault-lines. The Troach and Scorpio are examples of such lines.

Taurus, Woubits left-hand, Slanting Slab and November are the only major hard climbs on Clogwyn du'r Arddu which have had less than four ascents.

A. CARNEDDAU

A new edition of the guide-book is in preparation and it is hoped to publish it soon. New routes such as those done by J. R. Lees on Craig Braich Ty-du will be included. In the meantime the following route deserves detailed recording:

LLECH DU

The Groove. 475 feet. Extremely Severe.

Start: 30 yards to the right of Central Route, below the obvious corner.

(1) 75 feet. Up the corner (piton at 40 feet) to a big grass ledge and tree belay.

(2) 60 feet. Up the corner behind the tree, turning the first overhang on the right. Climb the right wall for a few feet and step back to a small sitting stance (piton belay). (Five slings used for aid).

(3) 90 feet. Continue up the groove for 15 feet to the large overhang. Clip the rope to a piton (in place) and descend back to the stance. With assistance from this rope above and small slings traverse left across the wall into the main groove. Climb the groove for 30 feet (piton at 15 feet) to a stance in slings and piton belay (in place).

(4) 100 feet. Straight up the groove. One piton and sling used for aid up to the overhang and another above it. Belay on grass ledge.

(5) 50 feet. Climb the wall above to the large grass bay, bearing right all the way. Belay in the chimney at the back of the ledge.

(6) 100 feet. As for Central Route.

First ascent: October, 1961. J. V. Anthoine, I. F. Campbell.

B. CWM IDWAL

CLOGWYN-Y-BUSTACH

Sweet Sorrow. 80 feet. Very Severe.

Between Llyn and the first pitch of Slab Intermediate.

Reach the parallel cracks from the left over a pocketed overhang. Follow the left-hand crack for a few feet, go right, then back up the left-hand crack to the top.

First ascent: September, 1960. R. James, R. Phillips, J. V. Anthoine.

Llyn. A route was climbed in 1947 by D. P. Davis and J. Barclay which Davis thinks was that now called Llyn.

C. TRYFAN AND GLYDER FACH

GALLT-YR-OGOF

Vegetable Gut. 120 feet. Very Difficult.

On the extreme right-hand end of the cliff, in the centre of a subsidiary buttress.

(1) 35 feet. Start up a groove directly below a tree and move out awkwardly to the top.

(2) 35 feet. Traverse right on a ledge to a V-shaped gut and ascend to heather.

(3) 50 feet. Traverse right and go straight up the arête on small holds.

First ascent: J. G. Childs, W. R. Carew.

DRWS NODDED

An artificial climb up the roof has been made; see *Mountaineering*, 31st March, 1962.

D. LLANBERIS NORTH

CLOGWYN-Y-GROCHAN

Slime Wall. Very Severe. 200 feet.

Better than it looks.

Start: About 20 feet left of Broad Walk, at a large flake.

(1) 60 feet. Climb the crack to the top of the pinnacle. Step left awkwardly onto the wall. Traverse diagonally left to the foot of a steep crack and good belay.

(2) 30 feet. Go up the crack to a good ledge.

(3) 60 feet. From the right-hand edge of the ledge trend right for 15 feet, then go straight up a slab.

(4) 50 feet. Go up easy ledges to the left, then break back right under the overhangs by a hand traverse from a corner, and go up a little wall to finish.

First ascent: October, 1961. P. Crew and C. T. Jones.

DINAS-Y-GROMLECH

Dives—Variation to pitch 6. 40 feet. Severe.

(6a) Walk up the slab at the foot of pitch (2) of Spiral Stairs, then climb a thin crack in the wall on the right. After 15 feet move out onto the right face and ascend to the top.

Ascended 17th September, 1961. N. J. Smithers, D. J. Bass (probably climbed before).

E. LLANBERIS SOUTH

DINAS MOT

The Mole. 275 feet. Hard Very Severe.

Start: About 30 feet above the start of Troglodyte Wall.

(1) 90 feet. A rising traverse to the right leads to a grassy bay.

(2) 110 feet. From the belay traverse left along the large flake to a rib. Climb the rib, then traverse right to the edge of the slab; continue up this until it is possible to climb the corner to a running belay. Descend a few feet, then traverse right and climb up to the large grass ledge (piton stance).

(3) 75 feet. Traverse left into a groove then go back right by some loose blocks. Continue up to the top.

First ascent: 8th April, 1961. J. Brown, E. D. G. Langmuir.

DINAS BACH

Mountaineering, 31st March, 1962, gives details of a climb (Stag Route) up the outside of the flake which forms Flake Chimney, and Anvil Chimney to the right of the latter.

F. CLOGWYN DU'R ARDDU

The new guide-book contains details of the following new routes:

Pinnacle Girdle. 31st August/2nd September, 1961. N. J. Soper and P. Crew.

Scorpio. 27th April, 1961. N. J. Soper, P. Crew.

Serth. 7th October, 1961. B. Ingle and P. Crew.

The Leastest. 28th May, 1961. D. L. Noble and C. J. Mortlock.

The Boulder—Moscow Finish. 29th May, 1960. R. James, A. Avchinnikov, J. Walmsley.

Pigott's Climb—Wall Variation. 13th May, 1961. H. I. Banner, B. Ingle.

G. SNOWDON SOUTH

CLOGWYN-Y-WENALLT

Picador. 80 feet. Very Severe.

Starts from the large grass terrace between Oxo and Torero.

(1) 80 feet. Climb a short wall into a shallow groove curving left. Follow this (crossing Torero) to easier rock.

First ascent: July, 1961. A Coburn, B. Fuller.

CRAIG BWLCH-Y-MOCH

Yogi. 125 feet. Severe (on the first pitch only).

75 yards to the east (right) of Belshazzar Buttress is a large square block on the road side. Immediately behind and to the right of the block a rib protrudes from the vegetated slabs. The route takes the rib direct, in three pitches.

Start: At the bottom of the rib, which is 10 yards from the road, with the "Bend" road sign at your back, starting from the right of the rib.

(1) 65 feet. Move left across the steep little wall, pull around onto the slab and step up on to the rib edge. Follow it direct past the tree on its right to a large ledge and block belay.

(2) 35 feet. Move up over some large blocks until the slab above can be gained. Follow it to a grass ledge with no belay.

(3) 25 feet. Starting on the right, step left onto the slab, which is followed for 15 feet, finishing on its right-hand edge. Belay 20 feet from the top of the climb, over a square block.

First ascent: 24th March, 1961. G. Hodgkins, M. Shannon.

Boo-Boo. 140 feet. Severe.

Start: On the steep wall immediately under the Far East Slabs, at an obvious corner crack with a protruding flake at its top.

(1) 30 feet. Layback up the crack and over the flake into a bay with a tree belay.

(2) 30 feet. Take the crack in the corner, pull up onto a sloping ledge and follow it until it is possible to pull up onto a stance directly below a large pinnacle. Belay.

(3) 80 feet. Climb the pinnacle and step onto the Far East Slabs; follow their right-hand edge to the top.

First ascent: 24th March, 1961. M. Edwards and N. Crofton.

Nimbus. 295 feet. Hard Very Severe.

Takes a diagonal line across Vector.

(1) and (2) 90 feet. As for One Step in the Clouds.

(3) 85 feet. Traverse right on doubtful rock into a slanting groove. Climb this (peg) and go over the overhang using a sling on a poor spike. Continue up the groove to the cave on Vector.

(4) 40 feet. Traverse along the obvious line into the gully.

(5) 100 feet. Go up the clean corner and then the gully to finish.

First ascent: June, 1961. J. Brown, C. Goodey.

Striptease. 160 feet. Very Severe.

Takes the gully on the immediate right of the Fang.

(1) 80 feet. Climb the chimney over the overhang to a small stance.

(2) 40 feet. Up the chimney over two more overhangs to a good tree.

(3) 40 feet. Step left to the arête and go up to the top.

First ascent: 3rd April, 1961. J. Brown, C. E. Davies.

The Fang. 200 feet. Hard Very Severe.

The obvious buttress between Christmas Curry and Vector has a roof with a point of rock hanging from it. Start from the gully on the right.

(1) 80 feet. Climb a leaning pinnacle just left of the gully, go across to a small groove and go up this to a ledge on the left. Step right and go up a crack to a small stance and peg belay.

(2) 120 feet. Climb the corner to a peg and traverse left to the arête. Diagonally left to a small ledge and thread then up the middle of the face to finish.

First ascent: 4th June, 1961. J. Brown, C. E. Davies.

The Neb. 215 feet. Hard Very Severe.

Midway between Clapton's Crack and Christmas Curry is a steep well-defined groove.

(1) 85 feet. Climb the groove to a grass ledge.

(2) 50 feet. Traverse right into a grassy bay and go up to an overhanging crack.

(3) 30 feet. Up the crack to a tree belay.

(4) 50 feet. Climb the crack to a slab below the roof. Traverse right and go up the slabs to finish.

First ascent: 1961. J. Brown, D. Thomas bach.

Kestrel Cracks. 200 feet. Mild Very Severe.

A variation finish to the Neb.

(1) 85 feet. As for the Neb.

(2) 35 feet. Climb the rib for 20 feet and go into an obvious corner leaning to the right.

(3) 80 feet. Up the corner, step left to a crack and go up this to a ledge. Left again to a deep crack to finish.

First ascent: August, 1961. C. T. Jones, C. E. Davies.

Clapton's Crack. 175 feet. Very Severe.

To the right of Valerie's Rib is an obvious corner above 150 feet of slabby scrambling.

The name of the climb did not originate from its author but from subsequent parties.

(1) 75 feet. Climb the corner by twin cracks to a good stance on the right. A fine pitch.

(2) 100 feet. Step left and follow a line of cracks through vegetation to the top.

or (2a) Climb the overhang to the left and go up the clean-cut groove. Harder.

First ascent: March, 1961. G. Clapton and party.

Pitch (2a) 2nd April, 1961. J. Brown, C. E. Davies.

The Grasper. 150 feet. Hard Very Severe.

Start from a stance below the dirty groove just left of Clapton's Crack.

(1) 75 feet. Climb the steep slabby groove on the right (jammed sling). Move left for 9 feet and climb the overhang. Move right into a crack and go up it to a good stance and belay at the foot of a groove.

(2) Climb the overhanging groove to the top. Four slings and a peg (in place) were used for aid.

First ascent: 2nd June, 1961. J. Brown, D. Thomas bach.

CRAIG PANT-IFAN

The Toit. 170 feet. Hard Very Severe.

Takes the buttress between Scratch and Lucretia.

(1) 120 feet. As for Lucretia, up easy slabs.

(2) 70 feet. Traverse across a vegetated gully to a wet corner (Lakeland Gem).

(3) 20 feet. Traverse left across a slab to a tree below a corner.

(4) 75 feet. Climb the corner to a 3-foot roof. Step right to a good crack and climb the roof using a sling on a chock and a peg. Continue into the right-hand groove to a good crack and go up this to a tree. A strenuous pitch.

(5) 75 feet. Climb the slab on the left at its right-hand edge.

First ascent: 6th September, 1961. J. Brown, J. R. (N.) Allen, C. E. Davies.

CRAIG-Y-GESAIL

Ek Borge. 120 feet. Very Severe.

Between Foul Touch and Touch and Go is a steep wall which overhangs at the top.

(1) 60 feet. Straight up the wall to a V-groove. Up left to a crack (peg) and up the left-hand edge of the wall.

(2) 60 feet. Climb up the wall a little and swing round the corner to a small bay. Go up the right-hand side of the pinnacle and up to the top.

First ascent: August, 1961. C. T. Jones, E. Siddall, R. F. Jones.

Sphincter. 120 feet. Very Severe.

The climb is at the extreme right-hand end of the Princess Buttress, above the lower shaly slabs. There is an obvious cracked groove on the steep boundary wall of the buttress. Start at the foot of the slabs below the cracked groove.

(1) 70 feet. Go up the slab trending slightly right to a small cracked overhang. Surmount this and then go up to a large pinnacle belay.

(2) 50 feet. Step steeply into the groove and climb it to the top.

First ascent: October, 1961. C. T. Jones and J. H. Swallow.

H. SNOWDON WEST

THE RIVALS

J. C. Hilton with a party from the Mynydd Climbing Club has done two routes in the neighbourhood of Eiff Tower which may be new. Further details are expected.

Mountaineering, 31st March, 1962, mentions a report in the journal of the N.W. London M.C. of exploration and two new routes in the Lleyen Peninsula; no details.

J. SNOWDON EAST

CARREG HYLL-DREM

Hard Direct Finish

Start from the stance after pitch (2).

(3a) 50 feet. Step right and climb the groove for a few feet. Traverse right (peg removed) to the arête (peg—in place). Move up then swing left to a good hold and spike (sling for aid) and go left to the top of the crag.

First ascent: 17th September, 1961. M. Boysen and party.

MOELWYNION

See interim guide-book elsewhere in this *Journal*; it includes six new routes, Overhanging Crack on Craig Nyth-y-Gigfran (Craig-y-Clipiau), Dorcon and Space below My Feet on Craig-yr-Wrysgan, and Mars, Andromeda and Orion on Craig Fach, also several new variations, especially notable being Honeysuckle Corner on Craig-yr-Wrysgan and Eagle Finish on Craig-y-Clipiau.

CARREG ALLTREM

Lavaredo. 145 feet. Very Severe.

Start: 30 feet to the right of Penammen Groove, a crack and groove run on either side of a detached finger-stone. The right-hand groove.

(1) 75 feet. Climb the groove for 30 feet to a flake on the right, step left on a ledge and so on up to a good grassy stance and large block belay.

(2) 70 feet. Get onto the block from the left, step left and climb the wall above, then finish up an open groove at the top of the wall.

First ascent: 20th March, 1961. R. James, K. Forder, I. Campbell.

K. CADER IDRIS**CYFRWY**

Rib and Slab. 370 feet. Severe.

The climb uses two conspicuous slabs on the left of the crag. To make the best line the rib edge is taken as the route.

Start: Slabs descend from the "Table" of the Cyfrwy Arête with a gully on the right. A prominent narrow rib starts in the gully.

(1) 85 feet. Climb the rib, narrow in its upper half, to a grass ledge.

(2) 85 feet. From the right-hand side of the grass ledge ascend an undercut groove, until a move can be made over the rib to the right, into a groove (belay). Ascend and move right onto the slab, then go up to a grass stance.

(3) 50 feet. Steep grass to the start of the upper slab.

(4) 100 feet. Climb the slab by a crack 15 feet from the rib edge, to a stance on the rib.

(5) 50 feet. Follow up the rib to the ridge.

First ascent: 2nd July, 1960. D. Burgess, J. N. Allen.

Slabby Buttress

A prominent buttress a few yards left of the Pinnacle Ridge and below the summit of the Cyfrwy Arête. Two routes have been done on it, described below from right to left.

Route II. 355 feet. Very Severe.

Start: At the foot of the groove to the left of the right-hand bounding arête.

(1) 90 feet. Ascend the groove, grassy at the top, to the grass ledge alongside the arête with the large white slab on the left.

(2) 30 feet. Make a rising traverse left across the slab. Go around the rib to a stance at the foot of a groove (loose block line belay).

(3) 45 feet. Ascend the groove to a ledge and belay (junction with Route I).

(4) 70 feet. Continue up the groove ahead to a stance beside the upper slab.

(5) 45 feet. Step right round the rib and climb this for 30 feet (stance on a grass ledge 10 feet to the right).

(6) 75 feet. Traverse back to the rib. Ascend 10 feet and move right to the grassy break. Ascend a further 10 feet and return to the rib. Climb this direct to the top.

First ascent: 8th June, 1959. D. Burgess, J. N. Allen.

Route I. 370 feet. Hard Severe.

Parts of Route II appear to be used.

(1) 50 feet. Ascend the slabby groove below the upper slab, tending leftwards to a large block belay.

(2) 50 feet. Continue up the broken groove to a good belay.

(3) 45 feet. The slab on the left is climbed diagonally upwards to the right to a large ledge and belay.

(4) 50 feet. Traverse left and ascend steep blocks to the ledge on the skyline with perched blocks.

(5) Make a horizontal traverse to the right for 10 feet. Ascend the rake to a ledge on the right (belay).

(6) 70 feet. Climb the groove towards the overhang for 20 feet. Traverse left diagonally across the slab to the sentry box (thread belay).

(7) 70 feet. Step right into a crack. Climb this and then broken rocks to the summit.

First ascent: 8th June, 1959. R. Handley, W. Richardson.

MYNYDD MOEL

The climbs below are on a steep crag near the summit, overlooking Llyn Aran. The most obvious feature of the crag is a wide crack which eventually runs into a gully. The routes are both below and to the right of this, off a prominent grassy terrace.

Route Central. 210 feet. Very Severe.

(1) 50 feet. Climb the vegetated groove to a grassy terrace with a good stance but no belay at the top.

(2) 60 feet. Move left and climb the slanting crack to the overhangs. Avoid the overhang by moving right, and climb the groove for about 20 feet to a peg. Traverse left and with the aid of a second peg climb straight up to a stance and belay.

(3) 40 feet. Climb leftwards without incident to a stance and belays.

(4) 60 feet. Upwards to the top.

First ascent: 8th June, 1959. J. Brown, H. Smith.

Ritander. 195 feet. Very Severe.

(1) 50 feet. As Route Central.

(2) 50 feet. Climb the pillar and ascend the wall, moving left and back right to a small grass ledge.

(3) 70 feet. Move left up the grassy groove, and traverse left beneath the overhang into a steep groove. Move up and to the right, and step back left into a niche with a belay and block 6 feet higher.

(4) 25 feet. Ascend the groove and swing right onto the corner, so to the top of the crag.

First ascent: 2nd July, 1960. D. Burgess, J. N. Allen.

II. CORNWALL

A new edition of the guide is in preparation and it is hoped to publish it shortly. P. H. Biven, the author, has concentrated on the rock climbs of the area, climbs given in the first edition being completely rewritten. A considerable number of good new climbs done in 1961 are included in the guide.

J.N.

III. IRELAND 1961

SEAN ROTHERY

Early in 1961 Lough Barra in Co. Donegal was again visited, and a few new climbs were done on the rough white granite crags in this lovely isolated valley. The great cliff above Lough Veagh in the adjoining valley was attacked several times without result. The guide to the Donegal climbs will be published, in printed form, in the summer of 1962.

There was great activity at Glendalough, on the Camaderry buttress where the number of climbers at weekends has more than doubled in two years. The major routes were climbed many times; climbs like *Spillikin*, *Scimitar* and *Cornish Rhapsody*, which are about Extremely Severe or Hard Very Severe by Welsh standards, are now normal routes. There is not much space left at Camaderry for new climbs but several were found. One of these, a new hard route near *Spillikin*, was done in training by the two young Dubliners who climbed the West Face of the Dru in bad conditions during the summer.

Connemara is being re-discovered; but the great cliff at Ben Corr which provides 1,000 feet of climbing tends to produce climbs lacking in variety and *Seventh Heaven* (Hard Severe) is still the best route on the crag.

The Belfast Section continually add to the climbs on the granite tors of the Mountains of Mourne and this type of climbing is renowned for its delicate balance moves on the rough-textured granite. There is now a comfortable new climbing hut at Dunnywater above Annalong village.

The number of rock climbers in the country has increased considerably during the past two years. The Dublin section of the Irish Mountaineering Club now numbers 200, and a new club has been formed in University College, Dublin. The Trinity College club is very active, and Dalkey Quarry has proved to be a training ground of immense value. A Mountain Rescue organisation is now in existence, and a proper stretcher and a first aid rucksack are kept at the Royal Hotel, Glendalough.

The new climbs of 1961 included:

LOUGH BARRA, DONEGAL

At Easter a small party from the Climbers' Club joined a large combined Dublin and Belfast meet in Donegal, and H. I. Banner and J. O'Neill made a new climb, *Rule Britannia*, X.S., just to the right of *Surplomb Grise* and sharing the last pitch. The obvious direct continuation was omitted through lack of time. During the same meet *Firbolg*, 300 feet, Very Severe, was made by S. Rothery, P. O'Hailpin and E. Wilkinson. This climb started about 50 feet to the right of *Goat's Pass*. Later in the year Miss E. Healy, with P. O'Hailpin, led a direct route up the unclimbed main face of Bingorm West between *Rule Britannia* and *Fomorian*. This is *Ploughshare*, 400 feet, X.S.

CAMADERRY, CO. WICKLOW

The best new climb made here was *Sarcophagus*, 200 feet, X.S., by E. Goulding and T. Ingram. This follows the original *Ivy Corner* to the right of *Spillikin* and crosses *Great Corner* to finish directly up the crack. The slanting dièdre to the

right of *Ifreann* was climbed by Miss E. Healy, S. Rothery and F. Winder. This is *Sebastian*, 150 feet, Hard Very Severe. The corner on the left of the first slab of *Cornish Rhapsody* was climbed by F. Cochrane and G. Burgess. This is *Last Post*, Hard Severe. A short new finish, *Lassitude*, Hard Severe, was made by E. Gaffney on the *Expectancy* slab. The first girdle traverse of the Twin Buttress was made by Miss E. Healy and S. Rothery, giving about 1,000 feet of climbing rarely below Severe in standard; although very little new ground is crossed the route takes in most of the best pitches on the crag in ascent or descent.

CONNEMARA

Only one new climb is reported from the west; this is on a newly-discovered small crag on Derryclare Mountain and about Mild Severe in standard, 300 feet, by F. Winder and S. Rothery.

MOURNE MOUNTAINS

Details of the new routes were not all available in time with the exception of two new hard climbs on the lower cliffs of Cove Mountain. These are *Brewer's Gloom*, 150 feet, Severe, by P. Grindley and party, and *Praxis*, 120 feet, Hard Very Severe, by T. Ingram and K. Shelley, which is just to the right of *Brewer's Gloom* and shares the last pitch.

IV. HIGH ATLAS

The High Atlas of Morocco merit a note, because many people imagine them remote and inaccessible. They are in fact a splendid stretch of rocky country, enjoying wonderful weather, and can be reached in well under the 24 hours from London.

The journey, by air, is the expensive part. Once arrived one can live very cheaply. We used French huts or rest houses, high up, on the north side, otherwise slept out. It being September and very hot below, we took a mule, which carried tea and flour, and a local guide. Chickens and eggs can be bought at villages. In April one can carry, as Alf Bridge and Eric Mensforth did last year, but the mule makes it possible to do more climbing and longer journeys, particularly on the south side of the range. In the mountains one can climb and make a rendezvous with one's baggage for the evening. There is no snow and one can move fast.

Thus in little over a fortnight I was able to reach 13 summits of over 11,000 feet. Some of them, like Toubkal itself (13,666 feet) are joined by high passes with others of the chain. Nearly all my climbing was perforce done solo, since my companion Len Frank succumbed to an insect bite and had to return to Marrakech for treatment, and the local guide, a very nice and helpful man, when tried on a rope looked to be in danger of hanging himself. I reckoned soloing safer. Highlights were:

Traverse of Ouanoukrim ridge, starting with S.E. ridge of Afella. There is a group of fine clochetons, not to be missed (D. or V.D.). After Biiguinousene comes Tadat, a 100-foot pinnacle on which are five routes, one the Severe chimney described in *Cambridge Mountaineering 1961*. Aguelzim is the last summit but the ridge goes on, and ends in a fine 60-foot pinnacle (new?). Two routes.

Tadaft (12,796 feet) by N.E. Ridge. This, the *route ordinaire*, is mild Severe. Descent on W. side by abseils. Up the two summits of the bou Imrhaz (13,222 feet), and traverse along the ridges to Timesguide n Ouanoukrim (13,416 feet), second summit of the range. Finished a lengthy day with the Toubkal Arête, a long, splendid, V. Diff. rock climb, and down to the famous Lac d'Ifni — the only lake.

New route on N. Face of Aksoual (12,828 feet). Not hard to find, takes the ravine leading below the summit, strikes out left up the most conspicuous and compact buttress of the face. Hits the summit ridge some way left of the main summit. V. Diff. to very mild Severe.

Also traverses of Aksoual ridge and clochetons, Anrhemer (12,773 feet) and Iguenouane (12,713 feet).

For weather, for solitude and freedom, for fine peaks and fascinating people (the Berbers), I would recommend the High Atlas.

C. W. F. NOYCE

V. THE SOUTH PATAGONIA SURVEY EXPEDITION, 1960-61

The Cordillera del Paine is a mountain range on the south-eastern side of the Patagonian Ice Cap, some 200 miles north of the Magellan Straits in southern Chile. The Paine massif rises to a height of 10,000 feet and, though little larger than Snowdonia in area, contains a most impressive number of unclimbed rock peaks and towers.

We were the first British mountaineering expedition to visit the Paine, and our party was led by the late Peter Henry and included Barrie Page, Vic Bray, Derek Walker and Dave Clarke (non-member).

A 13-strong Italian expedition in 1957, led by millionaire Guido Monzino and including seven Italian guides, climbed the highest mountain, the Paine Grande, a beautiful snow and ice peak, and also climbed the smallest of the three famous Towers of Paine. Otherwise little had been done, due to the remoteness of the area and also to the forbidding and treacherous climate.

The weather is most unreliable and local Chileans assured us that we experienced the worst summer they had known in 15 years. The major hazard is the wind which blows from the Ice Cap. Gusts of wind in excess of 75 miles per hour were frequently recorded in Base Camp, and speeds were much higher in the mountains.

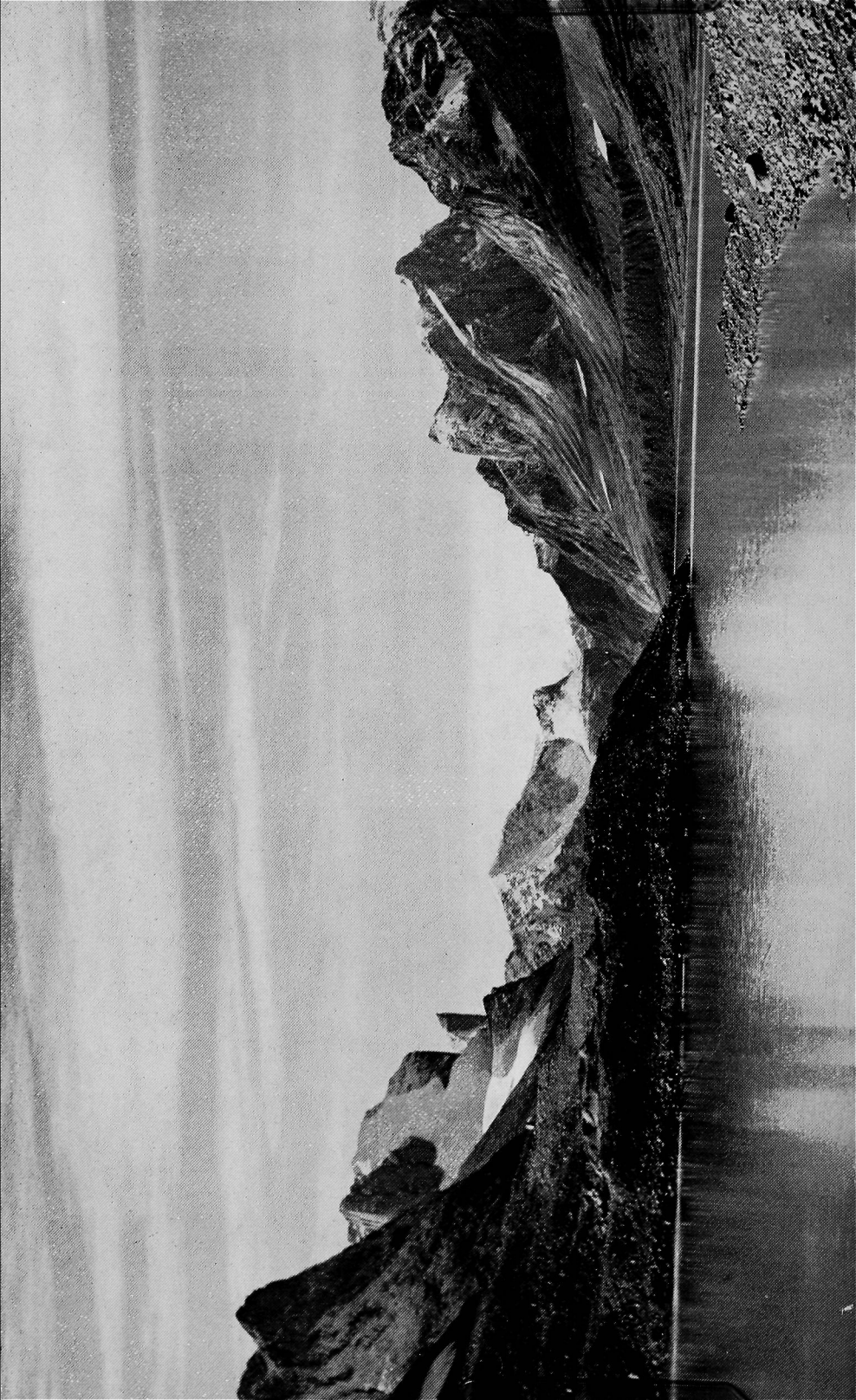
After completing scientific work and general reconnaissance we concentrated our attention on the South Tower. Much time was spent trying to climb what later was found to be the most difficult (northern) side of the mountain. Realising that there was a more reasonable ridge on the southern side, the expedition moved camps and equipment to the foot of the south ridge. Here two four-day periods were spent in an ice-cave, waiting for the weather to improve sufficiently to allow a serious attack on the Tower. Two attempts were made and beaten back by ferocious storms; in the face of continuing bad weather, the attack was called

THE FORTRESS, THE SHIELD AND THE TRIDENT

The rock faces are about 2,500 feet high

S. R. G. Bray
(South Patagonia Survey Expedition, 1960)





off. It seemed likely, however, that the expedition had found a feasible route up the Tower — granted reasonable weather.

In the last few days attention was focussed on the 7,500 ft. Cuernos (Horns of Paine), seemingly a much better proposition than the Towers. It was during the preparation for this climb that Peter Henry was tragically drowned. He was taking equipment from Camp I to Base Camp across Lake Nordenskjold when his small boat was overturned by a squall. The expedition ended on this sad note.

There is thus a great deal left to be climbed in the Paine: the Central and South Towers, the vast faces of the Fortress and the Shield, the Cuernos, and a host of smaller yet no less impressive peaks. It is hoped that the South Patagonia Survey Expedition II, planned for 1962-63 and containing a stronger climbing party, will meet with better weather and be able to snatch some of these last great prizes of the Andes.

D. W. WALKER

VI. BAFFIN ISLAND

T. A. J. GOODFELLOW

The Cambridge expedition to Baffin Island had the following members: R. E. Langford (leader), T. A. J. Goodfellow, A. R. Crofts, G. Bonham-Carter, C. W. Barlow, J. Dale.

The Cumberland Peninsula lies in the S.W. corner of Baffin Island. It is mountainous and little known, covering an area almost as large as Switzerland. Many of the mountains are uninteresting to the climber, being little more than rounded snow domes. But to the south of the Penny icecap is a group of peaks more worthy of attention. This group is bounded by the icecap and the Kingnait Fiord and is crossed by a deep pass which links the North and South Pangnirtung fiords. In 1953 a Canadian Government expedition visited this area, making their base at the head of the valley, which has become known as the Pangnirtung pass. A large lake (Summit Lake) six miles long dominates the pass; with ample resources, they were able to fly their equipment onto the Penny icecap, and, when the ice had melted from the lake, they were supplied by amphibious aircraft. But their purpose was mainly scientific and they climbed only three major peaks. It was a photograph of one of these, Mt. Asgard, printed in *The Mountain World* (1954), which aroused our attention.

Our resources would be limited. The Cambridge terms dictated mid-June to the end of September as our time limits. Since we could not afford air charter into the area, some other means of approach had to be found. After many false starts, one was finally found. We travelled to New York by cheap University Charter flight and immediately took a Greyhound bus to Montreal, where we awaited the arrival of our equipment by sea. Then, with all our equipment, we boarded a Nordair plane which is permanently engaged in supplying the American DEW line station sited at Cape Dyer on the Southern tip of the Cumberland Peninsula. After a week of frustration, we flew to another DEW line station on Broughton

SUMMIT LAKE, BAFFIN ISLAND
Looking South

Island, which lies at the mouth of the North Pangnirtung Fiord. The island has an Eskimo settlement, and, after a further wait while the sea ice cleared, the Eskimos took us the final stage of our journey in their whaling boats. We travelled for 70 miles into the North Pangnirtung Fiord. They left us at the bottom of the valley which leads to the Pangnirtung pass and the mountains which surround it. Our task was now to ferry our equipment some 30 miles up the valley and establish a camp from which we could operate in the mountains. We had also to do some minor survey and physiological work. Our route out lay down the other side of the pass, and before leaving Broughton Island we had contacted the RMPC man at Pangnirtung, an Eskimo settlement about 25 miles from the head of the South Pangnirtung Fiord which lay at the mouth of the valley down which we would journey. On a pre-arranged day he was to collect us in a Peterhead boat. So, when finally we reached our rendezvous, we would have crossed the Cumberland Peninsula, a distance at this point of about 80 miles on the map.

To reach the mountains, however, presented a greater problem than we had imagined. We had no porters and over a ton of food and equipment. Consequently we faced two weeks of back-packing up the valley. At first our loads were small and it was as much as we could do to establish three camps at suitable distances up the valley. But increasing fitness, and fear lest we should have insufficient time in the mountains themselves, improved our capacity. 85 lbs. became normal and on some days we would carry a load 12 miles, stop at the camp for a cup of tea and return along the same route unladen. The same problem of heavy loads had to be faced on our way out of the mountains. But our increased fitness enabled us to carry 120 lbs. and thereby save some valuable equipment, which would otherwise have been abandoned.

Luckily, the terrain on the inward journey was in our favour. The Pangnirtung pass is low, about 1,200 feet, so that there was little uphill work. Moreover we found excellent walking country in places by the side of the river, where the banks were sandy. But there were many streams to cross. We found a "short cut" at the fiord head which involved a thigh-deep wade for over a hundred yards in icy water. Small streams abounded, and there was one dangerous glacial torrent for which we used a fixed rope. Consequently feet and boots were continually wet, with very little chance of the latter drying out. By far the worst menace however was the mosquitos. The melted snow left much standing water in which the bugs bred prolifically under the July sun — or so we supposed. At any rate, during the approach up the valley we had no rest from them. Large, voracious and decidedly malicious, they proved a constant drain on energy and morale, not least by their regular appearance in coffee and porridge. Mosquito netting on the tents gave us protection at night, but the Canadian repellents were scarcely enough by day. However they never came as far as the glaciers, and, when later the general air temperature became lower, they vanished.

Thus for our journey out of the mountains we were free of them. But here the terrain was infinitely worse. The valley is blocked by huge moraines which have either to be crossed or traversed. Many falls were taken before we reached our rendezvous. It was a matter of constant surprise that no-one damaged a limb. But, strangely, one was so top heavy with a large load that it seemed to take charge, so that one landed on it and not on oneself.

So much load-carrying made us fit for our eventual arrival in the mountains. But the season is short in the Arctic, and we had wasted valuable weather in the valley. Moreover the nights were becoming daily longer and we were not able to enjoy the carefree feeling of endless day. In all, we climbed five peaks and were repulsed from a further two by poor weather. The mountains are nowhere more than 7,000 feet high. But the low line of permanent snow would seem to make them equivalent to the Alps from a climbing point of view. In character, however, they resemble far more the mountains of Greenland. The glaciers are long, cutting deeply between steep cliffs. They provide admirable highroads to the rock peaks. We never saw any impassable seracs, and the crevasses seemed less immense. One feature seemed to be a speciality of Baffin; all the peaks were noticeably less steep on their Southern side. Midgard, for instance, was sheer for 2,000 feet on one side, and practically a walk on the other.

Rock was usually the best key to the top. Frigga alone we climbed by a crafty series of steep snow gullies. But because of the predominantly rocky nature of the peaks, we were at a severe disadvantage when bad weather beset us towards the end. This was nowhere more felt than on our attempt on Asgard, already climbed by the Swiss in 1953. They climbed in excellent conditions, but nonetheless found the rock climbing very difficult. Consequently under snow, ice, and intermittent snow falls, we were beaten back.

Our attempts only scratched the surface of the area. From the summits unclimbed mountains stretched for miles around us; we used to gaze at the numerous precipices of rock, often over 2,000 feet in height, and consider that there were enough of them to keep rock technicians happy until the crack of doom.

In retrospect, it seems that within the time we could not have done more. Had we arrived earlier in the year, we could have sledged all our provisions straight into the mountains from Broughton. Had we had more money we could have flown straight to Summit Lake. As it was we had neither, and, because we spent so much time ferrying loads in the valley, we did not have the advantage of long days and fine weather in the mountains. But for my part, I regret none of these things, and prefer it as it was.

VII. ANTARCTICA

On behalf of the Australian Government I have, in recent years, led three Australian National Antarctic Research Expeditions:

Heard Island 1953-54;

Mawson, Antarctica, 1955-56;

Mawson, Antarctica, 1959-60.

During the second of these expeditions, I led the first exploration and ascents of the Masson, David and Casey Ranges in Antarctica (Lat. $67^{\circ} 40' S$; Long. between $62^{\circ} E$ and $62^{\circ} 30' E$) and the first penetration of the Prince Charles Mountains which stretch south through 4° of latitude from $70^{\circ} S$ in Long. $64^{\circ} E - 69^{\circ} E$, all on the Antarctic Continent, in MacRobertson Land.

The Masson, David and Casey Ranges, projecting from the ice between 10 and 50 miles from the coast, were sighted and named from the sea by Sir Douglas Mawson in the early 'thirties. The Prince Charles Mountains, one of the most extensive mountain regions in all Antarctica, which include the largest glacier in the world and which are still being explored vigorously by Australian expeditions, were sighted and named by Robert Dovers in 1954. The *Antarctic Names Committee of Australia* subsequently gave the name Mount Béchervaise to "a great massif of brown rock rising sheer from the plateau ice on the northern face, with steep slopes on other sides. It is bare, except for an ice cap on the flat summit area. 7,750 feet high, it is in about 70° 13' S, 64° 48' E. . . ."

J. M. BÉCHERVAISE.

VIII. THE DERBYSHIRE HIMALAYAN EXPEDITION, 1961

The expedition visited the Pir Pinjal range in the Kulu district of the Kangra Himalaya (Punjab) during the months of June and July, 1961.

Indrasan (20,410 feet) was attempted by the west ridge but the pathfinders, Burgess and Gray, were forced to retreat by the difficulty of the climbing from a point 800 feet below the summit.

During this phase of the expedition Deo Tibba (19,687 feet) was twice climbed by different parties.

The second ascent of White Sail (21,148 feet), on the Bara Shigri/Kulu Divide, was made by Burgess, Pettigrew and Ashcroft. It was first climbed in 1941 by Colonel J. O. M. Roberts.

Two virgin summits of about 18,000 feet in the Manikaren Spires—a group of aiguilles between the Malana and Tos nullahs—were reached by Handley and Gray.

Pettigrew and Burgess climbed the 18,000 foot Ice Pass in the Bara Shigri/Kulu divide whilst Ashcroft completed a plane-table survey of the peaks surrounding the East Tos nullah glacier.

R. G. PETTIGREW

EDITORIAL

I regret that although four members of the Club have died recently (J. R. Cracknell, P. C. Henry, R. H. Hewson and S. D. Mitchell) no obituary notices of them appear in this number of the *Journal*, since I have been unable to find anyone willing to write these notices.* To fill the gap I must say something of what I know of them.

Dick Cracknell was elected to the Club in 1954. He was a member of the Oxford University Mountaineering Club and attended the O.U.M.C. meet at Arolla in 1952. His home was in Exeter; after leaving college he worked for the Royal Dutch/Shell group and lived in East Sheen. In 1961 he died of cancer, against which he put up a tremendous fight. He left a wife and three young children.

Pete Henry was elected in 1955, at about the same time as a number of other members of the Bristol University Mountaineering Club, with whom he did some good climbing in Wales and elsewhere. His home was at Bramhall, Cheshire. After doing his National Service in the Royal Marines (when he climbed in Cornwall and other Commando training areas) he worked at St. Albans. He was leader of the South Patagonia Survey Expedition, 1960-61; the circumstances of his accidental death are detailed by Derek Walker in a report in "New Climbs and Notes" elsewhere in this *Journal*.

R. H. Hewson was elected in 1924. He lived for many years in Mill Hill, and latterly in Worthing. He did most of his climbing in the Lake District, being elected to the Fell and Rock Climbing Club in 1912. Maurice Guinness recalls meeting him at two or three Fell and Rock meets in the 'twenties, as does Herbert Carr.

Of S. D. Mitchell I know only that he was elected in 1934 and lived near Frome and later at Chislehurst.

If any members feel qualified to write fuller obituaries to supplement the above remarks, I should be glad to hear from them.

The principal change among the officers of the Club has been the replacement of Berrill as Treasurer by Kretschmer. Berrill has been handling the Club's financial affairs at a time of considerable difficulty, due principally to heavy capital expenditure on huts; this was his second stint of arduous duty for the Club, and we are grateful to him for his businesslike management of the Club finances. Sales has taken over Kretschmer's post as Hon. Hut Booking Secretary.

One new Honorary Member has been elected, Dr. Guy Barlow, whose name will always be associated with that of E. W. Steeple for their prodigies of pioneering in Wales (particularly on Tryfan and Llech Du) and Skye. One member's name has appeared in recent Honours lists, that of Densham who has been awarded the O.B.E.

The last year has shown great activity by our members on expeditions abroad. Articles or notes in this *Journal* describes the Nuptse expedition (our members

* Since I wrote the above an obituary of Henry has been received and is printed in this *Journal*.

Bonington, S. G. McH. Clark, C. T. Jones, G. J. Streetly, Swallow; Bonington and Swallow reached the top), the ascent of Amadablam by a party including M. P. Ward on Hillary's expedition (Lowe, Milledge and Ward; Ward was deputy leader and led the attempt without oxygen on Makalu), the South Patagonian Survey Expedition (Henry, leader, Page, D. W. Walker, Bray), the Cambridge expedition to Baffin Island (Langford, leader, Goodfellow), the Derbyshire Himalayan expedition (Pettigrew, leader, Handley), and C. W. F. Noyce's visit to the High Atlas. Other expeditions in which members took part were the A.C./S.M.C. party in the Caucasus (Vyvyan), an expedition to the Jagdula Himal led by Tyson, the R.A.F. expedition to the Karakoram (Smyth, leader, Sims, deputy leader, M. G. Hughes) and the Imperial College expedition to Jan Mayen (D. Thomas, who took charge of the party after an unfortunate fatal accident). Tilman and Marriott sailed to West Greenland and climbed two peaks there. In 1961 Shipton made a north to south traverse of the icecap in Patagonia, and early this year led a Chilean expedition which climbed Mount Darwin and Mount Yagan in Tierra del Fuego.

Expeditions to take place this year include the A.C./S.M.C. expedition to the Pamirs, largely composed of our members and led by H. C. J. Hunt, the joint Services expedition to Mount McKinley led by Banks, a botanical expedition to the Langtang Himal led by Glentworth, and a further expedition to South Patagonia including several of our members led by Page. We must also wish all luck to the women's expedition to the Kanjiroba Himal, with several of the members of which the Club has close ties.

In the Alps, 1961 was a mixed season. The highlight was the first ascent of the Central Pillar of Freney by Bonington (with D. Whillans, and I. Clough and J. Djuclosz on another rope) after considerable international rivalry. Bonington, with I. Clough, also did the Roc-Grepon traverse and, with Whillans, twice retreated from the Eigerwand, besides becoming involved in rescue operations. Other Alpine routes of note by members were the north-east face and the north ridge of the Badile, the Flatiron on the Sciora and the south ridge of the Punta Innominata di Sciora (all by Mortlock), the north-east face of the Badile, the east face of the Petit Capucin and the Nant Blanc face of the Aiguille Verte (all by J. F. G. Clark) and the north ridge of the Peigne and the Cassin route on the Cima Ovest di Laverado (both by C. P. Gordon).

For events in Wales see "New Climbs and Notes". In connection with the new guide to Clogwyn du'r Arddu the early history of some of the climbs on the cliff has been investigated. In a letter A. W. Bridge writes as follows of events on the day of the first ascent of Birthday Crack:

"A.B.H. and I were not with the Birthday Crack party (we had all bivvied together and Marco Pallis made us live on olives for a whole week-end) for Alan wanted to lead East Buttress [i.e., Pigott's] and I promised I would 'second' him. When Alan and I got down we joined up late in the afternoon for Curving Crack. That very same day, after we had done Curving Crack and East Buttress and Birthday Crack I was coiling up my rope and heard Colin Kirkus shout 'Alf, give me assistance.' Colin, in nailed boots, was on what we now know as Vember.

"I climbed very quickly; he was on the left of the Cracks on very exposed rock. I asked Alan to give me moral support from the Direct Start (as we

now know it) and he secured himself while I climbed below Colin. I was very strong and fearless in those days, and on the smallest of holds I climbed below Colin and begged him to move onto my shoulder with the utmost care and balance. He did so, and I just managed on my finger tips to hold tight and he then stepped sideways into the cracks. It was a very near thing."

The stop-press news from Wales is of Eric Beard's trip round the Welsh 3,000s in 5 hours 23 minutes. Beard is an instructor at Plas-y-Brenin; he did this run alone and unpaced. Of more general matters in Wales, the issue of camping in the Llanberis Pass is at the time of writing still under negotiation.

Last year the *Journal* contained an article by Mortlock on the new climb done by Whillans and himself on Dove Crag, which he called "Entity". After the article was written the 1961 number of the *Fell and Rock Climbing Club Journal* appeared, in which the climb was given in the "Climbs Old and New" section (compiled by P. Moffatt) under the name of "Extol". The latest *Annual Journal* of the Sheffield University Mountaineering Club contains, in the "New Climbs" section (apparently by N. J. Soper), the following remark: "Extol, Whillans' legendary climb on Dove Crag, also known apocryphally as Entity". Incidentally this mentions the second ascent, by M. Boysen, with the writer of the notes.

Mortlock assures me that Whillans and he agreed that the climb should be called "Entity". It seems that the name "Extol" was invented by someone with no *locus standi* in the matter. Hence the name of the climb is "Entity" and "Extol" is apocryphal. (Northern papers please copy.)

The usual programme of Club meets was held last year. The informal dinner held in Derbyshire on the occasion of the opening of the R. O. Downes Hut was so successful that a similar dinner has been organised this year in conjunction with a gritstone meet. It is hoped that the dinner may become a regular annual event.

H. R. C. Carr writes that he has a series of colour slides of the best of the Swiss landscape prints, of the period 1760-1830, recently bequeathed to the British Museum by R. W. Lloyd. He is prepared to give a lecture, illustrated by these slides, suitable for societies and schools; his charge is 5 guineas, or 3 guineas for schools. Members interested should get in touch with Carr direct.

Once again I have to thank Sean Rothery of the Irish Mountaineering Club for his notes on Irish climbing. The poems by J. M. Edwards are printed by permission of his family. The considerable outside help given in the preparation of the article on the Carn Galver Mine is acknowledged in that article.

I must thank John Slee-Smith for his assistance with the circulation of this *Journal* and the guide-books, and his advice on typographical matters to do with both, and John Cole for his efforts on advertisements. Slee-Smith, to add to his burdens, is now also the Assistant Secretary of the Club. Cole shortly leaves for Pakistan on business for an extended stay, and M. J. Cunningham has therefore taken on the job of advertising manager. And lastly, my gratitude to the Cloister Press as ever for their excellent work and their patience in printing the *Journal* and guide-books.

Obituary

PETER C. HENRY

Peter Henry was lost on the 19th February, 1961, on Lago Nordenskjöld in Patagonia, while ferrying equipment to the Base Camp of the South Patagonia Survey Expedition of which he was the leader. Although no-one else was present at the time of the accident, it seems clear that his portable boat was overtaken by one of the sudden fierce squalls prevalent in the area, and the extreme cold of the water would make survival after a capsize very unlikely.

It is doubly tragic that such a piece of ill luck should cause Peter's death so close to the conclusion of the Survey Expedition towards which he had worked so hard and long during the previous two years, for, in spite of almost continuous bad weather which prevented the attainment of any of the considerable summits in the area by the group, a great amount of valuable exploratory and geological work had been carried out; and a notable feature of the Expedition was the excellent co-operation with the local people and authorities, for which much of the credit must go to Peter.

I first met him as a fellow member of the University of Bristol Mountaineering Club, which he joined in 1952, and during his three years at the University he became known and liked as a most pleasant companion — cheerful under even the most adverse circumstances, always enthusiastic for the particular matter of the moment, and ready to talk to anyone about it. I recall on one occasion putting his patience, his fingers and his rope considerably to the test on an awkward problem in the Avon Gorge, but, typically, none of these failed me. He was always a most reliable second, and an excellent and circumspect leader.

After University he went to some lengths to enter the Royal Marines for his period of National Service, with the object of becoming a member of the Cliff Assault Wing. This desire was frustrated for some time, but was eventually fulfilled. During the time in Devonshire a characteristic incident occurred: whilst investigating the Dewerstone solo, he came upon some loose rock, fell, and broke an ankle. Rather than sit and wait for the uncertain

arrival of assistance, he hopped and crawled for several miles over fairly rough going to reach a place where he could call attention and ask for help.

On leaving the Royal Marines he joined Marconi Instruments Ltd. as a technical sales engineer engaged on customer liaison in connection with a wide variety of electronic instruments, and it was during this time, based at St. Albans, that he began his work on the expedition to the Cordillera del Paine. Climbing in Britain and several good seasons in the Alps had left a desire for exploration of ground less accustomed to the climber's boot, and a chance sight of a picture of the spectacular "Torres del Paine" led to the choice of area.

During the long period of his planning I was based near Coventry, and Peter's ramshackle but surprisingly fast van often used to rattle up our rather rough farm track on the way to, or on the way back from, almost any part of the country. He thought nothing of visiting, say, London, Cambridge and Edinburgh in a weekend, spending considerable time for discussion in each place.

After such an enthusiastic and painstaking preparation I am sure he would be pleased to know that Barrie Page, his Deputy Leader on the 1960-61 Expedition, is planning to take a party back to the area in the future, to continue the work begun so well, but terminated so tragically.

Our sympathy must be extended to Peter's parents, and to his brother and sister, in their sad loss.

P. H. HILL

EAST ANGLIAN MOUNTAINEERING

(A report made by Raymond Lister at the Annual Dinner in February)

© RAYMOND LISTER, 1962

MOUNTAINEERING IS A comparatively new sport in the fenlands of eastern England, yet its progress there has been, to say the least, spectacular, whether it be in the form of simple rodham climbing, or of full-scale attacks on such classic climbs as the tower of Ely Cathedral or the peak of Shippea Hill. The local Sherpas are men of skill, loyalty and courage, and excellent base camps abound.

There are many centres from which operations may be conducted — Prickwillow, Stuntney, Burnt Fen, Bluntisham-cum-Willingham — these are but a few, each one of which has excellent climbs in its vicinity, which range from a comparatively simple ascent like that of the Aldreth Causeway, to a steep and difficult climb like that of the Car Dyke.

Such, indeed, is the variety, that the well-known Denver Sherpa, “Boggy” Black, was able to make the ascent of Brandon Creek and Burnt Fen Pump-houses on the same evening in the summer of 1947, producing from his colleague, “Sluice” Parker, the witty if ribald comment: “What — *twice* a night at *your* age?”

Alas, the great “Boggy” overdid it in the end. In endeavouring, during the latter part of the 1949 climbing season, to add a third climb to his record — that of Stretham pumphouse — he fell into a hole of peat and had to be dug out by the local fire-brigade, who were brought to the spot by his pitiful cries for assistance. However, when at last he was dug out, he had expired, and his body was reverently carried back to March on a litter, later to be buried at an impressive funeral service conducted by the Reverend Mr. Knocker Carter of the Ebenezer and Mount Tabor Primitive Baptist Chapel at Manea.

Today “Boggy” Black’s memory is perpetuated by a magnificent cast-iron urinal, erected by public subscription in the market square at March.

It will not be out of place at this point to attempt a description of this remarkable erection, the design of the Six Mile Bottom architect, “Windy” Tighte-Hoppitt. Nothing more well-bred or genteel could be imagined than this convenient harbour of cast-iron gothick lattice, surmounted as it is by busts of their late Royal Highnesses Prince Albert of Saxe-Coburg and Albert Edward, Prince of Wales, each attired in costumes of highland chieftains of the time of the ’45.

Within, symbolising purity, a fountain plays, and around the top of the inside of the structure representations of palm and pine are interwoven, while each gothick arch, which encloses an imitation marble vestibule bearing the legend: “DOULTON LAMBETH”, is supported by two caryatids, one formed in the likeness of the late Mr. Rudyard Kipling, the other in that of the late Lord Lugard.

Lest its grandeur should cause us to forget its purpose, the urinal is finished off with a life-size statue of "Boggy" Black himself, attired as was his wont in a panama hat, shirt sleeves, braces, an abdominal belt and plimsolls. Beneath is the inscription, in those beautiful and immortal words of Alfred Austin, Poet Laureate:

"Along the wires the electric message came —

" 'He is not better — he is much the same'."

Nothing better could have been provided to celebrate the memory of the great Sherpa, being placed as it is, in the proximity of the ancient hostelry "The Ship and Shovel", where "Boggy" used to relax of an evening to play skittles or dominoes with his friends — those very friends who may now, by means of this monument, combine relief with reverence.

The special equipment used by fenland climbers is not without interest and may be described. First the dress. It is not so much storm, snow and blizzard with which the fenland climber must contend, as flood and mud. Accordingly, the usual dress is a bathing costume worn beneath a macintosh, with Wellington boots as the standard footwear and a sou'wester for covering the head. These have the essential combination of protection against the elements, combined with ease of discardment, plus a modicum of decency.

All these properties are essential, as witness the occasion when the Westley Waterless climber, "Flushy" Fulcher, in climbing Upware-Saint Uncumber church tower, lost his footing when negotiating the treacherous gargoyle above the east cwm of the roof, and was precipitated into the watery lode beneath. Fortunately he had the presence of mind to discard his macintosh, Wellington boots and sou'wester in the course of his descent, but he had unfortunately forgotten to don his bathing costume before setting out, and was arrested for indecent exposure of his person by the local constable, "Ginger" Gotobed, who was thus provided with his first case for many years.

The *chic* form of bathing wear is, of course, the type fashionable in the early 1920's, and made of loosely-knitted wool with bright horizontal stripes, and reaching to above the knees and beneath the elbows. This makes for absolute decency, so long as it is not shrunk too drastically in the wash.

Crampons and other equipment are rarely seen. Most of the buildings in the climbers' repertory are constructed of clunch, a comparatively soft material, and the natural soil is innocent of hard, rocky substances, and consists, indeed, mainly of black peat, for negotiating which snowshoes are eminently suitable or, failing that, tennis racquets may be affixed to the feet by means of straps.

One item of equipment peculiar to fenland climbing is that ingenious tool known as the spade and becket. Originally used for cutting blocks of peat, it may, however, be used for many other things, from the cutting of footholds in floodbanks to the excavation of a sheltered camping position in the peat itself. In the words of Alexander Pope:

"Let spades be trumps! she said, and becketts they were."

A fishing net also is useful for providing provisions from the natural waterways and man-made canals with which the area abounds. Nobody who has climbed the floodbanks of the Isle of Ely can forget the fragrant and inviting smell of sticklebacks being roasted over a roaring peat fire on a cold night — and this is yet another instance of the use to which the spade and becket may be put, for it

makes a splendid roasting-plate. One should be careful in selecting fish for comestibles, and one should see to it that the diet is varied. Sticklebacks *can* pall after a time and with lampreys and pike in such abundance it would be a pity to spoil one's palate by over-indulgence. For those interested in the niceties of technique in stickleback fishing I can do no better than refer them to my own publication, *Tiddlers, or, the Arte of Fishing for Sticklebacks* (London 1958) in which equipment, dress, and method are all described in great detail.

While on the subject of the fauna in the area it will be convenient to mention the district's particular form of yeti, known locally as the Fen Tiger or abominable fenman (Linnaeus: *Homo Leggbourkeiana*). Traces of the spoor of this creature have been found in great abundance in the peat and mud of the area, and many are the climbers who have laid claim to seeing it. The creature is extremely shy and suspicious, however, and one must be careful to approach it with quiet kindness. It may be recognised by its ambling, shuffling gait, its half-erect bearing and its expression of extreme vacancy and preoccupation. Its cries are remarkably akin to our own language, but are emitted in a low, guttural growl as if a hot potato has recently been placed in its mouth.

These creatures congregate each evening in communal dens where they seem to amuse themselves by throwing pieces of feathered, pointed metal into discs of cork, marked with radiating stripes. This peculiarity was recently dealt with at length in the *March, Stuntney and Reach Archaeological Society's Journal* by the Reverend Dribble Dampier-Gribble, F.R.G.S. and Bar, in an article entitled "A Curious Survival of Palaeolithic Fertility Rites at Rump Stuntney". Incidentally the article is also of interest in that the learned footnotes occupy three times as much space as the article itself.

Access to the fens may be accomplished in many ways — by motor-car, by railway, on foot, and, more recently, by flying-machine. But the latter is not very useful to the climber, who often will have to take comparatively heavy equipment with him. Best of all, perhaps, is the local train service, which, although not noted for punctuality, does afford one relaxed views of the country with its vast areas of level agricultural land, and every mile or so the sight of a tempting climb, which may be a steep dyke, a pump house, a church or one of the smock mills that still form landmarks in many parts of the area. The trains themselves have a pleasant old-world atmosphere about them which at once transports one back into a more comfortable and spacious age. The cast-iron seats are upholstered in bilious-green plush, and in the first-class compartments spittoons disguised as footstools are provided, although the railway authorities insist upon referring to them as *salivaria*. The carriages, which are illuminated by safety-lamps of a type invented and patented by Sir Humphry Davy, are decorated with crimson and gold lincrusta paper, and are embellished by framed water-colour views of such subjects as Grunty Fen in carnival week, or Burnt Fen in a November mist.

If one is lucky enough to be on a corridor train, a refreshment saloon will almost certainly be provided, where one can purchase, at reasonable terms, the best arrowroot and Garibaldi biscuits, to be washed down with a mug of Messrs. Epps's well-known cocoa. Moustache cups are available for those in need.

Could one imagine a better means of transport into one of England's finest climbing districts? The horseless carriage and the flying machine simply could not do justice to it. May the railway long continue to provide this service.

REVIEWS

CLIMBS ON THE NORTH YORKS MOORS. Edited by M. F. Wilson. (Cleveland Mountaineering Club; obtainable from the Billingham Press Ltd., Station Road, Billingham, Co. Durham, 10/6)

This is a revised and substantially enlarged edition of *Climbs in Cleveland*, which appeared in 1956. During the five years two hundred new routes have been added, both on the old crags and on others newly discovered. Most of the moorland crags are sandstone, but some limestone has also been explored in the near surroundings.

Cleveland is worthy hill country — comparing favourably with Dartmoor in nearly all respects: yet there are less than a tenth of the visitors! Now with this guidebook to hand the visiting climber will find even more entertainment.

E. C. PYATT

SNOW COMMANDO. By Mike Banks. (Burke Publishing Co., 12/6)

Readers of the author's previous books will find little in this slim volume which Banks has not told, in greater detail, already. As one who has read and enjoyed his first book *Commando Climber*, glanced through *High Arctic* and *Rakaposhi*, and been forcibly fed on mountain literature for some years, I approached the task of reviewing *Snow Commando* with some misgiving.

It is, therefore, greatly to the credit of Mike Banks that I found myself, in the event, enjoying the experience. He has the knack of helping the reader feel he is "there" and of imparting some of his own infectious enthusiasm. To these attributes Banks adds the ability to explain to the uninitiated reader the essential technicalities of climbing in simple terms, and to convey sincerely some of the deeper motives which beckon him to the hills. His friends may wince at this self-portrait of "a broad-shouldered, brawnily built man of middle height, with . . . a faraway look on my grey-green eyes"; but there is much else in his subjective moods which Geoffrey Young, who bade us reveal them, might have approved.

In all, an attractive tale for the younger reader, with mediocre illustrations.

JOHN HUNT

TO THE UNKNOWN MOUNTAIN. Ascent of an unexplored twenty-five-thousander in the Karakoram. By Wilfrid Noyce. (Heinemann, 21/-)

"Two objects I had" says Noyce in his Preface ". . . I would write about people, their reactions and feelings as understood by me and I would put Trivor, a mountain of which I had never heard before 1959, in a perspective common to all "Unknown Mountains", so that our adventure upon it should typify that of all who go out in quest of mountain beauty or difficulty, companionship in achievement or just an obstacle course."

In my opinion Noyce brings off these aims superbly; this is the most compulsively "readable" mountain book for years. And I should know: I read it twice, flat on my back on fracture boards — it is just the right weight and size to hold directly above the head — and once more while in a painful corset on a long miserable train journey.

Noyce, it is refreshing to recall, is a professional writer and this is a planned book. You will look in vain for all this Tom, Dick, Bill, Harry and Charlie stuff, all that "Send up the sacks, I cried", all those embarrassing attempts at understated emotion. This book is worth the money for the portrait of Don Whillans alone. "Then they stopped again at that little rise, not the big one, and said there wasn't a way. . . . Then I got bloody angry, you know, started kicking and there was a real shindy. And in the end I went on and made the bloody way, and came back, then they couldn't say there wasn't a way. . . . So in the end they went on binding, and we went on going, and then they got so as they couldn't get back and they had to come on". That is the real stuff, there is the man who was once jostled off a bus by an unfortunate citizen who thought he was a child, who did the terrific fast time on the Dru with Brown, who once said to Noyce, as wild uproar broke out on an extremely severe climb on Clogwyn du'r Arddu, "That'll be Harry falling off". And, to finish with "the Don", the Appendix from his own hand describing his return by motor cycle from Rawalpindi to Lancashire will soon take its own place among the minor classics of comic travel. The journey took him six weeks and 14 pages of print. I have a guinea book in front of me as I type this by a chap who managed to drive a motor car from Cherbourg to Lisbon.

This is an honest book. The reader feels part of the expedition and shares with the leader the tensions of responsibility ("Those great cornices, bending over towards the Shimshal. . . . Ought I to have allowed a party of two? It was an immense relief when they were seen again, later in the day, on the return journey") and the real hopes of a big mountaineer who is trying hard not to put himself into the first summit party. We first met this endearing characteristic of our proposed next President in *South Col* when he learned from Hunt about his role in the final assault and went out of the tent to kick things about for a little while.

Once or twice the schoolmaster comes out: "I gave him the biggest dressing down I have ever given anyone in my life", the French quotations, the references to the self-analyses in Proust, but all the time the reader, and certainly all those reader-members of the Climbers' Club who have already bought, or must go at once to buy, this book will be conscious of the shy tough man we all know, who thinks nothing of a drive from P-y-g to Godalming with a broken collar bone and four cracked ribs, who takes his walks with a rucksack full of bricks, who really thinks it fun to try out a sleeping bag in a blizzard on top of Snowdon.

I do not think that any expert will be able to criticise adversely the administration and performance of the expedition described in this book, although I wish there had been a rather more serious writing-up of what Noyce once or twice refers to delightfully as "the science". One gets the feeling that a man who can recognise a saxifrage or read an altimeter is regarded by Noyce as a Wise One from Outer Space. Probably the photographs have got something the matter with them, but I have yet to meet a climbing photographer who even wanted to see

the other man's pictures. But there are not many happier portraits known to me than the picture, facing page 117, of Noyce on his summit cone, smiling (I am sure) at the distant Pamirs.

KEVIN FITZGERALD

AIRBORNE TO THE MOUNTAINS. By James Mills. (Herbert Jenkins, 25/-)

Although the title immediately suggests parachuting into the mountains, this book in fact tells the tale of four officers from the Airborne Brigade who (wisely) left their parachutes behind when they spent six weeks climbing in the McKinley Range of Alaska. They centred their activities on the Traleika Glacier which is parallel to and confluent with the Muldrow, the *voie normale* of McKinley.

Three virgin summits of around 12,000 feet were attained, a sledge was dragged over many hard and dangerously crevassed glacier miles, and some new ground broken by a British expedition.

The 32 pages of photographs represent excellent value for money today but the photographs themselves vary greatly in quality. Some of Bradford Washburn's impeccable landscapes are included. These are, as ever, quite perfect technically as well as being of the highest aesthetic merit. He is the Sella of our generation and any other photographer is bound to suffer in comparison. At the bottom end of the scale is the photograph facing page 112 which shows half a climber (his legs seem to have vanished) in a chalky void. I simply cannot make it out.

In his treatment of the expedition story, and in his style, Mills has made a determined and successful effort to get right away from the "guide book" school of narrative. In its place he gives us writing in which vividness is achieved, but often at the expense of his becoming neo-journalistic. Historical background and mountain detail (we are not so much as given a height) are utterly lacking. The descriptions of the climbs are racy and full of excitement but give little clue to the technical standard or genuine difficulty as understood by climbers. Instead we are given an overdose of mood. Every expedition row, every fractious incident, is faithfully recorded. The result is extremely readable with all the appeal of the gossip column. The dialogue is realistic with everyone calling everyone else a bastard.

Most of the explosive incidents occurred when the quartet was either dragging a man-haul sledge or sardined into a two-man tent. Both these procedures are questionable. A sledge is an inefficient means of transport unless the surface is smooth, firm, and tolerably level; it is just not worthwhile saving the 10 lbs. or so in weight of a two-man tent to be indescribably uncomfortable for days. However, had they ditched the sledge and taken a second tent the party might have been more harmonious and the book very much less beguiling. For beguiling it undoubtedly was. The story galloped along and the characters came to life. Not one page was boring; in fact I think it was the most easily readable mountaineering book that has come my way for years. Only balance was lacking. Expeditions are not all bickering.

MIKE BANKS

MISCHIEF AMONG THE PENGUINS. By H. W. Tilman. (Rupert Hart-Davis, 21/-) This is the absorbing account of an 11-months journey completely lacking in compulsive qualities. So much was this the case that Colonel Tilman had to gather most of his crew through the "agony" column in *The Times*. "No pay, no prospects, not much pleasure" said the advertisement. A voyage half way round the world in a 45-foot cutter in order to climb some peaks thought to be about 5,000 feet (but proving to be substantially less) makes little appeal to the average climber, while the climbing might serve to put off the pure sailor. With Colonel Tilman, however, the journey is the thing and personalities count for little. In fact the weakness of the book is that one learns little of his oddly assembled crew and is told at the end of their 11-months journey that they were "no doubt glad to have seen the last of each other". Their qualifications for sailing were somewhat higher than for climbing. One had sailed a canoe and another had crossed the Atlantic 51 times in the *Queen Mary*, playing the double bass. Nevertheless, except for the cook, who steamed home from Cape Town to save time on the way back, all six members of the cutter's company stuck together for all the many long ocean passages.

The account of the voyage out is excellent; and once one arrives at the first objective, Possession Island in the South Indian Ocean, one is treated to entertaining accounts of the wild life of the island, the experiences of earlier expeditions there and the unexpectedly quick conquest of the mountains of the island. The speed with which all was accomplished led the party on to Kerguelen, 700 miles to the east, where the ice cap, Glacier Cook, was explored.

Throughout the book light is made of the difficulties of navigation, the adverse weather conditions, the damage to *Mischief* in bad weather and mechanical breakdowns (the engine was continuously out of action on the way home). One is left interested and amused, but feeling like the reader described in the book-jacket, "who will enjoy these exploits all the more for not having to share in them".

H. B. SALES

THE MOUNTAIN WORLD, 1960/61. English version edited by Malcolm Barnes. (Allen and Unwin, 32/-)

Books can create a wonderful atmosphere of satisfaction; and the first impression of the reader when picking up a new volume can be very important. Some merely use a book for the value of its contents, while others appreciate the typographical design, quality of the reproductions and the choice of paper, etc., and then settle down to enjoy the written word. *The Mountain World* rates very highly in all the technical aspects of the printing and publishing industry, and also contains a wealth of interesting material for all devotees of the high hills.

In looking at the book with a more critical eye, one cannot really blame the editors for placing Bradford Washburn's article near the front; but as the article is accompanied by photographs of such superb quality, the reader is led into thinking erroneously that the remainder of the photographs in the book will be of equal stature. Although by average standards the expedition photographs reproduced are very good indeed, compared to Washburn's efforts they look second-best.

True to form, the book opens with an account of that great writer and mountaineer, Geoffrey Winthrop Young, by one of his friends, Arnold Lunn. Geoffrey Young is portrayed in all his moods and guises. Perhaps the most poignant of all the snippets collected by Lunn describes the occasion when Alfred Zürcher is quoted as having asked the famous guide, Joseph Knubel, who was his best amateur climber — Knubel replied, without hesitation, "Mr. Young was just as good in the mountains as I ever was". This is certainly a fine compliment from such a great guide.

The article on Pobeda Peak is particularly appropriate this year, with the British expedition to the Pamir Range due to leave this country shortly.

The great ascents of Rakaposhi, Haramosh, Gasherbrum I and Gasherbrum IV were all made in 1958, and the records of each of these Karakoram ascents are admirably written and illustrated by members of the expeditions. On a comparison of the condensed account of the Italian expedition to Gasherbrum IV by Fosco Maraini with his superbly illustrated book of the same expedition, the absence of colour was very markedly felt, making the poor selection of black-and-white photographs much more noticeable.

The ascent of the last accessible 8,000 m. peak in the Himalayas is extremely interesting, and that the peak was Dhaulagiri is great news; although there have been a number of attempts on this mountain in the past few years, the record of the Swiss attempt makes extremely fine reading.

The articles on Antarctica emphasise the tremendous amount of exploration work still to be done in this region. The expeditions during the International Geophysical Year only scratched the surface of this immense continent, which forms one of the wildest and most inaccessible parts of the world.

Summing up the impressions gained of this volume of *The Mountain World*, the price of 32s. for which the publishers ask, although high, is not sufficient to make the offer anything but extremely attractive.

JOHN SLEE-SMITH

CLIMBING GUIDES TO THE SNOWDON DISTRICT: LLANBERIS NORTH.

By D. T. Roscoe. (Cloister Press, 9/6)

On skimming through this book perhaps the first feeling is one of disappointment that Dinas Mot is not to be found here. The Policy Makers tell us it will appear in a future guide to the South side of the valley, and I suppose we ought to be satisfied with that. I think I must be a little "old-fashioned", for to me it has always been part of the "Three Cliffs", and the thought that sometime in the future it will appear in another guide book gives me no satisfaction at all.

As we expected Roscoe has turned out a thoroughly practical, accurate and workmanlike guide to his side of the Pass. From the purely practical side this book is difficult to fault. The cliffs are clearly marked (one is tempted to say they could hardly be otherwise, but as we have seen recently, they could). The climber is led with little or no fuss to the foot of his chosen climb, and the line and pitches are clearly indicated. Much as one may deprecate this sort of accuracy, in an area so packed with climbs as this one it is difficult to see how it could have been satisfactory otherwise.

Description is less flamboyant than in Harding's guide and I personally lament the passing of my favourite passage "The crux involves . . ." when referring to the Ivy Sepulchre. Yet the book is not without a well-turned phrase and seems to adopt a satisfactory compromise.

In a guide such as this, where much of the climbing is of a very high standard, one would have expected "form for the day" to have introduced some irregularities into gradings, particularly of the harder climbs. However with a couple of odd exceptions, notably Brant Direct and Black Wall, there seems little to disagree with.

All round this is probably the most useful guide of recent years.

J. A. AUSTIN

THE ASCENT OF DHAULAGIRI. By Max Eiselin. Translated from the German by E. Noel Bowman. (Oxford University Press, 25/-)

This is an exciting account of the successful Swiss expedition to Dhaulagiri (26,795 ft.; 8,222 m.). The expedition succeeded in putting six men on the summit on 13th May, 1960, and a further two 10 days later. The mountain, with its almost daily storms, high winds and difficult rock and ice climbing, was a tough nut to crack, and the success of the expedition was due to good luck as well as to taking risks; for a 13-man expedition to go for the summit on Friday, 13th May, was perhaps not the least of these!

The mountain was first reconnoitered by the 1950 French expedition which gave it up in favour of Annapurna. Subsequent expeditions (including the 1953 Swiss party) concentrated on the "Pear" buttress route which is evidently both dangerous and difficult, reserving its crux to about 7,700 m. Eiselin was a member of the unsuccessful 1958 expedition and conceived then two original ideas. One was to attempt the mountain next time by the N.E. ridge, a route which earlier parties had ruled out as too difficult; the other was to use a light aircraft to land on the Dambush Pass (5,200 m.) and the N.E. Col (5,700 m.) so as to cut out the extremely laborious approach and the dangerous Mayanghdi glacier, and also to maintain contact with the outside world. He was to some extent reinforced in his choice of route by the 1959 Austrian expedition, the seventh unsuccessful attempt, which tried the N.E. spur on his advice and reached 7,800 m.

One of the most interesting features of the book is the adventures of the "Yeti", the single-engined Swiss-made aircraft which the expedition used. A very interesting journey through the Middle East to India and Nepal was followed by much intrepid flying between Pokhara and the mountain which resulted *inter alia* in a world altitude record for landing and taking off from the N.E. Col. Among many exciting incidents the most thrilling was a take-off from this col in very bad conditions when the pilot had to hurtle the aircraft towards crevasses and seracs at maximum speed in an all-out (and only just successful) attempt to take off; others, almost as dramatic, were a landing at Pokhara after the cylinder head had blown up and covered the aircraft with engine oil, thus restricting the pilot's vision to small side windows only, and the final crash near the Dambush Pass due to the control column breaking unexpectedly and unaccountably. It seems an open question whether reliance on an aircraft for an expedition of this nature is justified. Some great organisational problems were solved at the expense of

creating new ones when the aircraft was out of action; and the value of the aircraft itself, and the spare engine which had to be flown out especially, were high.

Apart from the flying there are gripping accounts of the rescue of a Sherpa from a crevasse, of the ascent of the N.E. Col by the liaison officer and a Gurkha who went up the Mayanghdi glacier unroped and apparently unaware of the huge risks involved, and finally of the summit climb itself. There are many excellent photos and the book has been translated in a readable way. This is certainly a mountaineering adventure with a difference.

ALAN BLACKSHAW

THE ALPS. By Wilfrid Noyce*.

(Thames and Hudson, 63/-)

This book is basically a collection of 230 magnificent photographs, covering the Alps from the Mediterranean to the hills near Vienna. The collector (who remains anonymous) has taken photographs from 50 different sources, and has attempted by his selection to draw a representative picture of the Alps and their changing character as one moves from West to East. He has been extremely successful, but it must be emphasised that it is not purely a mountaineering collection; pictures that merely illustrate a good route are not included.

The bulk of the writing in the book is by Karl Lukan, who writes an introductory essay to each region. Each essay consists mainly of an account of a mountaineering ascent (or speleological descent) in the region. These seem to be completely irrelevant, though a Fenman of my acquaintance enjoys them greatly and claims that they create the atmosphere for looking at the otherwise terrifying photographs.

The introduction is by Wilfrid Noyce, who lays the foundation for the photographs. He discusses the geology, scenery and history of the Alps, referring many times to the plates, and successfully verifying the collection.

The layout of the book is novel. The pictures appear in five batches of up to 86 photographs, each numbered, the numbers referring to notes in the pages immediately preceding the batch. This allows for voluminous notes but makes a labour of identifying a particular photograph.

This is a book that I would like to own, but, as review copies finish up in the library, I am unlikely ever to do so, as my desire does not stretch to three guineas.

M. G. HUGHES

* *Wilfrid Noyce admits only to writing the introduction and re-writing the notes. Otherwise the book is foreign in origin and may have been published on the Continent as by a different author.*

KARAKORAM. THE ASCENT OF GASHERBRUM IV. By Fosco Maraini. (Hutchinson, 60/-)

ANNAPURNA II. By Captain Richard Grant, M.C., Royal Marines. (Kimber, 30/-)

Here are two more books on the Himalayas, both describing successful attempts

on peaks of just under 8,000 metres. Briefly, Gasherbrum IV was attempted by a strong Italian party; Bonatti and Mauri reached the summit on 6th August, 1958, after a prolonged assault of the very difficult final ridge. The ascent of Annapurna II by Grant and Bonington was described in an article by the latter in last year's *Journal*.

But *Karakoram* differs enormously from *Annapurna II*. *Annapurna II*, as might be expected from an officer of the Royal Marines, is a straightforward and workmanlike account of the expedition, leavened with sufficient humour to make it quite pleasant and enjoyable reading. The photographs illustrating it are second-rate, at any rate in reproduction, and the book is printed on thick and unpleasing paper. There is a rough sketch-map of the Annapurna region; the endpapers are an adequate diagram of the route.

Many members will remember Maraini at the 1961 Annual Dinner, or will have met him elsewhere, and will not be surprised that his book is extremely well-written. His fine, vivid, human account, so different from the normal British expedition book, seems to lose nothing in James Cadell's translation. It is lengthy, not only describing the expedition itself, but summarising the history of other expeditions in the area, and packed with digressions into other matters which aroused the author's interest, such as details of local life and customs, place-names, naming of mountains and so on. The illustrations and their reproduction are magnificent; there are good diagrams and sketch-maps; the whole book is splendidly produced. Perhaps the best book on the Himalaya for many years; I enjoyed reading every page of it. Expensive, but worth it.

J.N.

SPACE BELOW MY FEET. By Gwen Moffat.

(Hodder and Stoughton, 18/-)

PLACE OF STONES. By Ruth Janette Ruck.

(Faber, 21/-)

At first sight it may seem strange to consider these two books together, the one by the only (or so it is supposed) female mountaineering guide in the world, the other by a farming disciple of the great George Henderson. Yet here we have the personal testaments of two women who have both in their own ways fallen under the spell of the mountains; the personal testaments indeed of two remarkable personalities, self-sufficient yet often self-doubting, cautious and courageous, and prepared with surprising humility to forego the easy vegetative welfare-state-life for one that must have been often lonely and seldom restful either spiritually or physically.

The two books have of course other similarities: both authors have lived a substantial part of their lives in small cottages on the slopes of the mountains of Snowdonia, and both have the talent for writing in a most readable style that is laced with genuine rather than contrived humour. Both books are indeed autobiographical in design, but there the resemblance ends with an astonishing contrast: whereas Gwen Moffat is immersed with personal relationships to the extent that at times her book reads like a novel, Ruth Ruck keeps her feelings for other people strictly to herself, and gets on with the stern business of relating the story.

It is this capacity for concentration that first strikes the reader of *Place of Stones*, the way the author has ruthlessly excluded anything not germane to her theme, the tale of her struggle to make a viable farming unit out of a small Welsh hill farm, a sympathetic home in an area of indifferent mountain and clannish hill people. It is a well-told story, and there is even an all-too-short chapter about climbing which seems to promise a glimpse into her private life, but after eight and a half pages we are back with the Hill Farming Scheme. One is left with the rather discouraging feeling that despite the author's ability and humour, despite one's hope that the book will sell well to augment the income from "Carneddi", its aridity of personal feelings, its apparent attempt to deny the sex of the author, will prevent any popular success. It is difficult to see how even the painter of a paper-back cover could give it the sexy appeal that has sold the more obscure novels of D. H. Lawrence.

It is of course quite a different matter with *Space Below My Feet*. I rejoice to think that here is a book that will continue its initial success, a success that is very well deserved. It seems unnecessary in this *Journal* to describe the book in detail, or even the story it relates, both of which will be as well known to most of the readers as the author is to so many of the Club. There may have been those in the Club who viewed its impending publication with misgiving: they now know that they need not have worried, the author's tact having been equal to the strain that must at times have been put upon it. Gwen Moffat's engaging personality comes through clearly; there can surely have been few authors candid and honest enough to put so much of themselves into an autobiography. It is a thoroughly delightful book about Gwen Moffat's adventures in the climbing world, and those who do not already own a copy should hurry up and BUY one.

E. A. WRANGHAM

CLUB JOURNALS

Alpine Journal. The May issue opens with an account of the successful 1960 Austrian expedition to Distaghil Sar. The map here would appear to belong to the next article, which has Noyce in fine form on Trivor. The vexed question of Everest is introduced by an account of the unsuccessful Indian expedition of 1960. There follows a description of the Chinese ascent from the north which, while unedited, does not escape much adverse editorial comment. This expedition is shown in much better light as a result of B. R. Goodfellow's analysis of one of the expedition photographs, in the November issue. It seems very unfortunate that an expedition with such high aims should have found such unconvincing chroniclers, and that its achievements should have become the focal point of controversy.

Other articles take us to the Rockies with the 1960 Royal Fusiliers party, to the Crozet Islands in *Mischief* with Tilman, and around Mont Blanc with Smythe. There are also included in this number appreciations of Jakob Anderegg and of Geoffrey Winthrop Young.

The November issue also contains many articles of great interest, including an anthology on Sir John Hunt's Greenland expedition, and a full account of the 1960-61 Himalayan Scientific expedition, during which the "illegal" first ascent of Ama Dablam was made. An introductory account of the climbing at Swanage is given, and a report made on the New Zealand ascent of the spectacular Andean peak Cayesh. J. Emery explores the importance to the mountaineer of physical disability.

American Alpine Journal. A racy account of the successful 1960 expedition to Masherbrum is followed by Dyrenforth's article on the ascent of Dhaulagiri — "Mountain of Storm". An expedition to the Logan mountains of the Yukon, during which several first ascents were achieved, is described. The issue ends with the admirable expeditions section which we have come to expect from this Journal.

The Canadian Alpine Journal deals almost exclusively with domestic matters. This club is however more fortunate than most in the variety of its home territory.

The Scottish Mountaineering Club Journal. An exciting article by Marshall on Scottish winter climbing is followed, aptly enough, by a discussion of the problem of survival. Further accent on safety is given in articles on Scottish mountain rescue, and on the technique and dangers of glissading.

The Journal of the Fell and Rock Climbing Club. Extracts from John Hunt's diary of his recent Greenland expedition make delightful reading. Oliver treats us to a gripping account of the west face of the Petit Dru, and Ross describes several climbs and one or two amusing (i.e., non-fatal) falls on Castle Rock of Triermain.

The Rucksack Club Journal has a fine article by Harding, which contains, among other good things, a memorable portrait of Arthur Dolphin. In the *M.A.M. Journal* Colledge describes an ascent of the north face of the Triolet, and Byne discusses his rapidly growing collection of mountaineering mail.

Cambridge Mountaineering is edited by, and seems to have been largely written by, McDonald. The issue includes a selection of admittedly absurd extracts from an original article on the Chinese Everest expedition, printed out of context and without comment. It is too easy to poke fun at party propaganda; one wonders about the worth of the exercise.

Oxford Mountaineering has a full account of the 1960 expedition to the Cordillera de Carabaya in Peru, and a short account by Mortlock of the Trivor expedition. Taylor describes the first British ascent of the N.W. ridge on the Sciori di Fuori. There is a delightful article by Fosco Maraini on an Easter traverse of the Haute Route. Included is an account, written in a slightly watered-down version of the nouvelle vague in mountaineering prose, of a climb in Glen Nevis. For an extreme example of this style, the reader is referred to a letter to the editor (who objected) in the 1961 *S.M.C.J.* For this style at its best see Robin Smith's article in the same Journal of 1960.

NIGEL ROGERS

Other Journals received:

Journal of the Swiss Foundation for Alpine Research, 30 November 1961.

Bulletin of the Mountain Club of Kenya, numbers for 1961.

Sierra Club Bulletin, January — November 1961.

Mitteilungen des DAV, May 1960 — June 1961.

Jahrbuch des DAV, 1960.

Die Alpen, all numbers for 1961.

Irish Mountaineering, 1961.

Mountaineering, 31 March 1961.

Ski Notes and Queries, September and December 1961.

British Ski Year Book, 1961.

Ladies' Alpine Club Journal, 1961.

Pinnacle Club Journal, 1959-60.

Journal of the Mountain Club of South Africa, 1960.

New Zealand Alpine Journal, 1960.

Bulletin of Mountain Club of Uganda, 1960-61.

Journal of the Lancashire Climbing and Caving Club, 1961.

Bulletin of the G.H.M., 1960.

Appalachia, June — December 1961.

Sheffield University Mountaineering Club Journal, 1960-61.

Birmingham University Mountaineering Club Journal, 1961.

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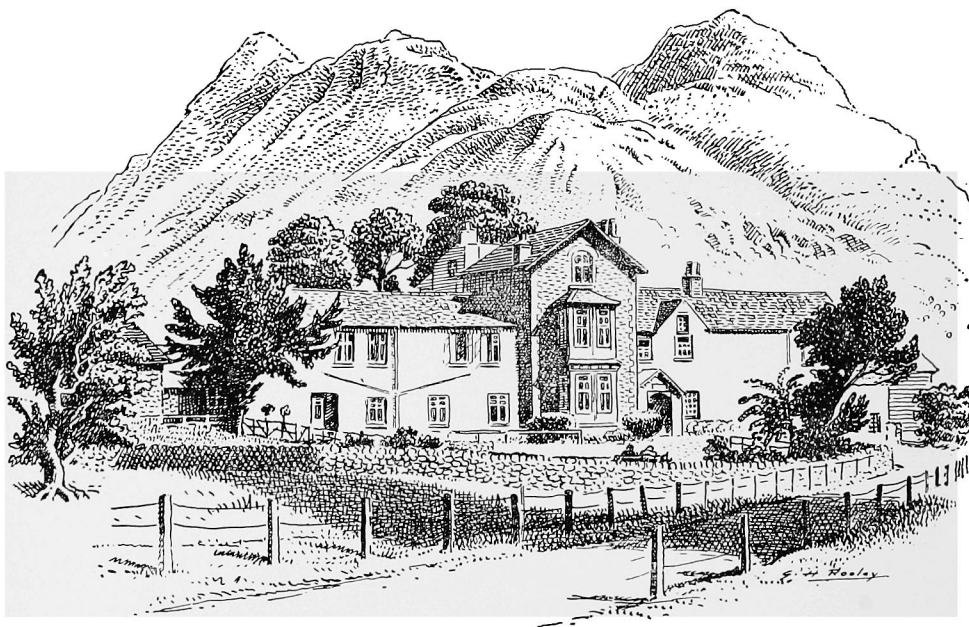
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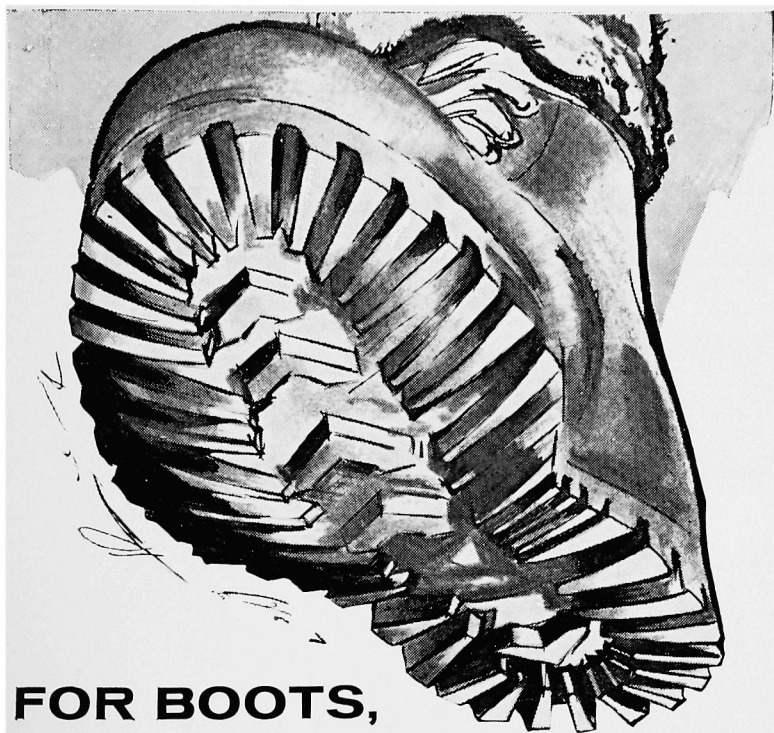
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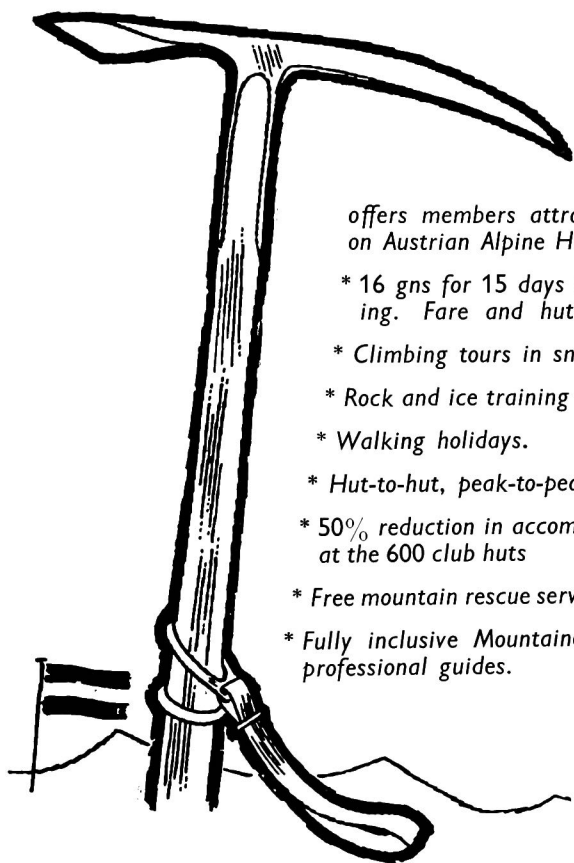
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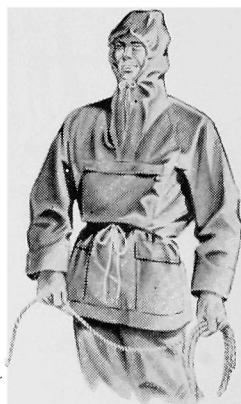
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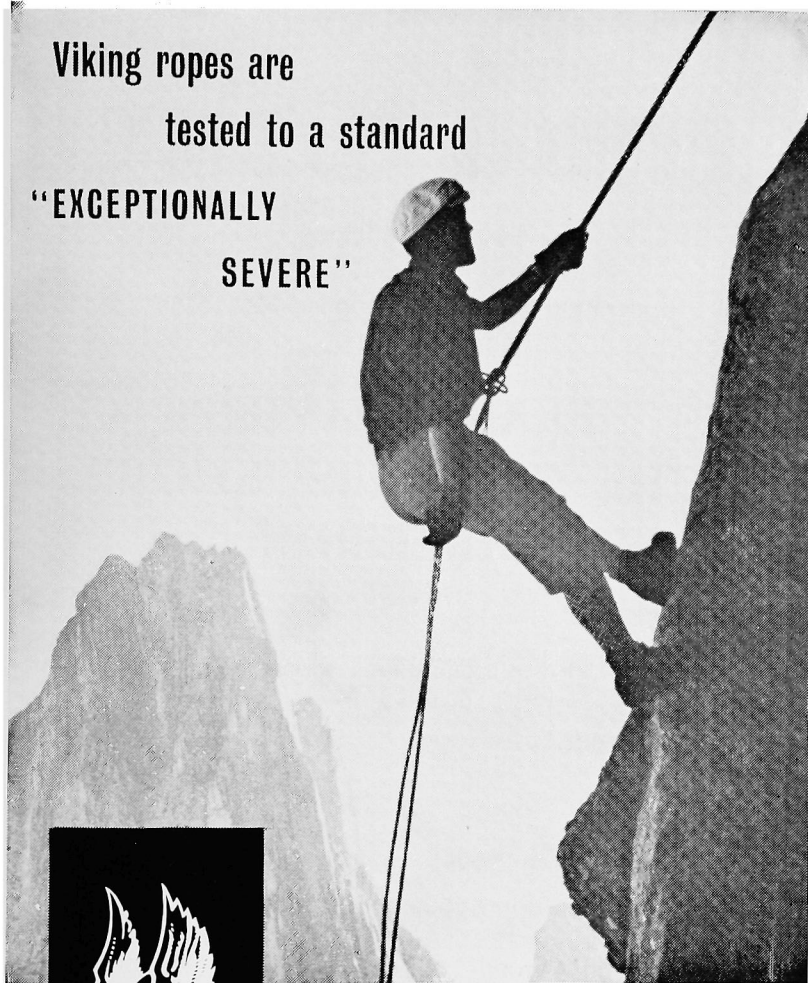
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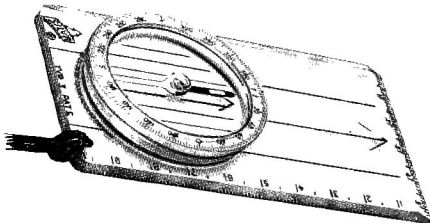
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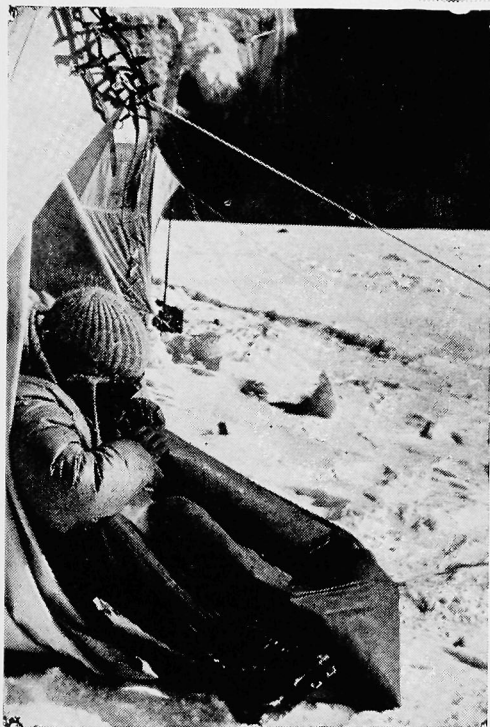
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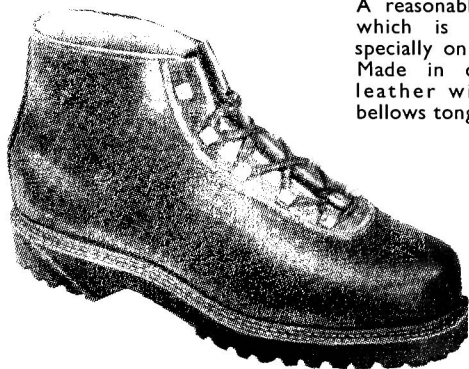
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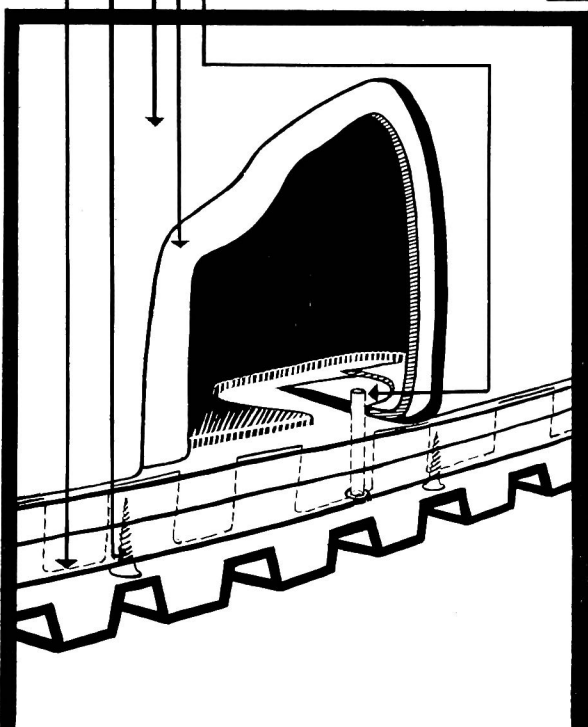
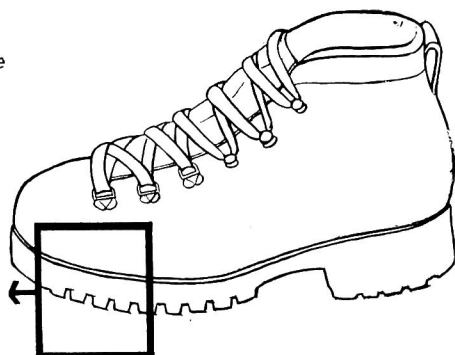
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