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YORKSHIRE RAMBLERS'
CLUB JOURNAL
1966

Edited by HAROLD G. WATTS

VOLUME X NUMBER 33

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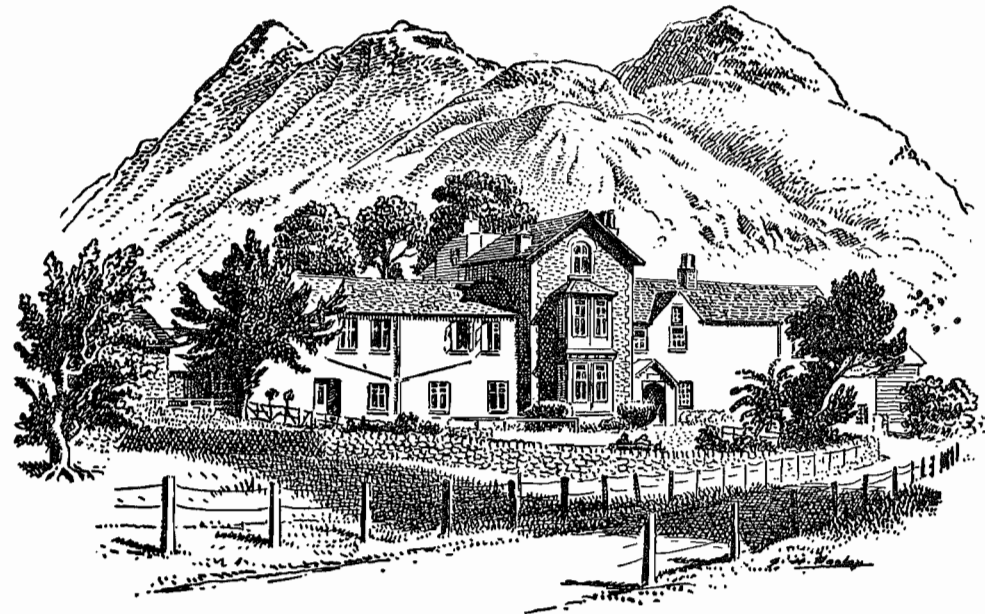
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HILL INN MEET

S. A. Goulden

THE YORKSHIRE RAMBLERS' CLUB JOURNAL

VOL. X

1966

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FUJI-SAN

by R. Gowing

THERE ARE FIRST SIGHTS which indelibly impress themselves on the mind, impressions which no subsequent familiarity can devalue. The Matterhorn seen on looking up from the streets of Zermatt; the Main Chamber of Gaping Gill seen from Boulder Slope; and Fuji rising snowy and ethereal above the haze of Tokyo. For the mountaineer visiting Japan, the first objective that occurs to him is Fuji, and though he will subsequently learn that other ranges lower in altitude offer more interesting climbing, he will not be content until he has trodden its (preferably) snowy heights.

Fuji-san has always been regarded as one of the national symbols of Japan. It is generally looked upon as sacred and all Japanese men with any national or religious feeling desire to climb it once in their lifetime. This usually takes place between the 1st of July and the 31st of August, when the mountain is officially opened and closed with colourful festivals; during this time the 90-odd huts as well as the souvenir shops and shrines on the various routes which ascend from all sides are open and long processions of pilgrims with straw sandals and wooden staffs snake their way up the dusty paths or enjoy a glorified scree run down the loose cinders.

While an ascent during the season is no doubt full of human interest, Fuji as a mountain has more to offer towards winter, when its snowy cap returns and the crowds have withdrawn to the Five Lakes which decorate its northern foot, or to the nearby hot spring resorts of Hakone. The dust and cinders are sealed by snow and there is a better chance of fine weather.

One wet Saturday afternoon in late November 1965, Tom

Gerrard and I set out from Tokai armed with axes, crampons, all available clothing and the hope that the weather would continue changeable to give us a fine day. After fighting through the traffic of the biggest city in the world we soon reached Fujiyoshida where, from the big Sengen Shrine, the traditional northern route up Fuji starts and drove up the fine toll-road which wends its way up to near the Fifth Station on the Fujiyoshida Route. Just below the top of the road, at about 7,400 ft., we parked beside an open sided bus shelter. The rain had stopped; we had a brew of cocoa and dossed down in the shelter. Snug in our sleeping bags and with the concrete floor well padded by our air beds we passed a comfortable night.

We awoke soon after six to a fine morning. Though the Southern Alps and other nearby ranges were cloud-capped, Fuji rose clear above us. As we breakfasted, shivering, on bread and jam and cocoa, I thought of another scene eight thousand miles away, of a sumptuous dining room where at that moment the Ramblers, replete with food and good fellowship, would be sitting back enjoying their cigars, listening to the exhortations of their honoured guest or to the scintillating wit of the President. There was little time for such thoughts however, as we packed up and tried to start the car. We drove it up to the car park and, leaving it there, decided to make for a prominent snow gully descending towards us from near the top of the big north east snow scoop beside the Fujiyoshida Route.

We set off just after 7.30 up a narrow path through low woods of birch, larch and alder, which soon gave out to sparse scrub larch and finally nothing but cinder, up which we toiled towards the snow gully. The cinder was well cemented by the frost, without which the ascent, tiresome as it was, would have been well-nigh impossible.

Towards 10,000 ft. we reached the snow gully. As we were putting on our crampons I observed and photographed a party of girls, one of whom came forward and claimed my acquaintance from the Japanese Alpine Club 60th anniversary reception at which I had been a guest a month before. She explained that her party, of the Edelweiss Club, were practising snow techniques and she invited us to call at her tent for tea on the way down, for which we regrettably had no time.

The snow proved to be in excellent condition and my new Japanese crampons bit well but the ascent, at an unaccustomed altitude, proved hard work. I stopped to change a film and to put on a borrowed duvet in anticipation of cold wind higher up. The gully eventually gave out on the ridge bounding the big scoop and we made our way into and up this. After a fairly long plod we reached the crater rim on its northern side at midday.

The crater, 732 feet deep from the highest point, occupies the southerly two thirds of the summit area, the rest being a sort of plateau surrounded by the rim peaks of the earlier crater. The crater walls include some high vertical crags, but in other places there is an even slope down to the bottom which is thus quite accessible though it is doubtful whether many people visit it.

Everything was thickly coated in ice and frost feathers and, though it was brilliantly clear, a strong cold wind was blowing. We climbed up the north west peak, 12,470 ft., Hakusan-daké, and then down among the rocks to the south west. Tom waited below Hakusan-daké while I made my way along the west rim and down to a hut on the west edge of the crater. As expected, it was all closed up, so I climbed up the south side of the ice-clad rocks forming the highest summit of Fuji and of Japan, 12,535 ft., Ken-ga-miné. This is crowned by a weather observatory and radar station which, though it showed no signs of life, is reputed to be permanently manned. I paused for a moment, sheltering from the wind, to enjoy the view of the crater and its surrounding peaks and of the Pacific shimmering far below.

From Ken-ga-miné I descended fairly steeply to the east and after crossing the gentle rise of Mishima-daké reached the Sengen Shrine, the main Shinto shrine of Fuji-san. In summer there is a post-office here; now shrine, stone lanterns and torii were inches thick in ice. I crossed the slight rise of Komaga-daké to the shrine at Gimmei-sui (Silver-sparkling water) where a spring exists in summer. Over the next hill the wind blowing from the north west across the crater was so fierce that I had to crawl sideways at full length, adhering with pick and front points. I struggled past Sai-no Kawara, so called after the Buddhist Styx, and soon was able to traverse on the leeward,

outer side of Asahi-daké and Jojuga-daké on the eastern rim, enjoying the view of the Izu Peninsula and of the hills and lake of Hakone, to reach the Kusushi Shrine at the head of the Fujiyoshida Route. I stopped in the shelter of the street of souvenir shops, which looked more like the Ben Nevis Observatory in winter, to change a film, then continued over the last peak, Kusushi-daké, to arrive at the col just as Tom was setting out to look for me.

Two hours after reaching the crater rim we set off down at 2 p.m., following the route of our ascent. We were troubled somewhat in the upper scoop by blown powder snow, but left this behind when we reached the gully. The snow had not deteriorated and we enjoyed an easy descent, with good views of the neighbouring Southern Alps and other hills and of the shadow of Fuji-san touching Lake Yamanaka. At the end of the snow we removed our crampons and set off to pick our way down the cinders. These had thawed to a depth of a few inches so that they slid when one put one's weight on them, not en masse like a good scree as they would in summer, but individually and unpredictably. After spending more time on our bottoms than on our feet we were glad to reach the consolidated ground of the vegetated zone and soon, an hour and three quarters after leaving the crater, we were sitting in the car eating our first food since breakfast.

As we drew away in the fading light Fuji held my gaze, slowly it lost its detail and gained that beauty of form that over centuries has charmed artists, poets, pilgrims and at least one Rambler.

KNOYDART. THE WHITSUN MEET 1965

by P. C. Swindells

THE CLUB held its 1965 Whitsun Meet at the head of Loch Nevis in Knoydart, a remote part of Scotland which is extremely difficult to reach. Access can only be gained, from the East by inferior road as far as Loch Quoich, from the West by boat. H. Stirling has already written about his approach from the East (*Y.R.C.J.* Vol. IX, No. 31, page 151), and what follows here is by way of an extended meet report covering the seaward entry from the West.

We met at 1 p.m. on Saturday at Mallaig, ready for the sail up Loch Nevis which must surely rank as one of the finest sea lochs in Scotland. Apart from Inverie, half way up on the north shore, and a house or two at Tarbet which lies slightly further up on the opposite shore, there are no signs of habitation and the scenery grows steadily more impressive. In common with other West Coast sea lochs, Loch Nevis has a wide seaward end which is almost cut off from the head waters by a shallow, narrow channel, at which point the loch bears away to the north so that it was not until we had chugged through a considerable race formed by the ebbing tide surging through the narrows that we were able to see our camp site at Camusrorry.

The actual manner of getting to the camp site was exceptional. Often on previous Whitsun meets, the Club has used launches hired at Mallaig but there has always been some form of jetty at the other end; this time, because of the shallowness of the head of the loch and the ebbing tide, it was necessary to stand off from shore about 200 yards and to ferry everything ashore by dinghy. The owner of the launch had towed a boat along for this purpose and, by great good fortune we had a second rowing boat, hired for the week by Geoff Bates. With these two we were able to unload with relative ease and before long camp had been pitched on a suitable piece of ground adjacent to the water's edge.

Knoydart is the district bounded on the west by the Sound of Sleat, on the north by Loch Hourn, on the south by Loch Nevis and on the east by, approximately, Loch Quoich. The whole area is jealously guarded as deer forest and we were

very fortunate to obtain permission to camp. The very fact that it is so difficult to get into the district added considerably to its attraction from our point of view. The mountains split themselves into three groups; first those round the head of Loch Nevis, secondly the Ladhar Bheinn area and thirdly those lying north and east of Loch Quoich that were visited by Carr and Stirling.

The head of Loch Nevis is fed by two rivers; one, the Carnach, meanders through a level plain for two or three miles and then twists round to provide the pass over to Loch Hourn or Loch Quoich; the other, which is unnamed, falls sharply from a couple of lochans called Lochan a Mhaim, having risen at the watershed of the fine pass, Mam na Cloich Airde, leading over to Glen Dessarry.

On the south, Loch Nevis is separated from Loch Morar by a relatively low range of hills; on the north of the loch is the massif formed by Meall Buidhe and Luinne Bheinn, while in the centre, between the two rivers, standing sentinel over the whole of upper Loch Nevis, rises the shapely peak of Sgùrr na Ciche with its outlier, Ben Aden, as a backdrop to the level Carnach valley. About 200 yards off-shore, on the edge of deep water, is a small island, Eilean Maol, which is the nesting ground for innumerable gulls, terns and oyster catchers. The shallows stretch out to this island and at low water it is possible to cross over dry shod, a fact that the birds aggressively and vociferously resented.

The area has little to offer the rock climber. In the immediate vicinity of Loch Nevis there is nothing except isolated crags and although Ladhar Bheinn has some fine precipices on its north east face, the rock is of poor repute; it is a form of mica schist and the lie of the strata is adverse, hence causing much vegetation. To the best of my knowledge, during the whole week that we were there, nobody uncoiled a rope and everybody spent their time exploring the country around Camusrory; two parties went off for three days in order to climb Ladhar Bheinn. The nearby peaks offered three full days' climbing.

Starting on the west, Meall Buidhe and Luinne Bheinn combined together made up one day. I think most people started by climbing direct from camp to Mam Meadail by

means of a well engineered stalkers' track going from Carnach to Inverie and then striking up a rather wet slope to Meall Buidhe. From there the way was clear along a not very interesting ridge to Luinne Bheinn from which it was possible to drop at will to the Carnach and so home. No doubt the same thing in the reverse direction would have been equally attractive. I do not recall anything very striking about either of these two mountains but then Meall Buidhe was in cloud and I was somewhat distracted by a thunderstorm when on Luinne Bheinn. I remember being impressed by the north west corrie which contains fine examples of glaciated rock but I was most attracted by the hanging valley, Ile Coire, which terminated in some very pleasing waterfalls.

The next alternative from camp was to go up Sgùrr na Ciche and then swing left, on to Ben Aden and down to the Carnach. I did not go up Ben Aden but I gather it is an interesting ridge with a prominent vein of mica about two thirds of the way up.

The third expedition was perhaps the best of the lot and comprised Sgùrr na Ciche, Garbh Chìòch Mhòr, Garbh Chìòch Bheag and Sgùrr nan Coireachan, all of them over 3,000 ft. We climbed them in that order but if I were to do it again I would reverse the proceedings as both the scenery and the elevation culminate in Sgùrr na Ciche. Coireachan is dull, the two Garbh Chìòchs make a fine ridge and there is a sharp pull up to Sgùrr na Ciche where care would be needed in mist. The disadvantage of any ascent of Sgùrr na Ciche from camp was the crossing of the Carnach; unless a considerable detour upstream had been made this meant crossing the saltings and wading two or, if navigation was at fault, three channels.

On the first day of the meet George Spenceley and I did the third of these three routes and by the time we reached Sourlies I was both weary and footsore. We then had two alternatives: to reascend the western shoulder of Sgùrr na Ciche and drop down to the Carnach where we knew that we could ford it, or to carry on along the sands and hope for the best when we came to the saltings. I think that George, who was still fighting fit, would have preferred to climb over but he gave in and we proceeded barefoot along the sands. George, intrepid man that he is with his boots on, was obviously not

enjoying walking barefoot whereas I was finding the paddling most refreshing. However, after a while we came across fresh footsteps going our way, obviously some other rambler going home, and this cheered us up a lot particularly when we saw him on the far side of the river and realised that he had crossed with ease. But what we had not appreciated was that the tide had turned and was now flowing fast, the channels were inches, feet even, deeper than when our guide had crossed. However all was well that ended well; we got across with nothing worse than an enforced wash and that saved time with soap and towel later on; supper never tasted better.

We were told that Ladhar Bheinn was the finest mountain in Knoydart and that the best approach was from Barrisdale on Loch Hourn via Coire Dhorrcail. Two parties therefore decided to leave the main camp and to set up advance camps at Barrisdale, going out one day, climbing Ladhar Bheinn the next and returning on the third. The first party, consisting of Sidney Waterfall, Anderson and their two friends, left on the Tuesday, to be followed the next day by George, Alan Brown, his friend and myself. When seen from the south or from the top of Meall Buidhe in the east Ladhar Bheinn looks relatively innocuous, but its north east face contains a number of corries separated by sharp-backed ridges and the main corrie, Coire Dhorrcail, can surely be classed as one of the finest in Scotland.

The way from Barrisdale leads over the river and along the level for about half a mile to a ruined bothy, at which point a track goes left over a spur to drop into the neck of the corrie where the stream falls sharply through woods of larch and rhododendron. When we left Barrisdale a thick haze covered the low-lying ground and there was every indication that the day was going to be a scorcher. As the sun grew stronger the mist thinned and at about 500 feet above the bothy we broke through into brilliant sunshine. For the next half hour the views were magnificent; to start with Loch Hourn and the glens remained shrouded and only the tops were visible, range upon range of them to the north and east, over the Saddle as far as Kintail, but gradually the foreground appeared and soon the whole length of Loch Hourn lay stretched out below us.

From the floor of the corrie we struck up a fine airy ridge,

Druim a' Choire Odhaire, which led directly to the highest point of the two mile long summit ridge. Turning east, our way for the first mile was along the tops of the precipices falling sheer for a thousand feet to the foot of the corrie; so steep were they that, seen from above, the rock appeared in places to be overhanging. We followed the ridge almost to its end where we descended into a rather boggy depression which drained into a burn containing several deep pools, in one of which we bathed and then lingered on the bank, drying ourselves in the warm rays of the setting sun and watching the shadows lengthen on Luinne Bheinn. Actually I think a better and more sporting way off the mountain would be by the prominent spur which forms the eastern side of the corrie.

A curious thing happened on the top of Ladhar Bheinn. We had filled two polythene bags with snow that we had found on the north face, and had carried them to the summit, intending to slake our thirst when eating our sandwiches, but no sooner had we sat down than a swarm of minute black flies descended upon us and upon our food and, what was more surprising, soon found their way through the necks of the polythene bags so that in a minute the snow had changed colour to the dirty grey that one associates with Bradford in midwinter. Now where did those flies come from? We found them nowhere else that day and there was no evidence of deer droppings or special vegetation that would explain their presence on the top of the highest mountain in that part of Knoydart.

To me this trip to Ladhar Bheinn was the highlight of the meet. We climbed a fine mountain but quite apart from that the journey was full of interest. Wednesday, the day we left base camp, was hot and sultry and we, heavily laden, plodded up the Carnach until, just at lunchtime, we found the pool we had been seeking; long enough and deep enough to swim in and with a sandy shore, but cold under a large overhanging rock that kept it always in the shade. After a leisurely lunch and a snooze on the springy turf we toiled up to Mam Unndalain, the bealach between Loch Hourn and Loch Quoich where we dumped our kit and struck off up an easy shoulder to Luinne Bheinn. For some time there had been thunder growling around and from the top we could see that the country to the east of Sgùrr na Ciche was in heavy rain and

it was obvious that before long it would be our turn. We made what speed we could on the way down and reached our sacks just as the first heavy drops began to fall; from then on until we reached Barrisdale, we walked in a deluge and at the end it was doubtful who were the wetter, those who had put on water-proof clothing or those who had taken off all they could. The first party that had set out the day before us had taken tents and there they were, snug and dry, when we four drowned rats arrived. We had not taken tents; instead we had relied on local knowledge which had said we would find a bothy; local knowledge was wrong, the only buildings at Barrisdale were two farms and the laird's house and all were occupied but, thanks to the persuasive tongues of George and Alan the shepherd, who was also head gillie, gave us permission to use his barn for the night.

The barn turned out to be a modern corrugated iron and concrete affair and at that particular moment was being used for shearing. Hung at the far end were the newly shorn fleeces of half a flock of sheep, rich in smell and, judging by the spots from which we later suffered, rich in other things as well. The other half of the flock was waiting in a pen attached to the barn and when its members were not bleating, sniffing or whistling, they took a fiendish delight in running along the side of the building, smoothing their horns against the corrugated iron.

The head gillie could only let us have one night's lodging and told us that if we wanted to prolong our stay we would have to see the landowner. Accordingly, later that evening, George and Alan, suitably cleaned up, sought and received permission and also an invitation to have a bath after their day on Ladhar Bheinn. This idea of a bath was discussed at intervals the next day, it was attractive but we finally decided against, on the grounds that it was not quite in keeping with the spirit of a Whit meet.

It must be a very lonely life for those who live the year round at Barrisdale. There is a rough track up the loch to Kinlochourn but the only real contact with the outside world is by boat and the only time they see more than the occasional stranger is during the short stalking season. They were delighted to see us and, having, like so many West Coast High-

landers, a ready turn of phrase, they beguiled us with stories of life in the Highlands. During the wintertime they feed the deer' and even as late as Whit five fine stags answered their call and came down to the farm to feed. They were all in velvet and we were able to get within 15 yards to take photographs.

The day of our return to Barrisdale was another scorcher and we took it gently, over Mam Barrisdale to Loch an Dubh Lochain where we had our first bathe, round the shoulder to the burn in Gleann Meadail where we had our second bathe and lunch, then a gentle plod up to the bealach, promising ourselves our third bathe in either the Carnach or the sea. Just before we reached the bealach the peace of the afternoon was shattered by a veritable cacophony of sound that burst upon us, reverberating from rock to rock so that it was hard to tell whence it came. At last we traced the source and saw our worthy President, white hatted against the sun, and an equally worthy ex-President, perched high on the mountain-side and guarding, like the clansmen of old, the pass leading to the camp.

Before leaving the subject of Ladhar Bheinn it must be recorded that Arthur Leese was far more energetic than either of the parties that went to Barrisdale. He did a two-day solo trip that took in Meall Buidhe, Luinne Bheinn and Ladhar Bheinn, bivouacking on Aonach Sgoilte where surprisingly, he was short on water; aiming to travel as light as possible he was also short on food.

The terrain of Knoydart is largely glaciated slab with no scree and little soil, which means that there are few trees and shrubs and nobody reported any out of the ordinary flowers. All parties put up ptarmigan and young, one 'probable' eagle was reported and there were three nests about one hundred yards from camp where a merganser, a mallard and a sand-piper were all sitting in a stretch of twelve yards. Douglas Mahoney stalked a herd of deer and enticed, allegedly with a piece of Kendal Mint Cake, a young hind from its mother so that he could take a close-up with his ciné camera. Ian Carr, exploring the shore of Loch Nevis, was lucky enough to get close to a wild cat. More trout than usual featured on the menu thanks to a large extent to Geoff Bates' boat, because,

by rowing round to Sourlies, it was an easy matter to reach the lochans on Mam na Cloich'Airdre.

It is worth noting that the bothy at Sourlies is no longer standing although the one marked 'Finiskaig' in the same estuary is in good condition; the one in the Carnach valley is in poor shape but at the moment still offers some shelter. The camp site rivalled Loch Clair for beauty and its remoteness could scarcely be equalled anywhere in the United Kingdom. I hope I shall be forgiven if I comment (with my tongue in my cheek and after this, my first Whitsun Meet) on the amount of kit. I had heard that the Y.R.C. liked to expand itself on Whit meets and indeed I had myself acquired a tea chest, but I had hardly expected the amount of equipment that spread over the jetty at Mallaig. Cookers large and small, boxes of all shapes and sizes, ex-officers' valises and even a tent with poles, the biggest surprise of all.⁽¹⁾

⁽¹⁾ *Editor's Note:* After all the Y.R.C. like the Boy Scouts must "be prepared".

THE MATTERHORN CENTENARY. ZERMATT, 1965

by J. G. Brook

THE FIRST ASCENT of the Matterhorn on July 14th, 1865, was a tragedy as well as a triumph. These conflicting historical facts must have presented a problem to those faced with the task of recognising this centenary. The problem was, however, solved with the usual Swiss tact and efficiency and a nice balance was struck between celebrating the triumph and commemorating the tragedy.

It was impossible during this eventful week for one individual to keep track of all the varied activities going on in and around Zermatt and these notes are only a record of my own stray observations. Zermatt was *en fête*, the main street and the hotels were gaily bedecked with banners, cantonal and national. Throughout the week the weather, at least in the village, was exemplary.

The Swiss had nominated 1965 "The Year of the Alps", so that in addition to the Matterhorn centenary there was much to be seen and heard of historical and artistic interest relating to the Alps as a whole. Neat showcases had been erected on the pavements of the village street and in the Museum garden, containing old maps, guide books, glacier crystals and specimens of primitive equipment, some of which looked positively lethal by modern standards.

The official proceedings were initiated with a Dinner organised by the Alpine Club and the Schweizer Alpen-Club on the evening of Sunday, July 11th, at the Monte Rosa Hotel. It was an international gathering of mountaineers, famous and not so famous, and the guests included relatives and descendants of those involved in the first ascent of the Matterhorn. I found that one of my partners at the dinner table was a relative of the Rev. Charles Hudson. One could not help feeling that in addition to the living climbers present that night the spirits of the pioneers who had used this historic hotel as a base for their first ascents must have been in some degree present. A quaint feature of the celebrations was that the guests were divided into "official" and "unofficial", the former being distinguished from their less exalted brethren by a red and white riband worn in the lapel of the jacket.

The next day I was away at the Monte Rosa Hut and therefore saw nothing of the official reception at the Seiler Haus Restaurant, nor the dedication of the "Hall July 14th, 1865" at the Museum. Neither did I see anything of the television antics on the Matterhorn on July 14th. Apparently many viewers were impressed by what they saw but opinion seemed to be divided amongst those taking part in the operation. As everyone now knows, Madame Yvette Vaucher, with her husband and Othmar Kronig, made the first ascent of the North Face by a woman, making a bivouac during the night of the 13th and arriving on the summit about 7.30 a.m. on the 14th, a few hours before the Hörnli Ridge parties.

Wednesday, July 14th, was the official memorial day in Zermatt. I therefore spent the whole day in the village and found it a memorable experience. On the Festival Field an enclosure had been made with a platform for the performers and seats for the official guests. Under the blue sky and brilliant sunshine the field, gay with banners and backed by the Matterhorn glittering white from the summit to the Hörnli, was an impressive spectacle. The morning was given over to a memorial service conducted by the Bishop of Sion, of which the most moving feature was the beautiful singing of the choir, the Musical Society of Zermatt. The service concluded with a short address by Dr. R. R. Williams, Bishop of Leicester, who touched on the ties forged between the Swiss and the English by the mountain exploits of the past. The service was followed by the laying of wreaths at the cemetery and at the Taugwalderhaus.

The memorial side of the centenary having been duly observed the afternoon was given over to celebration. The ball was set rolling by a procession of officials and guests, led by the local brass band and headed by some very striking young drum majorettes of the type more often associated with American Presidential elections. Speeches were delivered by the Mayor of Zermatt and by a member of the Swiss Bundesrat and the musical part of the programme was capably provided by the Lucerne Musical Society and Symphony Orchestra. We heard the first performance of Jean Daetwyler's "Alpine Symphony", conducted by the composer. Unfortunately it was impossible to obtain a true estimate of this interesting work owing to the

shortcomings of the amplification system.

Probably the most impressive part of the programme was the reading of passages from Byron's *Manfred* by Herr Alfred Lohner of the Vienna Burgtheater, whose magnificent declamation brought out the full dramatic content of the poetry. This was followed by the recitation, by Major H. H. Hadow, a descendant of Douglas Hadow, of a sonnet written by Lord Francis Douglas on the eve of the Matterhorn ascent. The Fest-Platz was filled almost to capacity with residents and visitors and I could not help wondering whether a British crowd would have stood so long and so quietly listening to a programme of music and poetry, most of it in a foreign language.

Those of us who delight in showing our wonderful colour transparencies were brought down to earth by the revelation that all this had been done, and done much better, over a hundred years ago. A small marquee had been erected in a corner of the Fest-Platz containing an exhibition of the transparency paintings of Franz Niklaus König (1765—1832). These truly beautiful paintings were done in water colour on an alcohol impregnated paper illuminated from behind and shown in a darkened room. König often heightened the effect by scraping the paper or by cutting out small portions to make it more translucent. The effect, particularly of moonlight scenes, was breathtaking. There was also an exhibition of Alpine art by artists working in the more orthodox oils and water colour. At the Castor Cinema films of various Matterhorn ascents could be seen, the earliest dating from 1901.

The public part of the day's proceedings ended with a short memorial service in the English Church, led by Dr. Williams, during which Sir John Hunt laid a wreath on the grave of Rev. Charles Hudson, whose body now lies beneath the Holy Table in the Church.

The Zermatt celebrations were followed by similar festivities at Breuil on the Italian side of the Matterhorn, and it was intended to link these proceedings by a traverse of climbers over the mountain from the Swiss to the Italian village. However, the weather had the last word and most of those who went over to Breuil made a somewhat inglorious passage of the Theodule by sno-cat and cable car. Some of these mechanical

developments in the Alps can only be viewed with alarm and dismay by those who love the solitude of the peaks and glaciers. In the sacred name of Winter Sports a network of chair lifts and cable cars is spreading like a rash around all the well-known centres and the huge pylons erected to carry these are spoiling some of the most secluded and delightful places. It is now possible to be carried from Zermatt to the Upper Theodule Glacier near the Gandegg Hut by cable car, where, after a walk of about one hundred yards, a sno-cat is waiting to take one over the glacier to the Theodule Hut. For the benefit of those who wish to ski on the Rosa Plateau the classic crossing of the Theodule has been vulgarised by mechanical transport.

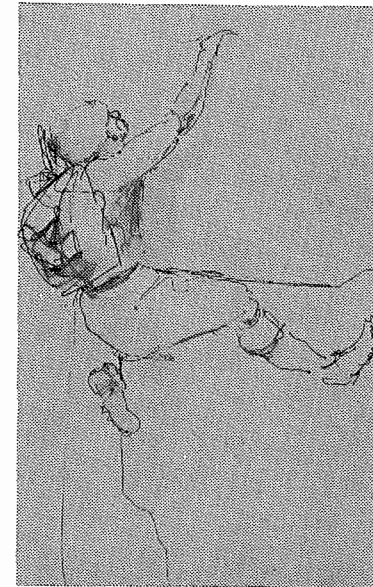
I offer no apology for making these observations together with my impressions of the centenary celebrations. Nobody can pretend that Zermatt, Grindelwald and the other well-known Alpine centres could remain as they were a hundred years ago, but there is no reason why the mountains and glaciers themselves should not. In fact there is every reason, moral and aesthetic, why they should be kept free from the despoiling hand of man, whether it be for the benefit of winter sportsmen or of cable car mountaineers. One hopes that our Swiss friends see, before it is too late, that they may be killing the goose that lays the golden eggs.

At the Y.R.C. 1965 Annual Dinner, Sir John Hunt, commenting on the Zermatt celebrations, speculated as to whether the year 2053 would see Kathmandu similarly celebrating the first ascent of Everest. Putting aside the question whether this planet will still be inhabited by the human race a hundred years hence, the possibility is unlikely. It was not so much the triumph as the catastrophe of the Matterhorn that stirred the imagination of men, just as it is the tragedy of Scott rather than the triumph of Amundsen that dominates the story of the South Pole. The Matterhorn ascent had some of the elements of Greek tragedy; the seemingly inexorable fate that drew together those particular men at that particular time and place, and led them from victory to disaster. If the first ascent of the Matterhorn had been accomplished smoothly without a hitch it would have been just one more of the many first ascents that were made about that time and the mountain

would not have been invested with the somewhat morbid glamour which has hung about it ever since.

Nevertheless, in spite of its ropes and chains it is still a very great and beautiful mountain, and in July 1965 homage was paid to it as well as to those who made the first ascent.

Before concluding these notes on the celebrations one further observation must be made. Many British climbers were grieved at the absence of a well-known Zermatt figure during the week. I refer to Bernard Biner, who had died suddenly the previous April. All the British climbers, and there are several Ramblers amongst them, who have enjoyed the hospitality of Bernard Biner and his sister, Paula, at the Bahnhof were shocked to learn of his death. Erstwhile chief of the Zermatt guides, he had been retired for some years but with his vast knowledge of the Zermatt peaks he was ever ready with help and advice to all climbers, beginners or experienced. His quiet unassuming sincerity made a lasting impression on all who met him and he will be sadly missed by all who know Zermatt and its mountains.



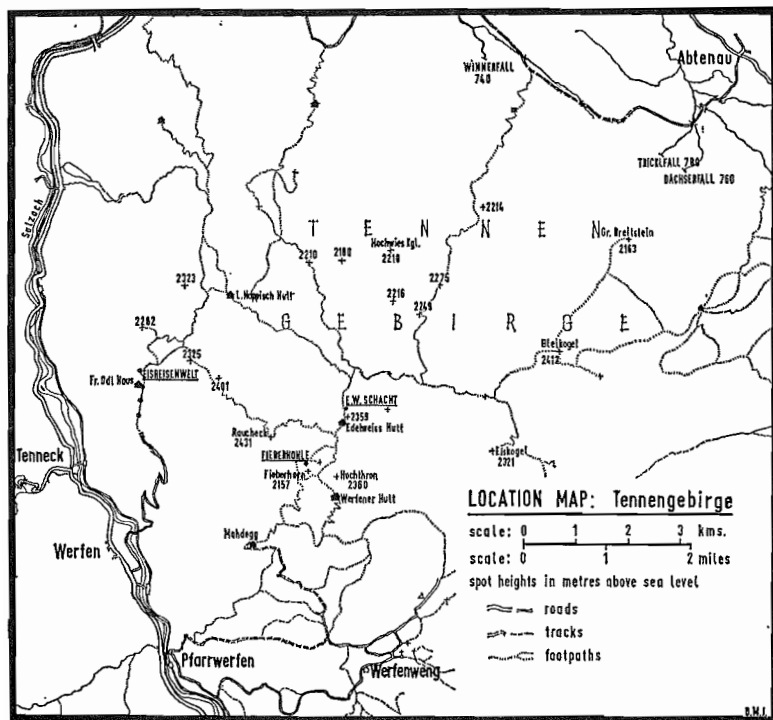
THE BRITISH EXPEDITION TO THE EDELWEISSERHÜTTENSCHACHT, 1965

Part I: *The Edelweisserhüttenschacht*

by D. M. Judson

THE Edelweisserhüttenschacht is a pothole in the Tennengebirge massif of central Austria, 25 miles south of Salzburg. It is situated at about 7,500 ft. on the summit ridge of the Streitmandl, 200 yards north of the hut of the Edelweiss Climbing Club, the Edelweissütte. Four holes unite a short way down to form one 300ft. entrance shaft.

The area is a typical karst plateau of gently folded rocks of upper (Alpine) Triassic age. The Dachstein limestone exposed on the plateau gives way to a Dolomite limestone at some depth, which does not seem to be amenable to cave formation, as is evidenced in the Eisriesenwelt. The whole dips gently to the north east. The only large scale risings for the Tennenge-



EDELWEISSERHÜTTENSCHACHT ENTRANCE

J. R. Middleton

birge area appear about four miles to the north east of the shaft at an altitude of 2,350 ft.; these are the Winnerfall, Tricklfall and Dachserfall, near Abtenau.

Two British expeditions had previously been in the area, in 1963 and 1964, and had put in the initial ground work. The 1964 expedition, in which John Middleton took part, had descended the entrance shaft and carried on down another four pitches until turned back on the brink of a deep shaft at a depth of about 550 ft. On both these occasions the Edelweiss-hütte was used as a base camp and an Austrian Government helicopter was used to ferry equipment up from the road vehicles at Werfenweng.

Our objective in 1965 was to put the strongest possible teams down the shaft in order to pursue it to its ultimate depth. We were prepared to go down beyond 3,000 ft. and to make prolonged camping trips underground. The final size of the party was twelve, although sixteen had been the planned figure: D. M. Judson, Leader; J. R. Middleton, Secretary; B. H. Twist, Treasurer and Communications; M. Clarke, Surveyor; J. Gregory, Food Officer; O. Clarke; R. Dalton; G. Edwards; A. Gamble; J. Garrity; J. Higgs and M. Wooding. So as to obtain the most efficient use of our manpower it was planned to use small assault parties spending the minimum time below ground and coming out for short rest and recovery periods; in fact a 'hit and run' policy. If necessary two- or four-man camps would be set up. The laying of a telephone line would closely follow up exploration at all stages to provide rapid reporting back of information and rapid follow-up of parties.

Our problems, we thought, would be threefold: to move about half a ton of equipment and food from the valley up to the hut about 4,000 feet above: to equip a 300 ft. entrance shaft so as to make the passing up and down of men and gear reasonably easy: to make the best use of our manpower by means of underground communications in the exploration of the totally unknown. Given good weather our first problem was solved with the loan of a helicopter from the Federal Ministry of the Interior of the Austrian Government.

In order to improve working conditions on the entrance shaft it was decided to divide the pitch into two sections of

about 100 ft. and 200 ft. each, by the erection of a scaffold platform at the most constricted point in the shaft. It was also proposed to ladder the first 100 ft. section from the opposite end to that which had been used by the previous expeditions so as to reduce the free, or overhanging, sections.

The men and equipment met at Dover on Saturday, 7th August, for the 3 a.m. boat to Ostend. Transport consisted of a long wheel-base Land Rover and trailer, a 6 cwt. Bedford van and a Volkswagen car. We drove continuously through Saturday and met again at a camp site near Golling, 15 miles south of Salzburg.

Sunday dawned a perfect day; M. Clarke, Middleton and Judson made an early start for Salzburg to arrange the helicopter. The equipment went to Werfenweng to await the airlift and Gregory got the first party off to the Edelweissshütte. Everything was going perfectly; the helicopter arrived at Werfenweng just before midday. Unfortunately, when he got up to the Edelweissshütte, the pilot was unable to bring the machine down. The thermals rising up the steep face of the mountain lifted and buffeted the 'chopper' to such an extent that it was impossible for it to make a safe landing. Seven attempts were made, but it had to be called off until the evening. We waited at Werfenweng until 15.00 hours when we learned that the chopper had been called to a rescue on the Dachstein. The attempt was postponed until 7 a.m. next day.

M. Clarke agreed to remain at Werfenweng to load the chopper next morning, while the rest of us packed as much kit as we could carry and drove to Mahdegg to start the long haul up to the Edelweissshütte. It was 5.30 p.m. by the time we left Mahdegg, a very late hour indeed, but we were eager to reach our new headquarters on the mountain and we did have John Middleton with us, who knew every inch of the way. At the end of the long slog to the tree line we called in for a refresher at the Werfener Hütte. From there a traverse around the foot of the Hochtron brought us on to the vertical steel ladder and the long steep scree slope between the Hochtron and the Fieberhorn. By this time it was rapidly getting dark and before we could reach the snow at the top of the screes it had become pitch black. At this stage John was not quite so sure about the route, there was talk of 'much more

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snow than last year' and of 3,000 ft. faces somewhere ahead. We had only one choice: to bivouac.

As the clouds thinned out a little after daybreak we gradually became aware of our position and found that we were no more than 20 minutes away from the Edelweissshütte. The hut is superbly sited within 5 yards of the summit of the Streitmandl and 200 yards from the shaft. Some of us went for our first look at the "Grosse Schacht" and took stock of our new surroundings, others chose to get in more sleep.

Throughout Monday the sea of cloud between us and the valley never parted, no chance of seeing the helicopter; clearly this situation could last for a long time. We decided to bring up food and the vital kit for rigging the entrance by the hard way, as much as we could carry each day until the chopper came. This was probably not a bad thing, it improved our physical fitness; unfortunately we were losing valuable time. The tedious process of 'gardening' the shaft was begun, there were many small ledges in the first 100 ft. We cleared all these of rock and glass as best we could and settled on a site for the platform at about 95 ft. down. It was not quite as we had expected from the 1964 survey. The very narrowest part at 105 ft. was too tight for our purpose and possessed no useable ledge, in fact below this level the shaft immediately belled out to its widest part, about 30 ft. by 30 ft. We returned 10 ft. from the narrowest point to where there was a good triangular ledge about 18 inches deep. We had our site but, as yet, no more than 150 ft. of ladder and no platform kit on the mountain.

Tuesday was still not helicopter weather. All members descended to the valley for a major carrying assault, leaving the hut at 9.15 a.m. and taking only 1 hour to reach Mahdegg and the vehicles. By evening we had brought up all the equipment for the platform: scaffold poles, shackles, connectors, rawl bolts, T. & G. boards, spanners and a saw, and enough ladder, but not rope, to tackle all the known pitches with 50 ft. to spare.

Wednesday remained cloudy, still not helicopter weather. M. Clarke and Twist set out with another carrying party for the valley. Wooding and Judson descended to the 95 ft. level and started the construction of the platform. Two and a half hours were taken to cut and erect the main four-member frame.

They returned after lunch to fix the T. & G. boards; as more boards were put in the upward draught became a howling gale. The task was a most unpleasant one with, at the outset, only a couple of small ledges to stand on, a drop of 200 ft. below, almost freezing rock and an icy blast coming up from the depths. On top of all this, all the drips in the shaft seemed to have been specially designed so as to drop straight down the necks of the workers.

At 6.30 p.m. the platform was deemed to be complete, with the final 200 ft. of ladder hanging temporarily from one of the main scaffold members. Garrity joined us on the platform and then continued through to the bottom, clearing on his way the small ledge 200 ft. down. The tackle was lowered and we joined him. We were standing in a large chamber; the roof came down at 45 degrees and the floor sloped away to a boulder fall at the farthest corner.

The three of us set off from the bottom of the shaft with 400 ft. of ladder and several long ropes, across the chamber and down the two short pitches, 10 ft. and 20 ft. The chamber at the bottom of the third pitch was circular and about 20 ft. across; a very small hole at floor level, almost closed off with debris, was the start of 200 ft. of protracted agony; a twisting and steeply descending crawl in a keyhole shaped passage. The gap in the floor was almost continuous to the head of the fourth pitch, in places up to 50 ft. deep and just large enough to admit the passage of a tackle bag. We battled on like a small party of ants, passing on the tackle bags in relays of ten feet or so at a time, until we eventually reached the head of the 130 ft. pitch. We put a ladder down the pitch and then thankfully turned for out; back to the hut for a very late dinner. Whilst we had been below, Higgs had kept a lonely vigil at the platform and had completed the three rawl-bolt fixings for the ladder and 450 ft. double life-line.

For the five of us in the hut Thursday dawned in a most abrupt manner. We were suddenly awakened from our dreams of deep shafts and large mounds of tackle by a strange sound; it became louder and louder. Yes, the chopper had arrived. Within seconds we were all running about half dressed and in a daze; boxes, drums, barrels and tackle bags were feverishly ferried towards the hut. Four loads and all our remaining food

and equipment had arrived on the mountain; it had to be sorted and stacked in and around the hut.

Friday saw the first major assault party launched; Middleton, Higgs, Wooding, Edwards and Dalton. They left the hut at 9 a.m. taking a tackle bag each, 350 ft. of rope and a certain amount of concentrated food. Meanwhile on the surface preparations were made to fix the heavy duty telephone line down the entrance shaft. The line was slowly lowered and fastened back through the pitons, thus holding it away from the ladder. Eventually the whole of the 400 ft. of line was in position, anchored at the top with its own stainless steel reinforcement to a rock bridge and fastened back to the wall at the bottom. In the Main Chamber we met the returning assault party; they had a sad story to relate.

The great 200—400 ft. shaft which had halted the 1964 exploration appeared not to exist any longer! In its place was a mere 60 ft. pitch finishing at the foot of an enormous unstable boulder fall. Prospects were not good.

On Saturday the second assault party was launched: Judson, M. Clarke, O. Clarke and Garrity. Our object was to investigate further the possibility of by-passing or traversing round the terminal boulder fall. Gregory, Twist and Gamble followed close behind laying the telephone line through the crawl and photographing. Progress was rapid, all but M. Clarke abseiling the entrance pitch. We carried only light food bags, pitons and belays.

The first 50 ft. of the fourth pitch turned out to be considerably narrower than had been expected; at the 50 ft. level it opened out into a large boulder chamber, 30 ft. by 60 ft., slightly offset from the line of the ladder, and below this it continued as a 6 to 10 ft. wide rift. The small amount of water first seen at the head of the fourth pitch disappeared in debris against the back wall of this long narrow chamber at the foot of the pitch. At the other end of the chamber a narrow, winding, floorless rift continued. This had been laddered, the fifth pitch, it was 50 ft. deep, ending in a small chamber. Here the stream was again seen, but disappeared in debris as before. Another descending rift followed, it had a small winding cleft in its floor, this, after about 50 ft., became just wide enough to admit a man. This was the head of the final 60 ft. pitch; it looked wet

and large boulders could clearly be seen below. Beyond the hole, the floor of the rift climbed some 10 feet or more to where a large crumpled boulder was resting diagonally across the passage. The space left above and below this boulder formed two large windows which gave an excellent view of a cavern whose floor was some 50 ft. below. The whole cavern was a tottering mass of boulders and debris; this balcony position gave the most fearsome insight into the power and devastation of nature that any of us had ever witnessed beneath the earth.

We re-hung the ladder down the hole in the floor of the rift, once through this small hole it was hanging centrally in a shaft six to ten feet wide. A steady flow of icy water poured down the ladder from a small hole just below the take-off point; its bottom was in boulders, generally about two feet across. Climbing down about ten feet from the foot of the ladder the lowest point was reached. Another little stream flowed down the end wall and was immediately lost in the boulders. Looking back behind the ladder, a wall of boulders rose almost vertically to a height of about 100 ft., loosely jammed between the smooth walls of the shaft. All this was resting on a mass of very small material, whilst near the top were rocks the size of cars. Any attempt to climb up this slope was unthinkable; to breathe was a hazardous exercise.

We could only conclude that at some time during the previous twelve months an enormous cavern collapse must have taken place, filling in or sealing off the 'big pitch' of 1964 fame. We had got 60 ft deeper than the 1964 expedition and had met an absolute barrier to our exploration. We retired taking the tackle from the bottom three pitches with us.

Sunday and Monday were spent in removing the tackle from the pot and in pondering over our next move. We had planned, in this event, to visit some of the nearby shafts pinpointed by previous expeditions, but this year most of these were covered with snow. Some of us decided to visit the risings near Abtenau and see for ourselves where the water went to.

These risings were found to be most impressive, although obviously not in spate. The most northerly, the Winnerfall, is the largest; when in spate it must form a 500 ft. cataract down the side of the mountain. At the time of our visit it was com-

pletely dry, but at its top a solution passage dipped steeply into the mountain, this finished after 100 feet in a deep siphon pool. Water was rising over a considerable length of stream bed several hundreds of feet below. In total this added up to a very large resurgence, though clearly only a small fraction of what it must be at other times of the year.

On the Wednesday we visited the Tricklfall and Dachserfall. The latter is something of a tourist attraction, with water spouting out of several small holes under pressure, whilst the former seemed to be a flood rising. During our trip around the valleys we made contact with Dr. Oedl, who very kindly agreed to arrange for us a trip into the further reaches of the Eisriesenwelt on the following Saturday.

By the Thursday evening we were all back at the Edelweiss-hütte with the exception of Middleton and Higgs who had gone off to look at caves on the Eiskogel. As the weather conditions were good we decided to call the helicopter for the Friday morning and then after our visit to the Eisriesenwelt, to continue operations from a low level camp at the end of the track at Mahdegg. Everything went smoothly on Friday; the chopper arrived at exactly 8 a.m. and most of us were up at 6 a.m. to pack the food and kit into handleable units for the lift. All was sorted out at Werfenweng and we met Dr. Oedl in Werfen at 7 p.m. He escorted us up the steep track to the end of the mini-bus route, and we were soon up the cable-car, eating and drinking in the Oedl-Haus, where we were to stay the night.

Part II: The Eisriesenwelt

by D. M. Judson

WE AWOKE to discover our superb situation, in the loft of a large hut, on a fertile ledge about 3,300 ft. above the Salzach Valley. An 8 a.m. start was made into the cave, giving us an hour to take photographs of the ice section before the first tourist party would be upon us.

From the shelter of the large entrance portal, with its magnificent view across the Salzach valley to the Hagensgebirge and beyond, we moved off down a funnel-like passage to the entrance door. When our guide opened the door, the outward rush of air was terrific. The going was easy at first, but once through the large Posselthalle we came to the foot

of the Great Ice Wall; here a steep slope of ice spans the passage from wall to wall. As we ascended the wooden stairs, I thought of the original explorer, von Mörk, and his colleagues in 1913, laboriously cutting steps upwards into the unknown.

Above the Ice Wall the scenery is composed almost entirely of ice; our guide kept dodging behind ice curtains and into 'Ice Chapels' where he would light magnesium flares from his carbide hand-lamp. The cold green light from the translucent ice would expose the striations representing the annual recession and development of the ice. Out of the party of eight we had four photographers; they were now working flat out. Round every corner was a scene more beautiful, more spectacular than the last. Our guide was burning magnesium ribbon here, there and everywhere, bulbs were going off, shutters were clicking; this was truly a photographers' paradise.

At one point a deviation was made from the tourist route, at first through a very low section with ice floor and small ice-columns into a series of boulder-strewn chambers and eventually into a final one, the Cavern of the Ice-Men. In the centre of this large cavern was a forest of ice stalagmites, some of them up to ten feet high, and made of the clearest translucent ice. Being mid-August, they were of course in decline and we were told that in the spring they would be even more superb, some of them up to 20 ft. high.

We returned to the tourist route where another great ice barrier was reached; in places it was solid right up to the roof and the path traversed an excavated channel. We descended a flight of wooden steps and entered a long gallery. The left wall was of sheer ice, banded every foot or so with annual recession lines. The roof gradually became higher until we found ourselves in the centre of the great 'Mörk Hall'. Here in an urn, in a niche at the far end of the Hall, are the ashes of Alexander von Mörk. We passed on through several smaller passages, down through the 'U-tube' beyond the tourist section of the cave, and beyond the point reached by J. W. Puttrel in his tour of 1932 (*Y.R.C.J.* Vol. VI., No. 20, p. 122). At the low point of the U-tunnel what is now a small area of ice had once been a large lake; this used to be traversed with the aid of a steel suspension device, of which the remnants could be seen

in the roof. Somehow the pool had mysteriously disappeared.

We had by now left almost all the ice behind us and were progressing slowly up the long gradual climb of the 'Midgard'. Here a tremendous amount of work had been done between the wars breaking up boulders and levelling the floor, preparatory to building a railway. A few individuals had had an ambitious plan to build a railway right through the length of the Midgard to take tourists through almost to the 'Oedl-Dom', where a natural shaft would have been cleared out and a lift would have been put through to the surface, about 1,000 ft. above, thus making a round trip. After the last war the plan was never revived and now only the cleared causeway remains.

We followed the northernmost wing of the system through the 'Fritjof Oedl-Dom' until we reached the final boulder fall of the 'Dom des Grauens', a great rambling unstable mass of boulders. The Oedl Dom is one of the largest in the system, probably twice the height of Gaping Gill, but lacking any sort of character, with only a small trickle of water from the roof. We returned from this section and were taken up a long and dangerous boulder slope into the 'Irrgarten'. Our guide had not been in this section before and was most concerned that he might lose some of us in this maze-like region. We turned back at the start of the 'Great Canyon' having seen only a small fraction of the 30 miles or more of the explored cave system.

We had been allowed to wander as we pleased through what is possibly the finest ice cave in Europe and we had seen a little of the sombre galleries that lie beyond. It had been an eight hour trip and quite a strenuous one. Somehow during the evening we all became involved in a rather gay party in the Oedl-Haus, some a little more involved than others!

Sunday was very much 'the day after'; we packed our bags, descended the cable-car and headed back to Mahdegg. Most of the kit was picked up from Werfenweng, packed into the trailer and carted up to Mahdegg where our new base camp was set up. A hole, later to be known as the Fieberhöhle, had been reported by a member of the Edelweiss Club, its entrance was about 1,000 ft. above Mahdegg. From preliminary inspection its potential seemed good and we decided to concentrate the rest of our efforts upon it.

Part III: The Fieberhöhle

by J. R. Middleton

WITH THE EXPLORATION of the Edelweisserhüttenschacht finishing in less than a week, we had to search the surrounding mountains for fresh possibilities. Many promising holes which we had noted during the hot summer of 1964 were, in 1965, found to be covered with ten to fifteen feet of snow. We visited the Ebental without success, then went on to the Hochweiss where we discovered several small ice caves and shafts descending fifty to a hundred feet to choked bottoms, but nothing of any significance. Morale had in fact reached rather a low ebb when a member of the Salzburg Edelweiss Club told us of a hole which one of their members had descended for about 100 ft. and which still went on. This was known as the 'Fieberhöhle'.

The Fieberhöhle is situated on the western base of the Fieberhorn, at an altitude of 1,875 metres, only one and a half hours' climb from our new base at Mahdegg. The hole itself is in a steep, smooth and water-worn rock slope, so that when it rains, as it often did in 1965, the water rushes down the slope into and over the entrance, completely blocking it. During normal weather the hole is quite dry.

The assault was made in three stages: on the Sunday following our disappointing finish at the Edelweisserhüttenschacht, Wooding took a party on a preliminary exploration and reported great shafts and fine pitches; on the Monday Judson, Middleton and Gamble penetrated to halfway down the last pitch, followed by M. Clarke, Twist and Higgs surveying; on the Tuesday Wooding, Edwards, Dalton and Garrity reached the bottom at 722 ft. below the entrance.

The start is large enough but only just, to allow an average man through comfortably. Several pitons had already been placed by the Austrians as belays for the ladders on the first pitch, the top 20 ft. of which is vertical and free-hanging on to a large rock-strewn ledge (A). The next 50 ft. goes down a 60 degree slope made up of delicately poised boulders which peeled off, roaring and rattling their way to the bottom of the pitch as each man passed over them; added to this the ladder persisted in attaching itself near the bottom, making it a 45

YORKSHIRE RAMBLERS' CLUB JOURNAL

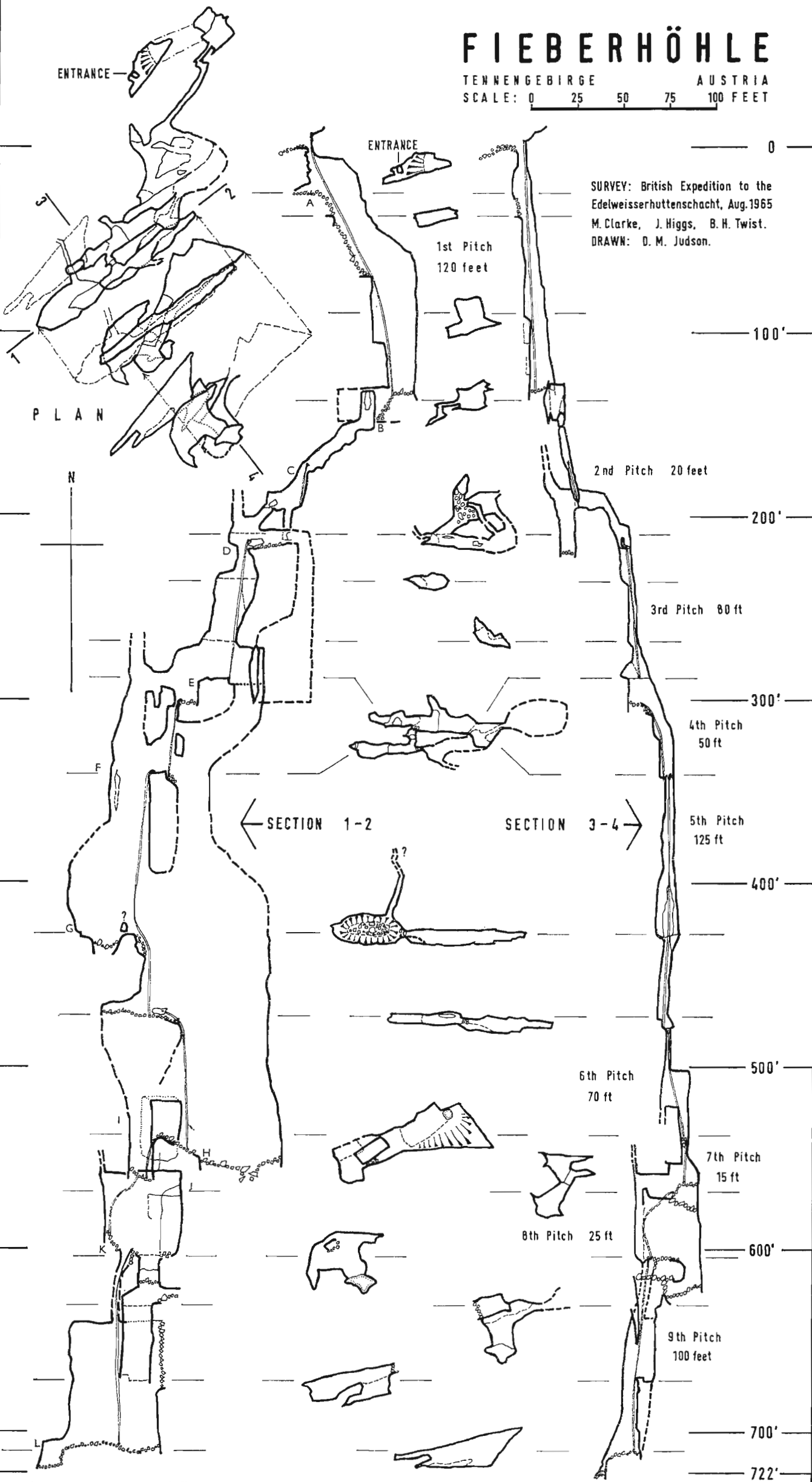
FIEBERHÖHLE

TENNENGEIRGE

AUSTRIA

SCALE: 0 25 50 75 100 FEET

SURVEY: British Expedition to the Edelweisserhüttenschacht, Aug. 1965
M. Clarke, J. Higgs, B. H. Twist.
DRAWN: D. M. Judson.



ENTRANCE

ENTRANCE

S

P L A N

N

F

G

K

L

A

1st Pitch
120 feet

B

2nd Pitch 20 feet

3rd Pitch 80 ft

4th Pitch
50 ft

SECTION 1-2

SECTION 3-4

5th Pitch
125 ft

6th Pitch
70 ft

7th Pitch
15 ft

8th Pitch 25 ft

9th Pitch
100 feet

0

100'

200'

300'

400'

500'

600'

700'

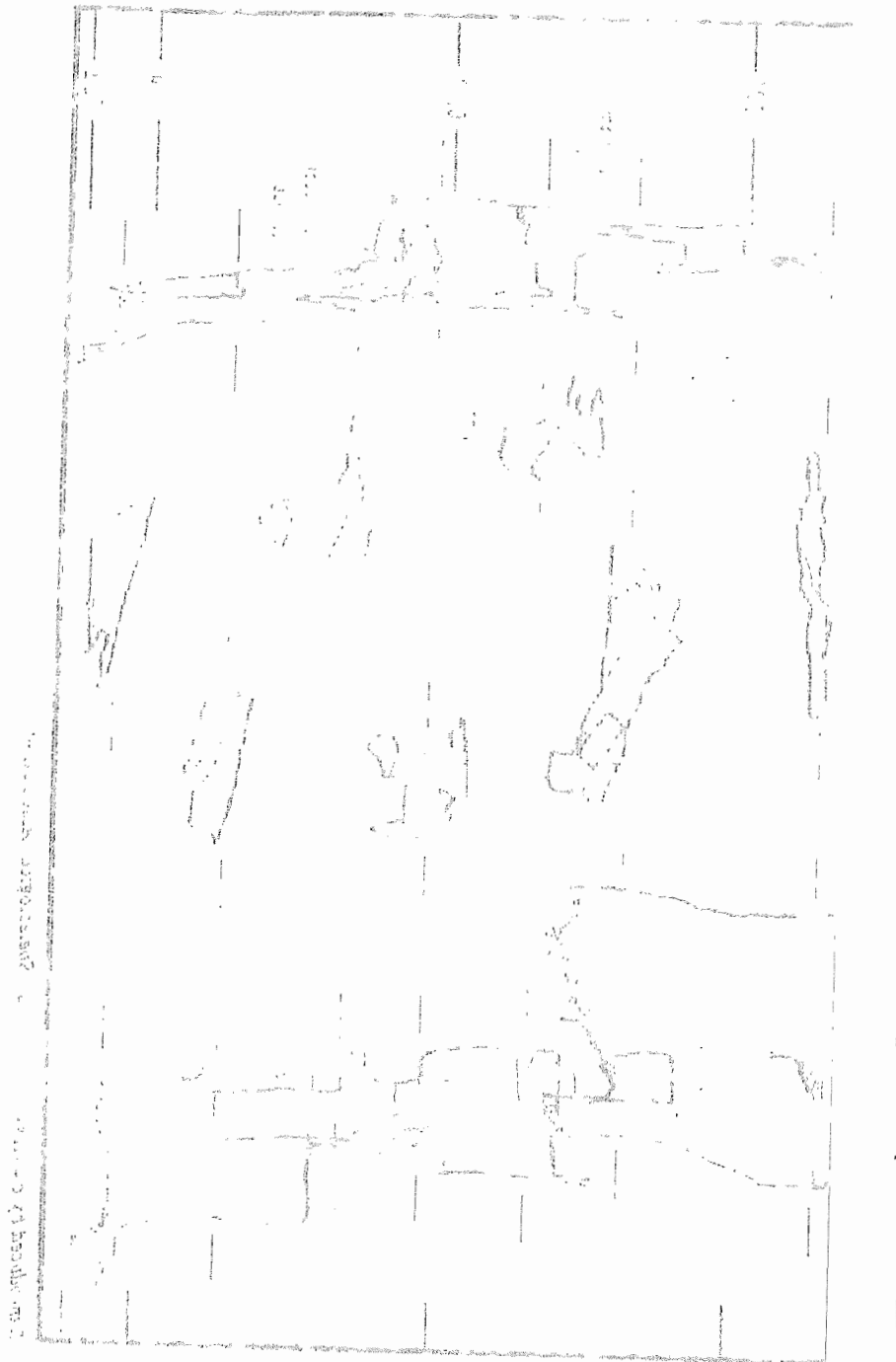
722'

degree climb inclined in two planes. A truly horrifying section and one which only dire necessity would get me past again. The final 40 ft. of the first pitch is down a clean washed wall finishing as expected, in a boulder strewn chamber.

A narrow fissure leads off, one enters this horizontally and feet first, it continues for 10 ft. to a 90 degree bend where one drops immediately into a small chamber (B). Here it was very cold, there was a draught strong enough in the fissure to blow out our carbide lamps. The route goes on round a corner, through a tight squeeze, along a short passage to a second tight squeeze and so to the top of the second pitch (C). The drop at (C) is only 15 feet and finishes on a sloping ledge with a 20 ft. choked pitch below it. The way on is by traversing round to the left, climbing upwards, round the top of a pitch of unknown depth but met with again lower down, and over a large flake of rock. At the end of a short passage is a pitch (D), of 70 ft. with two good ledges. In fact from this point downwards is just a long series of pitches, from one rock bridge to another, all part of a large and very deep rift-like shaft.

From the bottom of pitch (D) a high and fairly wide section leads to a 10 ft. climb (E) on to a large ledge at the top of the next ladder descent of 30 feet. At the bottom of this is a much smaller rock bridge (F), four feet wide between two walls, just about big enough for 3 men; at one end is a pitch of about 230 ft. and at the other is one of 85 ft., which is the one we took. The ladder lands one on what seems to be a boulder-choked continuation of the shaft (G), the main route goes on through a high fissure. An interesting inlet passage comes in at this point but we only explored it for about 100 feet to a 15 foot drop.

As might be expected in this pot where one vertical drop succeeds another, through the fissure there is a shaft, this time only of 45 ft., which takes one into the 230 ft. pot mentioned above and to finish this off is another pitch of 75 ft. where, after an awkward start, the ladder hangs free to a boulder strewn floor at (H). These boulders were generally very unstable and even though 15 or 20 feet high were quite likely to move several feet if touched. In several places stones dropped down between the boulders fell a considerable distance.



By climbing up the side of a boulder the size of a house (I), the next pitch, of 20 ft., is reached. This has a tight and difficult take-off and lands one on a two foot wide rock covered sloping ledge (J), on the edge of a 50 ft. drop. The way on is to traverse round this on to solid ground and up a rather tricky 30 ft. climb to a ledge (K). Again this is smothered in medium sized rocks, many of which we had to tip down the next and final pitch with a grandly reverberating roar. Two holes go down from this point, one drops sheer for 120 ft. to the bottom (L), the other is in a corner and goes down via a ledge. From this, yet another boulder strewn floor, there seemed to be no feasible way onwards, certainly not without some very vigorous digging. So at a point 722 feet below the entrance the party met with the same kind of disappointing finish as in the Edelweisserhüttenschacht.

The Fieberhöhle is in the truest sense of the word a "pot-hole", with over 570 feet of ladder climbing in its total depth and only about 200 feet of horizontal sections. A really superb hole, with one or two terrifying places which, one might say, 'add spice'.

NOTES ON THE SURVEY

- Plan.* The main plan of the pothole (top left on the drawing) has been made in three horizontal sections which should be superimposed upon each other as indicated by the arrows. Individual sections of the plan are interposed at their proper levels, indicated by horizontal lines, between the two elevations.
- Elevations.* The two elevations have been made at right angles to each other through the vertical planes A—B and C—D shown on the plan. The same scale is used in both plan and elevation.
- Lettering.* The capital letters A to L on the left hand elevation refer to points mentioned in the text.

Part IV: The Eiskogel Höhle

by J. R. Middleton

IT WAS from two Austrians in the Edelweiss Hütte, that we learnt of a large and recent discovery, the Eiskogel Höhle, situated to one side of the Eiskogel mountain. The cave was

four or five hours' strenuous walking away from our base, but our friends had so aroused our enthusiasm with descriptions of gigantic caverns, ice rivers and fantastic formations that nothing could stop us from visiting it.

My companion was John Higgs of the Nottingham University Caving Club; we assembled ice axes, potholing gear, concentrated food for two days and set off early from the Edelweiss-hütte, arriving on the Eiskogel about midday. We spent the next five hours looking for the entrance; once found we could not imagine how we had missed it, it is the uppermost of three in a large cliff face and is some 15 feet high by 5 feet wide. By the time we had found it it was getting late and we were pretty tired so we found ourselves a two-man bivouac cave and slept.

Immediately upon entering the Eiskogel Höhle we dropped six feet on to a pile of snow, compact and slippery. We made our way to the base of this and found ourselves in a small chamber with one passage leading off. This went steeply downhill and round several sharp bends before it levelled out and we came to an ice stream two or three feet wide in a passage about 9 feet high. Soon this passage divided, the left branch was the larger so we followed it. Almost immediately it widened, it had an ice floor about ten feet across and the walls were all covered with small ice crystals which shone like stars when we turned our lights on them. Suddenly we came to a 40 ft. pitch for which we had no tackle so, disappointed, we retraced our steps to the junction and tried the right hand branch which eventually led us to a large shattered chamber with some five passages leading off. After building a cairn to show where we had come in we systematically explored each of these only to find that they all ended in chokes. We again started to retreat but then noticed a small passage off to the right with a hole in one corner. Down this we went to land after ten feet on an ice pool at the end of a medium sized passage which we followed to a T junction. Here we turned left, eventually reaching a good sized chamber with one small tight hole leading out of it from which came a tremendous whistling wind: we were on the right route. A squeeze through the muddy hole, on up a boulder slope and then, suddenly—nothing. We were in the largest underground chamber in Austria and one of the largest in the world.

After surveying the scene for several minutes we found that we were halfway up a wall on the top of a great pile of massive boulders. From here we began laying a trail, using 'Bronco' which we can particularly recommend. Once down in the centre of the chamber we found that it was really a gigantic passage; imagine Gaping Gill Main Chamber with the walls not meeting at one end but continuing the same size for over 400 yards; four double decker buses side by side on top of four more double decker buses could travel most of the passage length with ease!

A wide gallery descended off to the left about half way along the main passage, this we followed steeply downhill until at a depth of about 200 feet it finished in a choke which held possibilities; on the way back to the main passage we went up another which ended in a shaft about 150 feet deep. At the end of the main passage one, by comparison small, led off down to one side; this was the start of the main ice river. We now put on crampons and walked past majestic blue ice columns, under glittering chandelier-like stalactites and through mirror-walled galleries. At one point we spent a very exciting hour hacking our way down an ice waterfall to find even more richly decorated chambers and passages. At this stage, whilst admiring the unbelievable, we relaxed our guard against danger and immediately John slipped; he fell, slid, spun round and round and eventually came to a stop some 50 feet lower down, severely shaken but not hurt. Down a further 50 feet we came to a 30 ft. pitch but luckily we could traverse along one wall and climb down into another very large passage 100 feet across and 60 feet high which again was a massive ice river. Where we climbed down there were many ice stalagmites over 30 ft. high in addition to numberless smaller ones. John, who had also visited the Eisriesenwelt, declared that these formations were superior to those of this previously leading ice cave.

At this point we decided to turn back as the ice river was descending rather steeply. After our previous escapade and as there were only two of us we thought it best to take no further risks. As we walked slowly back we had time to look round more thoroughly than I ever remember doing in a cave, and to take in well all the unforgettable sights.

Epilogue

by D. M. Judson

THE LAST TWO DAYS at Mahdegg saw a complete deterioration in the weather and the whole camp site gradually turned into a lake. On top of this several of us developed severe attacks of 'Mahdegg Fever' and become inoperative. We had snow on the mountain and finished with a desperate de-tackling and surveying marathon on the last Thursday. Camp was dismantled at an early hour on the Friday and the final sorting and packing of equipment completed at Werfenweng.

All in all it had been a disappointing expedition; we had not found the deep system we had hoped for. On the other hand some good trips had been made and I think most of us had enjoyed our three weeks on the Tennengebirge. We had explored two pothole systems that would rank with anything in Yorkshire for technical difficulty if not for aesthetic pleasure, and collectively we had seen some of the finest ice caverns in Europe.



THE NORTHERN ALPS OF JAPAN

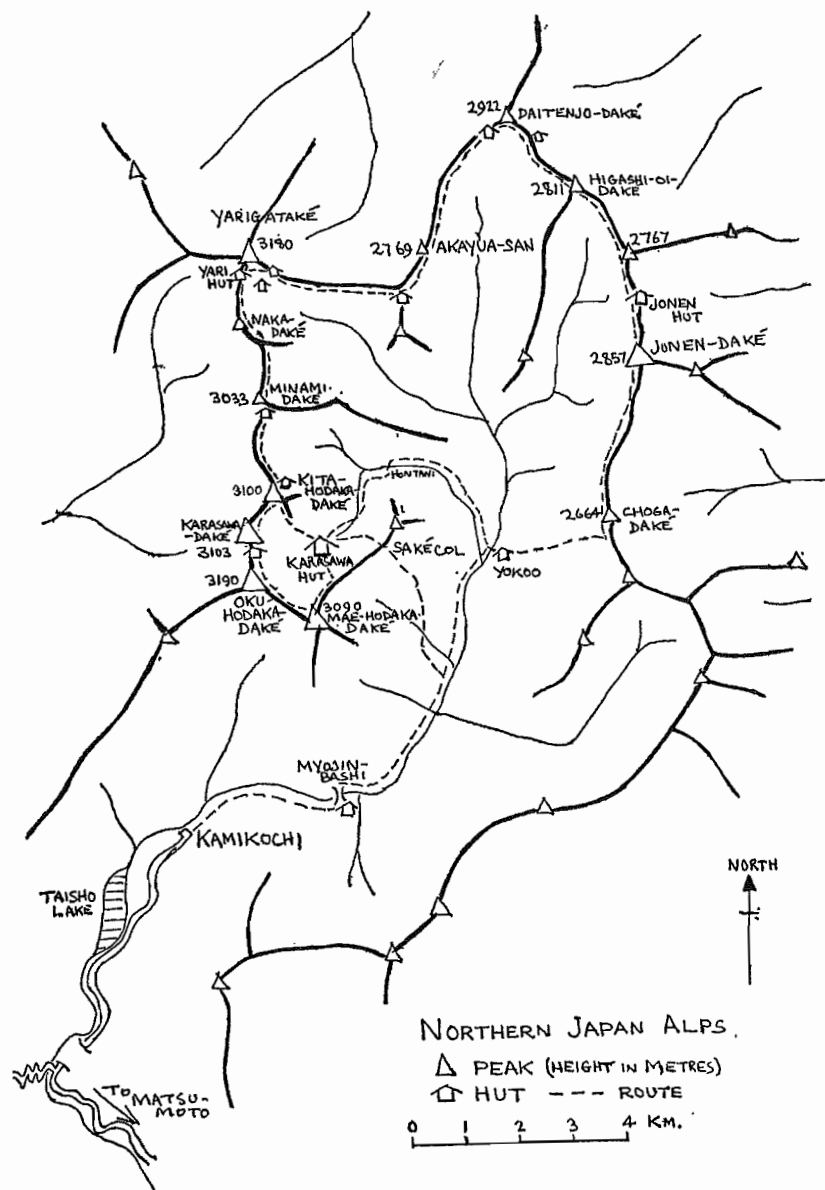
by R. Gowing

THE ISLANDS OF JAPAN occupy an area of 142,338 square miles, of which probably eighty per cent. could be classed as mountain or hill country. Of this a great part consists of either tree-clad hills or active and dormant volcanoes, offering a wide variety of scenery to the hill walker and motorist, but little to the climber.

Most of the peaks of interest to the mountaineer belong to the several groups of Japanese Alps, so named by Weston, in the prefectures of Saitama, Yamanashi, Shizuoka, Nagano and Toyama in Central Honshu. They are largely of granite, though they include some volcanoes, both extinct and active. Outside this area there are a few isolated peaks of interest to the climber and, as in any country, there are outcrops to be found in many places. None of the mountains is above the level of permanent snow, but during the winter the possibilities for snow and ice climbing and for ski-ing are quite extensive.

Though mountains have long been climbed in Japan for religious reasons, mountaineering as a sport dates mainly from the explorations of the Rev. Walter Weston, an English missionary who was active at the turn of the century. He helped to found the Japanese Alpine Club, which recently celebrated its 60th anniversary, and wrote two classic English-language books on mountaineering in Japan: *Mountaineering and Exploration in the Japanese Alps* (1896) and *The Playground of the Far East*, besides other books of a more general nature on Japan. Information in English on the Japanese mountains is scarce, apart from journal articles; the Rev. W. H. Murray Walton's *Scrambles in Japan and Formosa* probably completes the published bibliography. The Japanese mountaineer is well provided with a comprehensive range of guide-books and maps. The latter, once one has had the Kanji place-names transliterated, are very helpful, with all walking routes marked with the time required.

Since Weston's time, mountaineering has grown into a popular sport. Every university and district has its alpine club and hiking clubs are as numerous as in Britain. Japanese climbers have won international repute dating from Maki's



pioneering of the Mittellegi ridge of the Eiger in 1921 to more recent exploits in the Andes and Himalaya, including the successful campaign on 26,668 ft. Manaslu and many other difficult peaks (see, for example, *Alpine Journal*, LXX, page 213). Japanese equipment is excellent, often betraying a welcome reconsideration of the principles behind its design; it is reasonably priced and with a few imported items, such as the ubiquitous Bleuet stoves and cylinders, is available in sports shops in most towns. Our local sports shop is run by Yoshino Hattori, one of the leading young Japanese climbers, with considerable experience of difficult routes in the Japanese and European Alps.

The mountains are readily accessible, though the unmade nature of most of the non-trunk road makes reaching them take longer than the map would indicate. Many of the more touristy hills have fine "sky-line" toll-roads, funiculars and cable-cars. All the hills and mountains are well provided with paths, very necessary in the prevailing vegetation, and huts where one can live Japanese quite cheaply.

Tokai, where I was working on the commissioning of the British nuclear power station, is on the Pacific coast, near the northern edge of the central, or Kanto, plain. Northern Ibaraki has some pretty hills, 2,870 ft. Tsukuba-san offers good views of Kanto and the surrounding hills, but the nearest mountains are a good half day's drive away.

Early one Saturday in September, 1965, I set off with three colleagues, Tom Gerrard of the Rucksack Club, Kevin Viehoff and Joe Day, for a week's walking, climbing and exploring in the Northern Alps. Since in the notes which follow about our activities during that week I have unavoidably used local Japanese names, the brief glossary which follows will help to interpret their meaning.

- San, yama : mountain.
- Ken : prefecture or county.
- Kanji : Chinese-Japanese characters.
- Mura : village.
- Ryokan : Japanese style hotel.
- Tatami : thick straw matting which completely covers the floor of Japanese living rooms.



R. Gowing

Mae-Hodaka-dake, from Kitahodaka-dake, Northern Jaran Alps

Futon	:	bedding—both mattresses (rather thin, laid directly on the tatami) and quilted covering.
Daké	:	peak.
Bashi	:	bridge.
Cryptomeria	:	Japanese cedar tree.
Sanso	:	mountain hut.
Minami	:	south.
Kita	:	north.

The drive to Matsumoto, at the foot of the Northern Alps, occupied the whole of Saturday. A mixture of surfaced and unsurfaced roads took us to Takasaki, on the edge of the hills, where we lunched on prawns, rice and coca-cola in a small restaurant on the main street. A good road led us in heavy traffic over the 3,300 ft. Usui-togé pass to Karuizawa, a popular tourist resort at the foot of the active volcano Asama-yama, and down to the town of Ueda. From Ueda we followed a rough but scenic road over another 3,300 ft. pass to Matsumoto, which we reached towards 5 p.m. After briefly exploring the city, which has a fine castle, one of the few original remaining in Japan, we enlisted the help of the information office at the station to book us into a ryokan, or hotel, in a spa a few miles out.

FIRST DAY. We set off at 7 a.m. on a Sunday morning of low mist and drove down into Matsumoto where we picked up three of our Japanese colleagues, Ohtaké, Nakano and Tanaka, before setting off for a very scenic and quite exciting drive up to Kamikochi. The road is very rough, the crux being a single track tunnel that requires bottom gear, from which we emerged to a grand first sight of Hodaka, a high, jagged ridge mirrored in the Taisho Lake. Shortly afterwards we reached Kamikochi, hot spring resort and, at nearly 5,000 ft., principal centre for the Northern Alps, where we left the cars.

Here we loaded up with climbing and camping gear and a week's food, then we set off along a broad track through the woods to Myojinbashi, where we stopped for a drink at the inn. We crossed the suspension bridge and followed a path through tall cryptomerias and waist-high bamboo grass. The path was good, and pleasantly shaded; here and there it diverted around fallen trees, or crossed a stream by a plank

bridge. At Yokoo we crossed a tributary which flows down from the Hodaka group, and took a path ascending above its left bank. Above, on our left, rose the steep rock wall of Yokoo Dani; past this the path crosses the stream by a small wire suspension bridge at Hontani. We now split up to allow the fit men to go ahead and pitch camp, while Viehoff and I pottered up in the pleasant company of two girls. After a steep ascent up a moraine we reached the Karasawa Hut in failing light to be greeted by our colleagues, Hiraoka and Kuzushima, who guided us to our camp. This was a pleasant spot at 8,500 ft. in a broad, flat-bottomed corrie surrounded by the peaks of Hodaka. The cool mountain air was a delight after the heat of Ibaraki; after a light meal we turned in for a comfortable night.

SECOND DAY. It rained in the latter part of the night. Early in the morning we were woken by the occupants of neighbouring tents doing their morning exercises "ichi, ni, san, shi . . ." prior to setting off. We breakfasted and waited awhile to see what the weather would do, then retired to our tents. Our neighbours of the Aoyama University Alpine Club soon returned, and soon after we too gave it up and beat it to the hut.

The Karasawa Sanso is a fine example of a Japanese mountain hut, being closest in pattern to the Club Alpin Français style, modified to accord with Japanese custom. The big living room has a picture-window and a central oil stove; the kitchen and the tatami version of the usual 'matrazenlager' open off it. There is room for self cooking or one can have the meals provided by the hut staff; our Japanese colleagues did not recommend these, so we chose the self cooking method. We spent the day in great warmth and comfort, with occasional sorties to divert water from the tents and to collect food. We bought rice and ate our tinned salmon and bully with it, we drank numerous cups of green tea as we sat around with our Japanese friends. Towards evening we cooked dinner, then those of us who were not flooded out retired to the tents; by this time it had stopped raining and we even saw a few stars.

THIRD DAY. The day started overcast but not unpromising with the odd patch of blue sky. We set off at 7.30 a.m. up the cwm over boulder fields, then steeply up to the south east on scree and on a path bordering a scree/nevé gully leading

to Go-Roku Koru (5-6 Col) on the NNE ridge of Mae-Hodaki, which we reached in an hour from the hut in clearing mist. We climbed the ridge, covered in shrub pine, to Point 5. From here pleasant scrambling on good granite led us to Point 4 in half an hour from the col. Hiraoka, who knows these mountains, took charge at this point and led us up by steep but quite easy scrambling reminiscent of the Cuillin, to Point 3, over Point 2 and, in two hours from the col, to the 10,140 ft. summit of Mae-, or front, Hodaka-daké.

We were now in mist which continued the rest of the day, damp and at times drizzly, to remind me even more of our day in 1961 on the Cuillin Ridge. We continued along the Tsurioné or Hanging Ridge; Gerrard and I followed the crest for a while, which was quite interesting but soon we decided to accompany the rest of the party on the track which, like that on Striding Edge, mostly contours just below the crest. In this way we reached at midday the 10,450 ft. summit of Oku, or back Hodaka-daké, the highest point in the Northern Alps and the third highest in Japan, with a panorama indicator and a small shrine. From here twenty minutes of descent, on a good track well marked with paint splashes, led us to the Hodaka-daké Sanso on the col.

Resisting the temptation to pass the time of day with the pretty occupants of the hut we pressed on. Forty minutes from Oku-Hodaka we reached the multi-cairned top of Karasawa-daké, then chains led us down a gully as we followed a descent somewhat like that of the Hörnli. We walked and scrambled on in the mist and caught up the leaders just below the Minami-miné (south peak) of Kita-Hodaka. Some of the party then went down while the rest of us visited the main top (10,160 ft.) of Kita-Hodaka, the actual summit of which, like Sgùrr Dearg, is a little pinnacle just to one side. We descended the south east ridge of Mina-miné, a path following the ridge at first, then a rocky rake towards the main south east gully of the mountain, down which it zigzagged through the vegetation.

We came out of the mist a few hundred feet above our camp, which we reached at 3.15; I do not think I was the only one feeling very tired. We went to the hut and had a good meal of Ramen, Japanese noodles produced from packets by Hiraoka, then he and the other Japanese members of our party

set off down. We spent a happy evening standing beer to the hut warden and his associates, having just enough Japanese and English respectively to converse simply.

FOURTH DAY. Wednesday dawned fine; we left the hut towards 7 a.m. to retrace our steps to Kita-Hodaka. As we climbed among the flowers and scrub pines the views opened out, of the Hodaka range, of smoking Asama and, far beyond, of the unmistakable shape of Fuji-san. We reached the top of Kita-Hodaka in two hours, to be greeted by the sight of Yari-gataké, the Spear Peak, some miles to the north. Away at 9.15 we followed a path descending steeply to the NNW, bounding the steep but loose looking Takidani walls. I stopped to photograph the blue-flecked yellow gentian which grows profusely on all these mountains. After descending thus to about 9,200 ft. we followed a pleasant rocky crest, with the route well marked by chains, yellow paint and nail-scratches, meeting several parties, to Okirido Col at about 9,000 ft.

From Okirido we had an interesting scramble up the rocks of Minamidaké, 9,951 ft., the final crags being turned by an easy path to the left. We reached the rock peak soon after 11 a.m. and spent half an hour enjoying the fine views before continuing past a hut to the rounded summit. A fairly steep descent to a col was followed by a zigzag ascent, decorated by small blue gentians, to the 10,105 ft. summit of Naka-daké. Throughout the trip I was impressed by the beauty and variety of the alpine flowers at this late season and very much regretted that my Reflex was at the makers for repair. From Naka-daké it was fairly level to the main Yari Hut which we reached at 1.30 p.m.

After a brief rest we left our sacks for the grand climax to our day and to our trip, the ascent of the mighty Spear Peak. Avoiding the paint marks, chains and other aids with some difficulty we made our way up the steep rather shattered rocks. Some ten minutes later we were on the 10,433 ft. summit of Yari-gataké. The fairly roomy top was shared by an indicator, a small shrine, a symbolic spear and a considerable amount of litter. Seated upon the indicator to rise above the stink of the litter I enjoyed the extensive view, of mountains, of steep sided valleys and of Fuji-san 92 miles away. We strolled down and lazily examined Koi-Yari, the impressive pinnacle on the north

west side of Yari, rejecting our only chance to use the ropes which we carried throughout our tour. We booked in at the hut, pottered around outside enjoying the views, dined on dried potato and bully and soon after the beautiful sunset retired to a fairly comfortable night among the futons.

FIFTH DAY. On Thursday we rose as usual soon after first light. The clouds were high but ominous and a strong wind was blowing. We set off about seven and followed a path across the south east face of Yari, past the upper hut on the east ridge. The path wound through vegetation on one side or other of the ridge as we descended to the Mizumata Joetsu col, an hour from Yari Hut. Soon afterwards the rain started: we put on waterproofs and continued climbing fairly steeply to the Nishi-daké hut, in whose porch we stopped for a bite and an extra sweater. We went on in the rain over 9,085 ft. Akayua-san, on a path of granite sand which gave good going. It was quite windy and cold and the sections of path in the lee of the ridge provided welcome respite. Numerous flowers, the blue-flecked yellow and the purple gentian and a pretty eye-bright amongst others, and a family of ptarmigan, diverted our minds from the rain. Three hours out from the Yari Hut we stopped for a break outside the Daitenjo Hut, on the col below Daitenjo-daké.

Viehoff and Day followed a path turning Daitenjo-daké to the right while Gerrard and I took the alternative path contouring it to the north and struck up its north west ridge of loose granite. Fifty minutes from the col we reached the 9,587 ft. top of Daitenjo-daké, crowned by a shrine with a little stone image in it.

The path continued easily along a pleasant ridge with various flowers, including the frondy-leaved, peculiarly shaped pink, 'dicentra pusilla'; we also observed ptarmigan, iwari-bari (rock-bird) and other small birds. I think the ornithologist as well as the botanist could have a good time in these hills. We crossed the 9,222 ft. Higashi-Oi-daké soon after midday and went on over Point 9,078 ft. to descend steeply through pine woods, reaching the Jonen Sanso at 1.10 p.m. This was our objective for the day and we were not sorry to get there.

The warden and his son welcomed us with the customary green tea and we changed into what dry clothing we had,

hanging our wet things round the wood stove; fuel is no problem in huts in these tree-clad hills. We spent a pleasant afternoon sitting round the stove, watching T.V. and drinking our hospitable warden's coffee and best Suntory whisky. Later on a few more people came in out of the rain including a teaching dentist from Osaka Dental School who spoke quite good English.

SIXTH DAY. Next morning we rose to find mist clinging to our col and everything looking very damp, and we left in rain which steadily worsened as the day wore on. The warden saw us off at 8 a.m. for a hard plod up 9,373 ft. Jonen-daké, whose shrined top we made in under an hour from the hut. We followed the ridge which wandered about the 8,500 ft. level, much of it through trees and vegetation which would have been pretty on a better day. Eventually the path climbed out of the trees to 8,740 ft. Choga-daké (Butterfly Peak) over whose wind-swept top we continued 300 yards south to a slight col where we spotted the track going down westwards. It soon brought us into the forest and at 11.45 we reached the main valley beside the Yokoo Hut.

From here we followed the familiar path to Karasawa in rain and wind of increasing severity, which was blowing the waterfalls horizontally from the crags of Yokoo Dani towering above us. We went straight to the camp site which we reached in a fury of rain and wind, to find our tents flattened and Tom's damaged. We bundled them together and carried all the remaining gear to the hut where we hung up the tents to dry and started on the job of drying ourselves and clothing. My sack had not resisted the rain but fortunately I had left enough dry clothes at the hut. The rain had eased off when we turned in for a comfortable night on foam-rubber filled futons.

SEVENTH DAY. To some scepticism Tom announced that it was clear but a glance out of the window showed that it was indeed so. We breakfasted, packed up and, with fond farewells and presents of matches and towels, started on a rising traverse, following a rather precarious path through the trees to reach Saké col in threequarters of an hour. We lingered to enjoy the fine views of the Hodaka peaks and of Yari on the one side and of the Kamikochi valley on the other side of the col; I waited for Oku-Hodaka to clear so that I could photograph it.

Then I set off down the cwm to the south east; the path giving good swinging going at first but later becoming very difficult with roots and boulders. I contoured into the lower reaches of the next cwm, where I had to follow the stream bed for a while before picking up the track again and got to the valley in just under three hours from Karasawa.

The track led on through the cryptomeria forest, past the suspension bridge Nimura-bashi; I stopped about noon to lunch beside a stream which sparkled in the dappled sunlight filtering through the forest. When I had finished I followed the path, pushing through waist-high bamboo grass, to a collection of huts where I crossed the river by Myojin-bashi then, spurning a touting taxi driver, I walked the long 3 Km. of road to Kamikochi. After a wash in the river I joined the others for a meal at the fine new tourist restaurant, a substantial and reasonably priced meal of fish-and-vegetable soup, pork cutlet with salad and rice.

We then packed up and tried to set off; Day's old Hillman was reluctant but after help from a bus crew—Japanese drivers are most helpful towards their fellow drivers in distress—we got away, Joe leading, Kevin and I tailing him. We stopped at Matsumoto Station, where we had agreed to part, Tom and Joe preferring to press on for home while Kevin and I opted for a night in a ryokan before driving back on Sunday. We accordingly returned to our hotel in the nearby spa and soon were enjoying a soak in the big tiled bath.

After a week of living out of our sacks we were ready for anything and hungrily tucked in to the varied and unfamiliar dishes set before us. (The Englishman in Japan normally lives in a little world of his own, living western style and eating western type food). Used by now to sleeping Japanese we spent a comfortable night and drove home next morning by way of Tokyo. This route took us between the Central and the Southern Alps and past Fuji-san, but it was a hazy day so we saw little of the hills.

CAPERS ON STROMBOLI

by L. C. Baume

"STROMBOLI" was a film; it is also a volcano. Volcanoes can be capricious. I have lived inside the crater of an extinct volcano, I have climbed to the top of a somnolent volcano, I have flown over the billowing clouds of an active volcano; but I had never actually set foot on the summit of a volcano in eruption. I determined to remedy this omission.

There are of course volcanoes and volcanoes. There is Vesuvius which engulfed and stifled Pompeii and Herculaneum in one catastrophic convulsion in 79 A.D. There is Fujiyama, ethereal and aloof in the morning mist.⁽¹⁾ There is Lullailaco, in Chile, towering to a height of over 20,000 ft. There is, or was, Krakatoa in the Sunda Strait, which blew up and sent its dust-laden sulphurous smoke right round the world, blotting out the sun. There is Mont Pelée which, early one morning some 60 years ago, erupted in one brief blinding minute and completely obliterated the town of St. Pierre together with its 35,000 inhabitants. And there is Stromboli.

Rising gently to a height of 3,000 ft. from out of the calm blue waters of the Tyrrhenian Sea, its green-tinged lower slopes blurred by the haze of summer heat, Stromboli siestas peacefully. Only a white plume of smoke drifting lazily from its summit discloses the fiery nature within.

It is common knowledge that many years ago a fellow called Cronus, at the instigation of his mother and armed by her with a scythe, emasculated his father and, as a result of a subsequent incestuous association with his sister, had 3 sons, one of whom was Poseidon. Poseidon, not unknown either for his amorous affairs, had a son called Aeolus who in due turn married the daughter of King Liparus. These two went to live in some islands now known as the Lipari or Aeolian Islands situated some 140 miles, as the Siren flies, from Sorrento. Their neighbour was Hephaestus, the mysterious but obliging blacksmith whose subterranean workshops connected with Mount Etna in Sicily. Aeolus became the guardian of the winds and many people came to visit him, amongst them Odysseus, a Greek

shipowner. My own visit to the Aeolian Islands occurred of course much later; anyway it was his Uncle Hades, the keeper of the "Great Lighthouse of the Mediterranean", whom I wished to visit.

Today a steamship sails from Naples on a regular schedule to call on the seven islands of the Aeolian group. Unable to reach the small jetty of the main village of Stromboli, the steamer anchors off shore—out towards the rocky islet of Stroboliocchi which rises vertically out of the sea to a height of nearly 200 ft.—and small lighters convey the passengers and cargo ashore.

The jet-black volcanic sand of the foreshore is in dramatic contrast to the Daz-white walls of the small cubic buildings grouped and scattered along the untidy lanes that lead to nowhere in particular; small, simple, square houses for the most part, many of them empty, many crumbling into decay, abandoned, if not entirely forgotten, by the 4,000 inhabitants who have emigrated to find a more peaceful and more assured future overseas. Only some 450 islanders remain.

Though still early, it is hot, hot with an oppressiveness that turns even the thought of a walk into an agony and the prospect of an ascent of the volcano into a mental malaise. But it is siesta time; non si affretti.

The most sensible time to begin an ascent is in the later afternoon; the heat of the day is exhausted, the shadows lengthen and there is the possibility of a cool evening breeze. From the jetty, my companion and I (for we were two) followed the lower lane which leads westwards to the end of the village, pausing only to admire the vivid purple bougainvillea and the flame-red hibiscus trees growing in the courtyards of the whitewashed houses. At the outskirts of the village the lane forsakes the rocky cliffs of the coast and turns inland, climbing gently through neglected vineyards bordered by clumps of olive trees and fig trees until, suddenly, it is a lane no longer. Instead there is a road, engineered and paved, some relic of a long-forgotten and never completed project, winding and climbing up the lower slopes of the volcano. And equally abruptly the road ends; there is no lane either, only an ill-defined path meandering on through the dry grass and the thickets of thorny scrub and ubiquitous cactus opuntia,

(1) See this issue, page 1.

vaguely and half-heartedly.

We continued; ahead of us the path led on, passing in a short while through a miniature forest of thick bamboo, two metres high, and then opening out on to the scrub-covered slopes of lava boulder and powdered ash up which, in the gathering dusk, we floundered and stumbled.

It was at about this time that suddenly, without any warning, the stillness of the mountain was shattered by a frightening "woosh" and roar just above our heads. I ducked instinctively for it was exactly the sound of a stick of bombs crashing down from the skies; but my momentary alarm was unjustified for, as we were to discover later, this was only a spasmodic eruption from the main crater still invisible to us from below. Hephaestus was at work.

We found a track again leading up through the loose sterile ash with which the whole of the upper part of the mountain seemed to be covered. Soon we were level with the main crater and could see distinctly the black specks of ash and the lumps of molten lava that were spewed out with each volcanic vomition silhouetted against the pale evening sky. The summit lay a few hundred feet higher and we decided to press on while we could still see and before we were too overcome by the foul sulphurous fumes blowing across our path.

Three hours after leaving the village we were at the top, but our desire to follow along the summit ridge to other barely discernible summits was frustrated by the thick and opaque clouds of steam and smoke issuing from the various fissures and craters and drifting across the mountain top. So we descended to a strategic point closer to and overlooking the main crater where we had decided to halt and await the night so as to see Stromboli in all its pyrotechnic splendour. From this eerie other-world viewpoint, we watched the dull red globe of the sun far below us float, sink and dissolve in a sublimation of sky and sea and mist. With the darkness came a bitterly cold wind against which even our thick woollen sweaters and windproof anoraks proved insufficient to keep us warm; we munched our mortadello sandwiches, gritty with volcanic ash, and waited.

Our vigil was well rewarded for every 10 to 15 minutes an impressive eruption took place. A deep rumble would be heard

coming from within the mountain, followed immediately by a shattering "woosh" and the belching of a fiery blast of flame and hot ash high into the dark night sky; the fountains of white hot lava ash would spurt 80 to 90 metres up, changing from yellow to red, and then fall back on to the mountain and, still glowing, go rolling down the lava-run—the "sciara del Fuoco"—down and down towards the sea. Then all would be still again, except for the continuous spitting of hot ash from nearby and much smaller fissures. Occasionally we noticed an incandescent glow through the thick clouds of smoke, as though there were yet other active craters beyond the one we could see.

Soon the moon came riding into view, seeking Endymion; a clear white moon so bright that, as we gathered our cameras and gear and prepared to make our way back down the mountain, we had no need to use our torches. The descent was rapid, as we slithered and glissaded down the silken ash and galloped down the clinker-strewn slopes to the path through the bamboo glade. It was cool, we were elated by our "baptism of hell-fire" and by the prospect of a few hours in bed.

As we approached the outskirts of the village, we noticed that the night air was heavy with a cloying oriental perfume, reminiscent of frangipani blossom after an evening monsoon storm. In the gardens and stony fields around the outlying houses, we noticed clumps of vegetation, each bearing innumerable large flowers in full bloom; exotic and fragrant flowers of white and pale purple, doomed to wither with the first warm rays of the morning sun. "Passion Flowers" I pronounced with dogmatic aplomb, still drugged with the experience of volcanic eruption and the nostalgic scent of virginal frangipani. But alas, I was wrong; there was no passion—there are only capers at night on Stromboli . . . Capers to be plucked, pickled, bottled and displayed in unromantic uniformity on the plastic-lined shelves of Neapolitan super-markets.

Truly, *Sic transit gloria Stromboli*

EASTER IN THE HIGHLANDS, 1965

by D. J. Farrant

FOR THE CLUB'S EASTER MEET in Glen Nevis my guest, Kenneth Coote and I decided to borrow a tent from a scoutmaster friend. We had put tents up before so we felt that practice was not necessary with this one. When we arrived as the advance party on the evening of Maunday Thursday we hunted for a site that was both suitable and available; eventually we found promising ground near Polldubh. It was on the river bank and seemed quite dry but it was rather a small area and it bore evidence of recent inhabitation by a herd of loose-bowelled Highland cattle. Nothing daunted we proceeded to pitch our tent. Having unfolded it eight times we found that our friend had made a mistake and had lent us an area of canvas that could comfortably have accommodated his whole Troop. Various rude suggestions were passed that our marquee might serve as a flysheet beneath which the whole Meet could camp, but it came in very useful as a community centre in the long periods of heavy rain which we had to endure.

Much good mountaineering was done by many Members over the Easter week end and at the conclusion of the Meet on the morning of Easter Monday Richard Gowing, Ken and I moved off to Wester Ross in search of more great mountains and rather better weather; we were to be successful on both counts. Our first stop was at Dundonnell where, after the storms of Nevis, it was a pleasure to wake up in the luxury of a well appointed hotel instead of finding the lilo floating on the groundsheet and one's left ear full of icy water.

Tuesday dawned clear and we set off for An Teallach with high hopes. The weather improved as the morning continued and we had superb views out over the western lochs and the Summer Isles to the hills of Harris, the far Cuillins and the rampant peaks of Canisp and Suilven. As we climbed easily up to the summit ridge, we made our first acquaintance with the flat slabs of red Torridon sandstone. This firm, delightful rock runs in long strips through the heathery slopes and its formation of interleaved horizontal blocks is quite remarkable.

We reached the ridge at noon and turned back along it, first of all to ascend the northernmost top, Glas Mheall Mòr.

We then started the traverse which was to take us over five hours. The sun was now streaming down and it must have been thirty degrees warmer than on Ben Nevis only two days before. We made good progress along to the reigning peak, Bidean a' Ghlas Thuill (3,483 ft.) and continued up the beautifully conical summit of Sgùrr Fìona. It was here that an easy ridge walk in good snow changed into a serious winter mountaineering expedition. The ridge narrowed to a few inches as we carefully ascended the very exposed pinnacle of Lord Berkeley's Seat (who Lord Berkeley was and why he chose to sit here were mysteries the solutions to which escaped us. I can only assume that he must have had a wonderful head for heights). This led us on to the four jagged pinnacles of Corrag Bhuidhe, where conditions were very tricky, and the knife-edge ridge had to be traversed with extreme care because of the sensational exposure on either side. We had to rope up for the descent from the last pinnacle because most of the ledges were snow covered. This was done in three pitches and took us over an hour. Climbing down was not technically difficult for there were many holds for the feet, but it was often hard to see them because of overhanging ledges directly above them. Exploration with the feet was necessary and usually successful but was not performed with an easy mind owing to the absence of good handholds. Flat ledges provided the only holds and quite a lot of kneeling, careful balance and reverse mantle-shelfing were needed. We reached broader ground ultimately, however, and completed the summit traverse by climbing the Corrag Bhuidhe Buttress and Sàil Liath, arriving on the latter at 5.30 p.m.

This summit was a superb vantage point and we had vivid views up to Ben More Assynt, across the Road of Desolation to Loch Glascarnoch, down to the jagged outlines of Torridon and across the sea to the Black Cuillin ridge. We dropped back down to the Cadha Gobhlach col and had a most exhilarating run down the steep snow slopes—1,250 feet in ten minutes—to the rocky shore of Loch Toll an Lochain. This is said to be one of the greatest corries in Britain, along with Coire na Caimhe on Liathach and Coire Mhic Fhearchair on Beinn Eighe and the view of its soaring cliffs was breathtaking, especially as the surface of the lochan was so still that

the whole of the mighty ridge was perfectly reflected in the dark waters. We eventually left the corrie after many lingering glances and made our way through the heather and sandstone slabs back to Dundonnell. The only thing to mar a perfect day was that Ken caught an ankle in the heather a mere two hundred yards from the road and the resulting severe sprain was to prevent him from taking any further active part in our holiday.

The following day was another sweet and gentle spring morning and Little Loch Broom bore scarcely a ripple. We drove slowly round this incomparable coastline, savouring to the full the delights of the western lochs. We paused in Aultbea to replenish our supplies and also to rout out the whimsical Dr. Hunter who strapped the injured ankle and assured Ken that he would be only too pleased to have him admitted for X-ray at the nearest hospital. As this was in Inverness—a mere 85 miles away—we declined his offer.

We continued our journey to Gairloch and then turned inland to run along the shores of Loch Maree, where we had a superb view through the silver curtain of birches of the noble outlines of Slioch. On our arrival at Kinlochewe Richard set out to climb Slioch with another party of climbers whilst Ken and I went down to install ourselves in the Ling Hut, by courtesy of the S.M.C. This very attractive and well equipped bothy is half a mile from the road in Glen Torridon on the shores of Lochan an Iasgach. The whole area abounds in wild life and in our short stay there we saw many red deer within a few yards of the hut, a heron, several rare species of wild duck and—incomparable sight—an imperious Golden Eagle which swept majestically into the sky from the towering crags of Liathach and soared away up the glen.

To our intense disappointment the Thursday morning was damp and misty with the cloud well down and Richard and I set out for Beinn Eighe with no real enthusiasm. We followed the well defined stalkers' track round the shoulder of the mountain to enter the broodingly impressive Coire Mhic Fhearchair. The silence of this eerie corrie was broken only by the crashing of avalanche ice as it peeled off the cliffs and by the sweeping of the grey sheets of the rain as they struck the surface of the lochan. A full view of the three great rounded

buttresses was denied us, but occasional breaks in the cloud enabled us to appreciate at least something of the true grandeur of this awesome place.

We decided that a full traverse of the summit ridge was impossible in the conditions so we contented ourselves with climbing Ruadh-stac Mòr (3,309 ft.), the Munro of Beinn Eighe. This was a long and arduous ascent of the large loose blocks of Cambrian Quartzite which is the vivid feature of the mountain. The descent might well have proved more tedious than the going o'er, but it was in fact made more tolerable by the fortuitous discovery of a thin snow shoot which, though wet and slushy, gave far better progress than precarious lumps of scree.

The weather was so bad that evening that we virtually decided to abandon our final plans and return a day early. We arranged to get up at 6 a.m. and make a cursory inspection of the wicket before packing up. When I somewhat gingerly sniffed the air at the appointed time on the following morning I found to my surprise and pleasure that conditions were fit for play: the clouds were high and the sun shining strongly; our traverse of Liathach was definitely on.

We left the hut at 8 a.m. and after a brief walk along the road we struck straight up for the skyline. This seemed a very arduous thing to do but the route was always interesting and varied and we always seemed to be getting perceptibly nearer to our objective. We had some interesting pitches on sandstone outcrops, very steep scrambles up heathery ribs and finally an excellent kick up hard crusty snow in a deep gully. We reached the ridge at 11 a.m. and found ourselves virtually on the summit of the most easterly peak, Stùc a' Choire Dhuibh Bhig. We then started the westwards summit traverse and passed over Bidean Toll a' Mhuic to the highest peak, Spidean a' Choire Lèith (3,456 ft.). We had had excellent views all the way but as we stopped to eat, just after midday, the cloud blew menacingly over. The sun was still shining feebly and we tried to manufacture Brocken Spectres but met with no success. The conditions now grew rapidly worse as we made our way down to the sensational Fasarinen Pinnacles. These we roped up for as, although the climbing was straightforward, the exposure was incalculable and the rock none too safe. For honour's sake we climbed

all the little pinnacles; some with great trepidation on my part for the smaller ones were so weather worn and precarious that it seemed as if one vigorous pull would send the whole pillar tumbling into the infinite recesses of Coire na Caime.

When we reached the broader section of the ridge again we unroped, but the blizzard mounted in intensity as we struggled up to the last peak, Mullach an Rathain. Here bearings were difficult to take, but a fortunate break in the cloud showed us the impressive gendarmes of the Northern Pinnacles which lead up to this final peak. Happily we were soon able to find our way to a cairned track which led us to the scree shoot running down to the little village of Fasag. This shoot of course was still under snow—of the deepest and wettest variety—but we managed to plunge down it successfully and were rewarded by the joyous sight of our wounded companion waiting for us with the car right at the foot of the mountain, thereby saving us an unwelcome five mile trudge back along the road.

The final evening of our holiday was spent in reflective mood in the snug little hut. These light-hearted hours were spent in minute examination of the rhyming possibilities of the English language—who would have thought it was so difficult to find words to rhyme with Torridon—and in thinking of possible titles for this article. "From Ross-shire with Love" seemed too macabre; "Easter in Wester Ross" seemed too obvious a pun, although this did lead to the neat maxim, "Easter in Wester Ross is wetter than in Easter Ross". Ultimately the prosaic title was considered the most suitable. This humorous pastime eventually gave way to deeper and calmer reflections in which we all firmly resolved to pay a return visit to this wild and enchanting corner of Britain.

CLIMBS IN THE EASTERN ALPS

by D. M. Moorhouse

ANY YOUNG CLIMBER who reads Hermann Buhl's *Nanga Parbat Pilgrimage* two or three times dreams of climbing in the Kaiser. Nowadays, when young climbers have perfected the art of making do with very limited money and with unlimited enthusiasm for the hitch-hike, climbing in the Kaiser need no longer be a dream and a visit realises the fondest hopes. If this young climber is endowed with more enthusiasm than sense and gorges himself with more than three readings, he may be tempted to the Laliderer Wall in the Karwendel. I was one of these and arrived with Nick Halls at the foot of the Wall infused with the spirit of Hermann B. and determined to beat it to the ground. One route on it nearly beat us into the ground and we fled to the Kaiser, which we found was all things the Laliderer was not—and a really cheery place.

THE HERZOG KANTE, Karwendel Group, May 1964, Grade IV +

It was our first Alpine season. We had been told it was best to go to the Eastern Alps early in the year, to the smaller and less serious training mountains. So, guided by the 1963 copy of the Alpine Climbing Club Journal, we went to the Karwendel, a large area in Austria directly to the north of Innsbruck. On our map the Karwendel range looked quite small, there seemed to be a good hitch-hikeable road to it and a hut under our chosen crag, the Laliderer Wall. We left England, Nick by train with the heavy gear necessary for a six month season, I hitch-hiking with a light sack.

Our hitch-hiking road to the Wall was still snow-bound in May and in any case no cars could enter the area as it is the private hunting ground of the Duke of Saxe-Coburg. After a 7-hour walk to the hut Nick, carrying 90 lbs. of gear, arrived with blistered feet and I with a pulled Achilles tendon; luckily the winter room of the hut was open.

Next day we turned our attention to the Wall. It looked bigger than we had thought, it was in fact 2,500 feet bigger, the total height of the Laliderer is 3,000 ft. Every two or three minutes we heard an avalanche of snow and rock fall from somewhere on it. We thought this was just a normal alpine

stone fall, of which we had already heard a lot. We wanted to climb the Grade VI+ Nord Verschneidung, so we went to reconnoitre the start. A hundred yards from the Wall stones whistled and splintered around us and any further progress seemed certain death. We retreated to the hut disheartened by our lack of nerve in the face of a normal alpine stone fall and wondering how any man could survive this barrage for many seasons and become a good alpine climber. We had heard that this place was a 'Mecca' for the hard men from Munich and Innsbruck, but we were alone at the hut.

A few hours later two very tired young Germans arrived; they told us they had made the Herzog Kante, had descended on the other side of the mountain and had taken a day and a half to walk round the range and back to the hut. This seemed odd, our description of this climb gave six hours to go up and three to four for the descent. They also said they had placed 14 extra pegs in the climb, this seemed shocking to us.

Next day we again failed to reach the foot of the Wall so we decided to lower our sights a bit and wean ourselves gently by climbing the Herzog Ridge; the stones fell mostly to either side of this and it would give us the added reward of 14 more pegs. Very early the following morning we arrived at the foot of the ridge and began to climb, but after two rope lengths we were stopped by our first problem of alpine route finding. Having tried a few desperate variants we learnt two lessons: routes that climb ridges do not always follow the crest of the ridge, and, the easiest possible way is the best. We were eventually reassured by the discovery of a peg, showing that we were on the right route; our confidence returned.

The rock was loose, in places looser than our wildest dreams and was in many places covered with soft snow. At last we arrived at the first crux pitch, a line of pegs up a steep short wall. Nick led this and belayed; I followed knocking out as many pegs as possible with my brand new, bright red, duralloy, North Wall hammer. It slipped from my hand and, hypnotised with horror, we watched it clatter and rattle down, to end in a snow patch 300 feet below. The recovery of this very precious article wasted an hour.

Next came the dance with the Gendarmes. The Gendarmes were balanced heaps of limestone dross, each about 10 ft.

high and undercut by wind and frost. I led, threading the rope to left and right in the best tradition of natural protection; the movement of the rope disturbed piles of stones which roared down on either side of the ridge. By now ice was adding to our troubles and presently the final problem revealed itself in its full horrific details; an exposed loose traverse above the abyss, leading to the foot of an overhanging ice-filled groove. To overcome this Nick became involved in a series of desperately unstable and gymnastic acrobatics. After this the climb seemed to go on for endless rope lengths of easy loose ice-covered rock.

Eventually we made the summit and it was here that our real troubles began. The snow was deep, soft and up to our waists for the full length of our traverse of the summit ridge, while we looked for the beginning of our descent route, the Spindler Schlucht. We found that the best means of progress was crawling, so that our weight was widely distributed as we moved. Two hours of crawling up and down the ridge found us at the top of the schlucht. One look down it revealed to us why the Germans had preferred to descend on the south side and walk round the mountain. It looked more like a 'Sassenach-eating' gully on the Ben than an easy descent route, as the mist swirled up from beneath the cornice.

Disheartened, we discussed the two alternatives, the gully or the long walk round. However, a decision was made for us by the increasing mist, which limited our vision to about 30 feet, so a descent of the gully became inevitable. The English guide-book description of the descent seemed to indicate no great difficulties and it reassured us a little. The decision was further supported by our blistered feet, my strained tendon and our general fatigue.

I placed a peg on the only available piece of rock, ten feet back from the cornice, and used Nick's brand new waist line as a sling to suspend the rope down the gully. I went down first and after about 100 feet found an abseil ring on the right wall. I checked to see if the rope ran and it did so Nick came down, but this time the rope jammed. Now the brand new, bright red, duralloy north wall hammer came into its own as Nick re-ascended the gully, protected from below by me. After a gripping ascent he rearranged the ropes and abseiled down

again; this time the rope did come.

Thereafter we found no more abseil rings as they were all under snow, abseil had to be made from doubtful pegs and hand-cut spikes. The problems of treating loose pegs gently, especially when descending over ice overhangs, caused a good deal of stress. There were also the worries associated with stones falling from the gully walls and the danger of being swept from an abseil position by small ice and stone avalanches. Luckily we were under small overhangs as the more serious avalanches went past.

Soon we had used all our available slings and had only one peg left of the seven we had removed from the ridge. Darkness overtook us and we bivouacked on a snow platform under a small overhang. Our supply of food, one packet of boiled sweets, disappeared down the gully when I moved during the night. Fortunately we had duvets with us and I got a little sleep but Nick had chosen his position badly and was hit twice on the legs with stones. In the morning we discovered that we were one abseil from the fixed iron ropes of the easy path at the foot of the gully. An hour and a half later we were back at the hut. On the afternoon of that day we saw the whole gully avalanche!

THE WILDER KAISER, Kufstein, May and June 1964

The Kaisergebirge lie between Kufstein and Kitzbühel in the eastern Tyrol and for a first visit to the Limestone Alps or for warming up before attempting the hard routes in the Dolomites, the Kaiser is ideal. The rock is good and, by May, free of snow; routes range from 1,000 ft. to 1,500 ft.; the approaches are generally from one to one and a half hours. There is a large number of routes within a small area, many of the best are on the "Trinity"—Fleischbank, Predigstuhl and Totenkirchl. A base at the Stripsenjoch hut gives the best approach and the largest selection; there is a nice camping spot with water, under the joch on the east side. The quickest way to the hut and the kindest when carrying a heavy rucksack, is from the Griesner Alm car park, 1½ hours; the most beautiful is up the Kaisertal from Kufstein, 4½ hours.

Although there are many good routes in the easier grades, the Kaiser comes into its own in the climbs over Grade V. It

is with the harder climbs that some guide as to what to tackle next is a great help; there is a good German guide book with illustrations and a map, some of the descriptions are a bit vague but can be supplemented with postcards showing the routes, available at the hut.

Here are comments on ten of the harder climbs I can recommend; we found them all, each with a distinct character. I have arranged them in order of difficulty to give an idea of their scope and to provide a yardstick for other routes. The gradings of some are a little lower than those given in the German guide book so as to bring them into line with modern Dolomite gradings.

- (1) FLEISCHBANK OSTWAND, Dulfer Route. Grade IV+. 1,200 ft.

This is a must for a first visit, it is the classic of Classics, well within the scope of any competent "severe" leader. It has an interesting rope traverse with plenty of protection and this is often a new experience for British climbers.

- (2) TOTENKIRCHL WESTWAND, Dulfer Route. Grade V. 1,200 ft.

A good climb in a good position over one of the prettiest valleys in the area. Although the problems are similar to those of the previous climb, it is quite a bit harder, some of the pitches being hard severe.

- (3) FLEISCHBANK SUDOSTWAND. Grade V+. 900 ft.

Not much harder than Dulfer Westwand but more sustained and with more pegs; a little mild V.S.

- (4) PREDIGSTUHL NORDGIPFEL. Schüle-Diem Weg. Grade V+ to VI-. 1,000 ft.

Takes a nice corner line but is not as hard as it looks, the main difficulties are in the first half. Some mild V.S., plenty of protection.

- (5) FLEISCHBANK OSTWAND. Rebitsch-Speigl Route. Grade VI-. 1,000 ft.

A first class climb on good rock, mainly free climbing, in part delicate and in part strenuous, from hard S. to V.S.

- (6) FLEISCHBANK SUDOST, Verschneidung. Grade VI.
1,050 ft.

This takes a very good line and is excellent climbing all the way; it is more sustained than any of the previous, mainly V.S. with A.1. artificial. In hot weather it is a real sun-trap

- (7) MAUKSPITZE WESTWAND. Buhl Route. Grade VI.
1,500 ft.

This climb is too far out of the way for a morning approach from the Stripsenjoch hut. To spend a day walking over the Kleine Tor Pass and bivouacking under the wall makes a nice expedition. The Maukspitze is a 'must' for the Buhl fans and is one of the harder climbs; interesting chimneys (desperate with rucksack) and a beautiful 150 ft. traverse on pegs and free, of V.S. British grade.

- (8) PREDIGSTUHL. NORD GIPFEL. Direttissima. Grade VI.
1,000 ft.

This is a good route in an excellent position and is VI for most of the way. Mainly free climbing with pitches of A.1 and A.2 artificial, but there is ample protection. It can be likened in difficulty to the Cassin Route on the north face of the Cima Ovest di Lavaredo. Mainly V.S. with a little H.V.S.

- (9) TOTENKIRCHL. WESTPFEILER (Brandler). Grade VI and A.2. 1,500 ft.

This is a modern route and its main difficulties are artificial climbing. As it is quite long and route finding a bit difficult in the first half, a bivouac under the wall is advisable; there is a good site under large boulders. Good climbing on a good wall.

and, finally, for those with the Death Wish:—

- (10) FLEISCHBANK OSTWAND. Schmuck Kamin. Grade VI+.
950 ft.

This is said to be the hardest free climb on the Kaisergebirge; it is certainly the most serious. The line is perfect, a vertical groove and chimney system, straight for almost 1,000 ft. It is the climb on which Hermann Buhl

fell 30 metres (see his book). There are only a few words on this route in the German guide book. The first ascent was made in the 1950's; Nick Halls and I made the 6th ascent in June 1964.

Start by following the Aschenbrenner Lucke route for three pitches until it leaves the chimney line leftwards, IV and VI—. Continue in the chimney 4 pitches to a good stand below a groove, III, IV and a little V— at the end. Climb the groove for 70 ft. (VI, 2 pegs) to a large foothold on the right wall and a stand peg. This is the stand below the 85 ft. crux pitch and has a very poor belay. The crux is a groove, free climbing by bridging, and is 'mild extreme' British standard with no protection. It ends at a good stand and a large ring peg. Above this is a short overhanging crack with very sharp rock spines, V.; the chimney eases to IV for one pitch after this. The last four rope lengths are in an overhanging chimney, very narrow and very sharp rock, V to V+, finishing on the summit ridge.

THE CARLESSO SANDRI ROUTE, Civetta Group. August 1965

The Civetta Group is some 20 Km. south of Cortina d'Ampezzo in the Dolomites and at the southern end of the group lies the Cirgine di Venezia, a 'cirque' guarded on either flank by two great towers, on the left by the Torre Venezia and on the right by the Torre Trieste. The Trieste is the larger and dominates the valley with its beautiful south wall some 2,400 ft. high. On this wall is the Carlesso-Sandri route, which is one of the great classics of the Dolomites and one of the three great climbs of the Civetta. The first ascent was made in 1934 and for that time was considered a very remarkable climb. The sixth ascent was in 1956 and even in 1965 only about 60 ascents had been made. The climbing is very mixed, with hard free and technical artificial; the rock is not always good.

The weather was terrible in Chamonix in August 1965 so, in desperation, Brian Shirley and I decided to hitch-hike to the Dolomites for a week and try to make one or two good climbs in the Civetta, hoping that in the meantime the weather would pick up in the west. We had in mind the Philipp Route on the Punta Tissi, North West Wall and the Carlesso Route

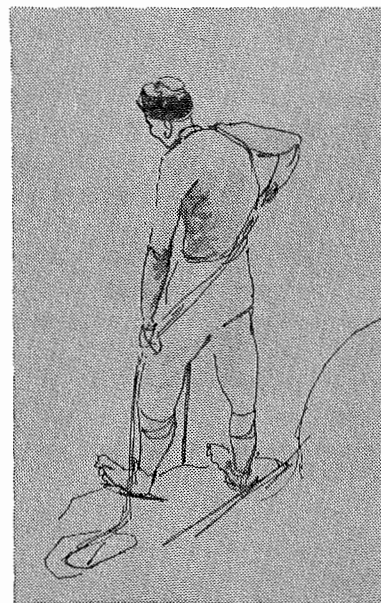
on the Trieste, but on arriving in the Civetta we found the weather just as bad, with snow to the screes. This eliminated the North West Wall and left the Trieste which, being a south wall, was soon free from snow.

It was very cold and overcast as we fought our way through the dwarf pines to the start. The climbing soon got hard and the English guide book was not much help in route finding. At last we found ourselves at the first terrace; from here an easy traverse to the left leads to the foot of the "Great Corner" which is over 250 ft. high and is one of the prominent features of the face. The route takes the right wall of this and is very exposed mixed climbing; above this is the second terrace and bivouac site. We arrived with plenty of time to spare and spent it improving the accommodation—so-called. The wind had risen and it was a very cold night; Brian was lucky enough to have an elephant-foot sack and before morning I was very envious.

In the morning we creaked up the first few rope lengths to the foot of what is described in the English guide book as the Crux. This is an A.3 slab; anything in the Dolomites that is two degrees less than vertical is called a slab. I was glad it was Brian's lead but I had an anxious time watching pegs drop out as he moved off them. Not all were in place and we used some interesting combinations before overcoming this.

After the crux the description leads one to expect things to ease off before reaching easy slabs. In fact this was not so and the next section turned out to be five hard rope lengths of mainly free climbing, on the last of which I managed to bring an overhang down on myself; luckily I was second at the time. Three rope lengths up the easy slabs led to the summit chimneys—to quote the guide book. I led the last of these and, finding a peg below a corner line, presumed that this indicated the chimneys. Brian did not seem to be progressing as fast as usual; on the next pitch in reply to my enquiries all I got was a series of 'Sheffield grunts', luckily impossible to interpret! I soon found out why: hard, loose and with little protection. The next pitch was harder, very loose and I only just managed to make it. Three more hard rope lengths, easing towards the end, brought us to the summit. That second day was so cold that we climbed all the time in duvets.

The descent is a real gripper when one is tired—ten abseils. We had a second bivouac, a little snow and epics with jammed ropes. At last we arrived at the Vazzoler hut and were informed that we had just made the fifth ascent of the "Direct Finish", first done in 1956 by Dietrich Hasse. This route is a more serious undertaking than the Brandler-Hasse Direct on the Cima Grande or the Soldo-Conforto on the South Pillar of the Marmolata. With the Hasse finish it is very sustained climbing.



THE LAND OF THE MAGIC CARPET

by H. G. Watts

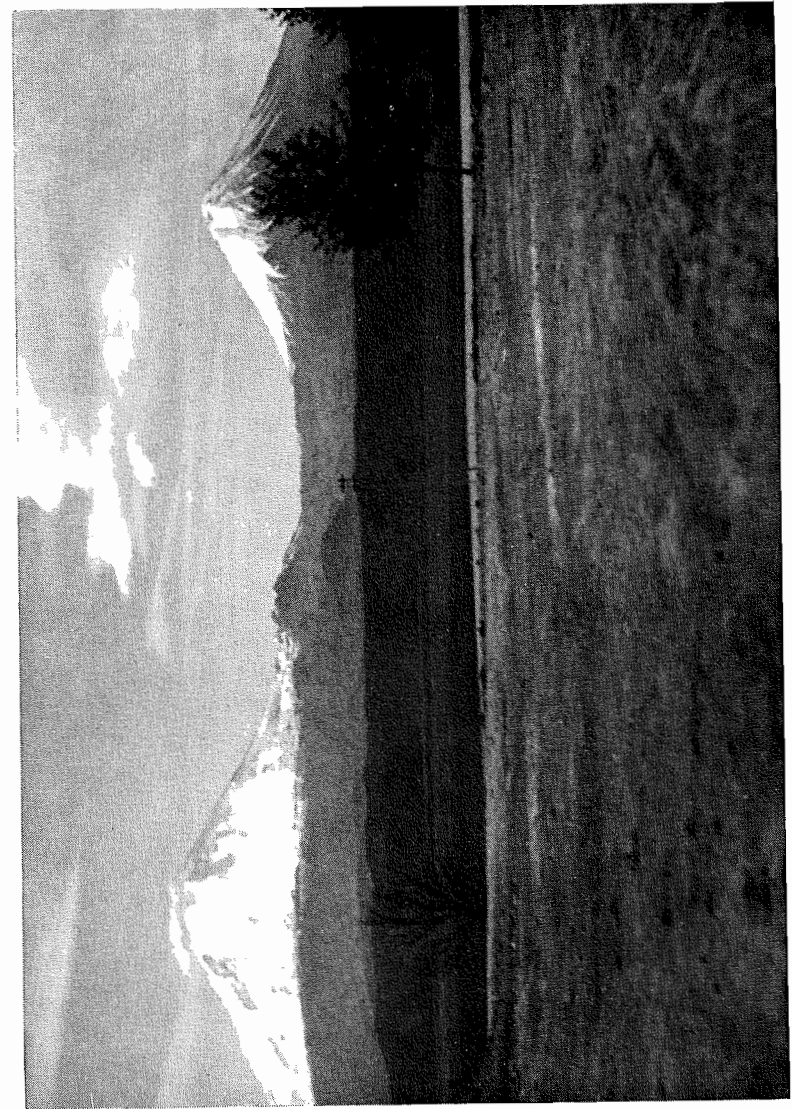
IN THE AUTUMN of 1965 my wife and I explored the exciting remnants of the Minoan and Mycaean civilisations in Crete and the Peloponnese and I renewed a wartime acquaintance with the glories of Periclean Athens.

Our main reason for going to Persia in the spring of 1966 was to visit my younger step-son, who is a lecturer in English at the University of Teheran. Always bearing in mind the second part of Rule No. II of the Yorkshire Ramblers' Club, we took the opportunity of seeing some of the ruins of the ancient Persian Empire and of learning something about that great rival of Hellenic culture in the sixth and fifth centuries B.C.

We arrived in Teheran by air from Istanbul; the less said about this unattractive modern capital the better. It is vast, dusty and squalid; its one redeeming feature is that the Elburz Mountains rise a few miles to the north, but as the month was May we were too late for ski-ing and our programme did not include climbing the 18,605 ft. Demavend for which, though it is scarcely more than a walk, a mule, camping equipment and three days are needed.

Our stay coincided with the first ten days of the month of Muharram, during which the Shi-ite Moslems observe a period of mourning for the death of Husayn, a grandson of the Prophet. During these days and nights the populace surges in ragged and disorderly procession round the streets waving black flags, wailing and, figuratively, beating itself on the back with chains. Europeans are not welcome and for a woman to appear wearing red is to invite a volley of stones.

The archaeological museum contains finds from Susa, Persepolis and other sites but, as so often happens, the best and most valuable objects, especially those of gold, had gone on exhibition across the Atlantic. The pottery of the Achemenean period VIth to IVth centuries B.C. and certainly one of the greatest periods of Persian art, strangely enough compares neither in form nor in decoration with the superb specimens from the Minoan II period some 1,000 years earlier in the museum at Herakleion.



Mrs. K. F. Watts

MOUNT ARARAT

As the aircraft glided between the wind-eroded sandstone hills towards the airport of Isfahan, 300 miles south of Teheran, the morning sun glinted on the multi-coloured domes of the Lotfallâh and the Royal mosques and we flew over the beautiful XIth century Charestân bridge. The mosques and their flanking minarets are covered with glazed tiles in blue, green and yellow designs; they date from the XVIth and XVIIth centuries but the manufacture of these tiles remains to this day one of the main industries of Isfahan. The domes look as if gigantic flying saucers had just landed on an interplanetary cruise. The oldest and most famous of all the mosques is the Friday, Masdjed-é-Djomeh, the building of which was begun towards the end of the XIth century, simple in its architecture but vast and bewildering in the number of pillared halls surrounding the inner courtyard. The surprising thing about the mosques in Persia is their cleanliness, enforced in places of worship by the tenets of the Moslem Faith; this does not however apply outside religion, the dirt and squalor in which these middle eastern people live makes a visit to their countries an experience in which interest is often tempered by revulsion.

The cities of Persia are linked by powerful Mercedes-Benz motor omnibuses, so to see more of the country than one does from an aeroplane we used one to cover the 300 miles from Isfahan to Shiraz. Our bus was equipped like an aircraft, adjustable seats, kitchenette and lavatory; a steward supplied cold drinks, light refreshments and cups of delicious tea. The journey took 8 hours; we passed through some cultivated areas where there were streams or where the water was raised, often by hand operated wheels, from holes looking like bomb craters going down to the water table. But there are many thousands of square miles of flat plain, evidently laid down between mountain chains by the action of water in pleistocene times, where the soil looks suitable for yielding good crops if only there were an adequate water supply. It seems that when northern Europe was covered with ice the rain-belt, which now so often interferes with Y.R.C. meets, lay further to the south so that the Sahara, Arabia and the Persian plateau were grassy uplands teeming with animal life. Although desiccation has been going on for the last 10,000 years,

the country in classical times was much more fertile than it is today. One wonders if, with the expenditure of money and energy it could be made so again by pumping up the water from deep wells and conserving and using it scientifically. Persia, however, is self-sufficient in foodstuffs and not interested in exporting anything except its petroleum products and its carpets; in addition it suffers from the habitual indolence of an Islamic country where the women do the work and the men stand or sit around all day in idleness and intrigue.

Shiraz, like any other city in the Orient, is dusty, hot, smelly and seething with humanity. But 40 miles to the north lie the ruins of Persepolis, the magnificent palace built by Darius the Great, 521 to 485 B.C. The broad staircases, specially shallow so that a man may ride a horse up them and flanked by superb bas-reliefs showing the King with his soldiers, servants and tributaries, the Hall of the Hundred Columns and the huge Apadana, a columned audience hall each column of which is crowned by twin horses' heads, give the impression that Darius took his inspiration as regards architecture from the Temple of Amun at Karnak and as regards layout from the Minoan palaces in Crete. Alexander the Great took Persepolis in 330 B.C. and it is thought that it was during the subsequent carousal that the palace caught fire and was destroyed, though it may have been purposely demolished in revenge for the sacking of Athens by Xerxes.

Pasargadae, the ancient capital of Cyrus II, 559 to 530 B.C. is 45 miles north of Persepolis and it was here that he was buried in a funeral chamber mounted on a 5-tier pyramid, all made of huge limestone blocks. Nearby are the foundations of several palaces in one of which there is a relief showing the King wearing an Egyptian tunic and crowned with the uraeus, the Egyptian symbol of kingship; this is one of the many items of evidence of the close relations between Persia and Egypt.

A letter of introduction to Dr. Pirnia, the Governor General of the Province of Fars, not only got us permission to go to Firuzabad, in the country of the Qachqai tribe, but the Governor kindly provided us with his own chauffeur-driven car and arranged for us to be received by the Deputy-Governor of the

town. Until only a year or so ago it was dangerous for foreigners to penetrate into such tribal areas and permits are still necessary to get past military guard posts on the roads. It is not so much that the tribes are savage but theirs is a monotonous life and they are bored so they welcome the opportunity to amuse themselves at the expense of the police and possibly of other strangers. They are rough people and their fun tends to be more than just hilarious.

We drove the 80 miles over rough roads through undulating sparsely wooded plains and over two ranges of rugged limestone hills, occasionally meeting small groups of people with camels and donkeys. The women wore their tribal costumes of red, yellow and russet-brown, those riding the donkeys were often carrying young lambs or goats in their arms; the men-folk looked truly ferocious. At last we passed through a deep limestone gorge with a clear stream running down it and before we debouched into the fertile Firuzabad plain we saw a fine rock relief cut in the cliff-side showing Ardechir I, the founder of the Sassanid dynasty, in battle with Ardavan V, the last of the Parthian kings, 224 A.D.

The Deputy Governor and six of his staff received us outside the municipal office, a large house in a garden of sweet scented roses and stocks. To our dismay we found that we had not a single word in common, we might have been visitors from another planet. We were taken into the house and we sat on one side of a large room while our hosts sat on the other. A page of Persian phrases from the Blue Guide did little to relieve our embarrassment. However, the ceremonial cup of tea was brought and soon after that the village schoolmaster, hastily summoned by telephone, arrived and for the rest of the day acted as interpreter. Through him we were able to say what we wanted to see and everybody agreed that this would make a splendid day out.

So we piled back into Dr. Pirnia's car, the Deputy Governor, his Chief Clerk, the town archaeologist, an agricultural expert, the schoolmaster and ourselves; on the way we stopped at the boys' school to pick up the schoolmaster's 11 year old son, this was too good an opportunity to miss. We were much impressed by the schools in this little town of 5,000 inhabitants; there are separate junior schools for boys and girls and

a secondary school for older children up to 17 or 18. All three were fine, light, well built, well ventilated modern buildings which would put to shame many a British council school.

The palace of Ardechir I, on the edge of the plain near the gorge through which we had come, now little more than a heap of tumbled masonry, is nevertheless a good example of early Sassanid architecture. Three enormous domed chambers, one of which still shows some carved decoration round the doorways, formed the throne room and the ceremonial part of the palace; now it is used as a stable for donkeys. The porticoed entrance on one side and the harem and living quarters on the other are in ruins. Part of the building also served as a fire-temple in connection with the rites of the Zoroastrian cult; most of these fire-temples, of which there are many in Persia, used natural gas as the source of the "eternal fire". Beside the palace there is still a deep pool of cold clear water from a spring, the reason for the choice of this site.

The ancient city of Gour, about 2 miles to the north of modern Firuzabad, founded in the IIIrd century A.D., is said once to have housed a million inhabitants; there is little to be seen now except a high central fire-tower and the foundations of a palace, but the encircling walls are still traceable and define the large area that the city once covered. Here, and surely also on many another ancient site in Persia, there is obviously still much scope for organised excavation; who can say what treasures may yet lie beneath the ruins?

We were entertained to lunch again in the municipal office; vast dishes of rice baked with saffron and raisins, various meats cooked as kebab and eaten mainly with our fingers, cucumbers and a delicious salad made from yoghurt and chopped cucumber. Devout Moslems drink no alcohol so we were offered the choice of iced water, pepsi-cola or Canada Dry.

Once again we loaded ourselves into the car and drove about 5 miles into the country to see a carpet factory. It was very different from what we are used to seeing in Halifax or Kidderminster. The 'factory' consisted of a large courtyard enclosed by a high mud-brick wall; inside were several low buildings, also of mud-brick, over which vines were trailing, under trees were rough bamboo shelters. In each building and

under each shelter a team of six or eight women worked on a superbly beautiful Qachqai carpet. The women wore the gaily coloured pleated tribal costume and worked sitting on the part of the carpet they had finished. The warp threads were tightly stretched between stout wooden beams, each woman—their ages varied from 10 to at least 65—had a supply of coloured wool which she deftly threaded between the warps and cut off with a knife. The intricate pattern of each carpet was so well known to each member of the team that they worked without a plan, each one using the right colour at any particular moment. At regular intervals a thick weft was passed across in front of the woollen tufts and beaten tightly into place with combs by the whole team. Hens picked about behind the women on the finished part of the carpet.

The colours are obtained entirely from local vegetable sources and the wool from local sheep. The dyeing is done by boiling the wool in iron pots over a wood fire with the appropriate vegetable ingredient. There is never any doubt about such questions as matching or fastness. Each woman is paid the equivalent of 5/- per day, they work for 12 hours daily and a team in that time completes about 6 inches of carpet. We were shown one carpet which when finished would measure about 25 ft. by 18 ft. and would sell for £1,750.

Persia is not only The Land of the Magic Carpet, it is also The Land of the Rose. Nearly every house has a little patch of ground, some of course have big and very beautiful gardens, where lovely scented roses bloom from April to October. At the time of our visit they were in the glory of their first flowering. Hybridisation has not, as in Europe, deprived them of their scent. Before leaving Firuzabad we were taken to a big orchard-garden full of roses, with apple and palm trees and vines. The Persians think that the little sour unripe apples eaten at this time of the year are a great delicacy and we were given a basket of these and a huge bunch of roses, whose petals we kept and dried in the sun during our journey back to Europe.

As a parting gift the schoolmaster gave us two little books of the poems of Saadi and Hafiz, Persian poets who lived in the XIIIth and XIVth centuries and whose tombs in Shiraz one must make a point of visiting, if only out of courtesy. When



R. Harben

PEN-Y-GHENT

we asked what we could give him in return he said "A good dictionary of the English language". We have ordered it and hope it reaches him safely.

Once again we took a bus for the first stage of our home-ward journey, the 800 miles from Teheran to Erzurum in Turkey. This cost us £5 each, 1½d. per mile, and took two days, with an overnight stop at Tabriz and a six hour delay in crossing the frontier into Turkey at Bâzargân. The bus was not the height of comfort or luxury and we were glad not to be with it all the way to Munich, its ultimate destination; nevertheless on the second day it took us through some fine country. The north of Persia is pasture country of green undulating hills and the valley up which the road ran on the way to the frontier station was ablaze with brightly coloured flowers, deep scarlet poppies and massed blue and yellow flowers making the hillside look almost like the Dutch bulb-fields. The birds were as brightly coloured as the flowers and we spotted golden orioles, hoopoes, rollers, bee-eaters, kestrels, buzzards, shrikes, egrets, storks, nut-hatches, firecrests, herons and a pair of golden-yellow geese with brown wings.

The tiresome six-hour delay at the frontier was to some extent compensated by a close-up view of the majestic snow-covered cone of Mount Ararat, 17,346 ft., rising alone above a black base of lava—it last erupted in 1840—with all the dignity and beauty of Fuji-san. Here also we found growing wild a very lovely iris with pale mauve and deep purple petals.

At Erzurum we left the bus to rattle its way through Asia Minor to Ankara, Istanbul and Europe and we gave ourselves the luxury of doing the last 200 miles to Trebizond on the Black Sea in a large American taxi. The last 60 miles to the coast was like an alpine valley, snow on the peaks, pine forests on the hillsides and below vineyards, orchards and vegetable plantations. Rhododendrons were growing wild and at one point the hill was yellow with wild azaleas. The filth and squalor of Trebizond and the discomfort of its 'best' hotel were something of an anti-climax and it was with relief that we boarded the M.V. *Marmara* for the 4-days' run along the coast to Istanbul. The Black Sea coast is hardly to be recommended for a seaside holiday; in spite of its great natural beauty it seems to collect a permanent cloud cover,

although a few miles out to sea the sun shines; the little towns are uniformly squalid and the sea itself a dirty green colour.

We explored Istanbul and Salonika for Byzantine churches with their lovely mosaics and frescoes, some going back to the Vth century A.D. We grieved at the neglect and wanton destruction of so much of this beauty by the Turks subsequent to their conquest of south eastern Europe at the end of the XVth century.



PEN-Y-GHENT POT, 1964

by T. W. Salmon

FOR SOME TIME John Middleton and I had planned to bottom Britain's deepest pot-hole, Pen-y-Ghent. This we intended to do in one day with a minimum and, I might say maximum, party of five. Our plan was to take all the tackle in with us, get the whole party to the final sump and dismantle on the way out. The expedition was finally arranged for the week end of October 3rd and 4th and the party consisted of John Middleton with two friends, Foster and Nathan, David Smith and myself.

John and I arrived at Lowstern early on Saturday evening and retired to bed soon after ten, having arranged to meet Foster and Nathan at the pot on Sunday morning at 7.30. David arrived during the night, creating the usual disturbance. At 5 a.m. on Sunday there were rather bleary second thoughts about the feasibility of the enterprise and it was a good thing that flagging enthusiasm was boosted by the necessity of being at the pot by 7.30. However, by the time we had breakfasted, dressed, girded ourselves with Nife cells and left Lowstern in John's big seed van we were full of anticipation for the coming assault. The other two were waiting at the Hull Pot shooting hut and we were able to start for our pot straight away with our loads of lightweight tackle, electron ladders, nylon ropes and alloy pulley blocks.

The entrance to Pen-y-Ghent Pot is down a very tight 6 ft. hole of jammed boulders, followed immediately by a rough crawl, also very tight, but after about 12 ft. there is a 6ft. drop into the stream of Pilgrim's Way. At this point I found John sitting happily up to his knees in extremely cold water muttering something about putting on weight; he had put his light out so that I, following him, could curse and groan not knowing that he was there listening.

When the party had reassembled we started out on the Marathon, a 1,000 yard crawl. At first the passage was just high enough for us to crawl on hands and knees with shoulders scraping the walls; the floor was a stream about 12 inches deep and in places the roof dropped so that progress could only be made by submerging up to the nose in the water. Time

seemed to stand still in this section and we became semi-automatons, throwing the tackle forward, crawling to it, throwing it forward again; our knees got very sore with the constant wetting and the stony floor. Quite suddenly the roof came down and the passage widened to about 8 ft.; we were now in a flat out crawl but the walls and roof were well lubricated with water so we made good progress, this section is about 60 yards long and ends at the first pitch. This pitch has two streams running down it, the one we had been crawling in and another coming from a slightly higher level 5 ft. to the left. At the bottom of this 20 ft. pitch we entered 'Easy Passage' which doubles back under the crawl and goes on at the most awkward height of 4 to 5 ft. for 1,000 ft. with some rather sporting cascades and deep pools a couple of hundred feet from the end.

The very welcome end to this section is a 15 ft. pitch which can only be laddered in one place, right in the centre of the waterfall. A tight fissure leads off at the bottom, followed quickly by a short crawl leading to the top of the main pitch, a drop of 130 ft., divided into two by a large ledge at 60 ft. The top half is in a fissure about 2 ft. wide and once started is easy to climb; at the ledge the pitch splits into two, on one route the ladder hangs free and gets buffeted by a large waterfall, the other is reached by crawling under a shelf directly below the first part of the pitch, is quite dry and the ladder, which hangs close to the wall, gives a fine climb. The chamber at the bottom was a most unpleasant place full of spray, very cold and draughty. We quickly left this forbidding place and headed into the high rift passage, here the stream goes down into a narrow boulder choked fissure; this we traversed until we reached the next pitch of 15 ft. which we laddered, although it is quite an easy straight climb. The pitch was fluted and very cleanly washed, at the bottom was a ledge from which there was a further 15 ft. pitch, again an easy climb which did not really need laddering. A 10 ft. climb followed dropping us once again into a bedding plane crawl in water; but luckily it was not very far before we again reverted to the higher rift passage. We slithered and splashed down several cascades before reaching the 40 ft. pitch into Pool Chamber; the take-off to this pitch is rather awkward and great care must

be taken. Pool Chamber is very close to Boulder Chamber, which, as its name suggests, is strewn with fair sized boulders, these reach the roof at the side opposite to the entry; the stream vanishes into the floor and the way ahead is behind a large flat boulder.

Once past Boulder Chamber we soon found ourselves at the head of the next pitch which is very wet, the water feeding the waterfall gushes out from a narrow fissure and crashes into a deep pool 25 ft. below. We were all wet before we reached this pitch so when we arrived at the bottom and found ourselves up to our waists in water we did not even notice it. From here onwards the character of the passage changes completely from a rift passage to one of a roundish Master Cave type. After a few feet the stream from Hunt Pot enters on the right, considerably augmenting the already large Pen-y-Ghent stream. We waded along in water in places up to 4 ft. deep, neglecting some dry passages in our enthusiasm to get to the bottom. The next pitch is called Niagara Falls and is one of the most impressive I have ever seen. It is really in two halves; in the upper one we managed to avoid the water which comes roaring and foaming out of a four foot wide passage down several steps and then plunges 30 ft. to a ledge; the lower half, although only consisting of a ten foot drop, is the more impressive. We landed on the ledge, right in the corner of a fault, with the water spreading out on the wall to our right; as the fault was only three feet wide we could not avoid the water. We descended through it and then had to wade right along the base of the waterfall, in it up to our waists; it now felt ice cold and its force on our heads was stunning.

Once out from under this stupendous fall we made quick progress into the Lower Main Stream Passage which is about 7 ft. wide and 5 ft. high. We found this a most awkward passage because the floor, which we could not see owing to the depth of water, was deeply ribbed and we had to be very careful to avoid broken legs or at least twisted ankles. The walls and roof were very black, the water ran along with quite a roar, rushing round many twists and bends until suddenly it dropped into the final sump. Here, 527 feet below ground and a mile in, we had our first rest, the journey had taken

exactly four hours. We feasted on self-heating cans of soup and soggy sandwiches and with no effort at all managed to lose two Tupperware sandwich boxes in the sump.

Our rest was very short, perhaps 15 minutes and then we started on the long trek out. Generally speaking the pitches are quite short and we made fair speed until we arrived at the big pitch where our enthusiasm was cooled and our wet bodies frozen by the inevitable wait in that damp and dismal spot. Once up with our increasing loads of tackle we soon warmed to the chase again, creating small whirlwinds as we negotiated the twists and turns of Easy Way. At last we were up the final pitch where we had our second rest of the day and ate some mashed chocolate before diving into the long last crawl, Pilgrims' Way. After the efforts of the day this crawl really is the limit, one just feels that there will never be an end or that perhaps one has taken the wrong turning, but suddenly there is the sweet smell of fresh air and one is there. By the time we were all out and standing on the moor some eight and a half hours after going in, we were all feeling that satisfying exhaustion which comes after a sporting trip, for that is undoubtedly what Pen-y-Ghent Pot is. It tries the pot-holer in every aspect of his chosen sport; it is no pot for beginners, but with five or six good experienced men, such as was our party, nowhere else provides quite the same sense of achievement.

WITH A SCOUT TROOP TO THE HIGH ATLAS

by A. M. Marr

MARTON SENIOR SCOUT TROOP has a policy of holding one expedition of an adventurous nature abroad every three years. In 1960 the Troop spent 12 days in Corsica, combining climbing with the less energetic but equally exciting sport of skin diving. So in September 1962 they decided that their 1963 expedition should be held abroad and members were asked to submit their ideas of what would provide a holiday with challenge, with adventure and which on return would give a sense of achievement. Soon the ideas rolled in. Austria, Germany and Italy were discarded because many of the boys had already been to these countries or would have the opportunity of going there with their schools. The Swiss Alps were considered but had to be ruled out because only two leaders had had previous alpine experience and this was not enough to take a party of twelve up the really worth-while summits. It was decided that not only must the country visited be interesting in its own right but it must also provide facilities for carrying out interesting and exciting activities. Eventually came an idea that stuck; at first it was viewed with scepticism, then with optimism and finally with excited anticipation.

The Plan—to climb the highest mountains in the Atlas Range of Morocco.

As the distances involved were comparatively great and the area to be visited relatively unknown, it was decided that organisation and planning should follow the lines of a full scale expedition. Books on Morocco were obtained from the local library and soon it was possible to start planning in detail. The Expedition had been offered the use of a mini-bus which suitably converted internally and adapted mechanically, would solve the transport problem. The time available was 23 days, during which the expedition would drive 5,000 miles through France, Spain and Morocco and spend 8 days at a base camp more than 10,000 feet up, ideally positioned to attempt the surrounding peaks. The decision to visit Morocco was made not only for the climbing which the High Atlas has to offer but also to provide an opportunity of seeing something of a completely different civilisation which in southern

Morocco has altered little since Biblical times. The aims of the expedition were set out as follow:—

- (i) To climb Jebel Toubkal (13,660 ft.), the highest mountain in North Africa, and surrounding peaks.
- (ii) To meet and talk to Moroccans and to observe the way of life in a non-Christian country.

Soon after the decision had been taken in September 1962, a meeting was held at which the various duties necessary to the planning of the expedition were delegated to the more senior members of the troop, who were to be given any help they needed by the junior members. Hundred of letters were written to food and equipment suppliers asking for support. Articles were written and photographs taken for the press and for various magazines, three members appeared in a television interview and explained the objects of the expedition. Sea bookings were made, equipment lists compiled and medical supplies obtained. The vehicle was fitted with a roof rack, 5-gallon tanks for water, petrol and paraffin, a sand filter on the carburettor, a four-bladed fan, new tyres, two spare wheels and a large spare parts and tool kit. A large bunk replaced the bench seats in the rear and an extra seat was added to the front compartment over the engine.

Ex-army bush hats were supplied and were found to give very good protection from the hot sun; when not in use they easily folded into a pocket. Equipment included lightweight mountain tents, primus stoves, climbing ropes, slings, pitons and étriers. Guide books, maps, carnet and permits were obtained and official permission to visit Morocco was given by the Embassy in London. Immunisation against typhoid and tetanus provided many sore arms and at least two boys were taken home in ambulances after collapsing at school.

We left home on 26th July, 1963; soon after Wetherby we had a blow-out on one of the rear tyres and on inspection a four-inch rip was found. Fortunately we carried two spare wheels but surely this was a bad omen so near home. However, we got to Dover without further mishap and covered the road south through Bordeaux, San Sebastian and Madrid on schedule.

Eating out in Spain proved very interesting, no one in the party spoke Spanish and our phrase books were useless. After

scrutinising the menu for half an hour, during which time the waiters made many ridiculous suggestions, we ended up by taking pot luck and it must be put on record that we did achieve one of the most fantastic combinations that has ever graced a table, even in Spain. After a day of swimming, under-water fishing and water ski-ing at Marbella on the Costa del Sol, we sailed from Gibraltar to Tangier and the mysterious Continent of Africa.

The Customs proceedings were somewhat enlivened at Tangier when it was found that one of the boys had not had his passport stamped by the Moroccan police at Gibraltar, consequently he was an illegal immigrant. After half an hour of much shouting and gesticulation the trouble was sorted out and we were on our way. We drove the 200 miles to the capital, Rabat, and here met Tim Hulbert, who had been with Voluntary Service Overseas for a year in Morocco and who was to join us for two days. Having spent the night on the beach near Rabat, we set off early next morning for Casablanca. After bathing in the huge Atlantic rollers we left for Marrakesh and the deep South. The route, on excellent roads built by the French, lay across an arid plain supporting only a few palm trees and the occasional camel. Marrakesh lived entirely up to expectations. It is a savagely beautiful city set amid tall palm trees and surrounded by a high mud wall, at the foothills of the Atlas Mountains. Here we visited the Djnaa el Fnaa, a square in the centre of the city, dominated by the famous Koutoubia mosque. In this square many exotic activities take place, from acrobatics and Berber dancing to story tellers and snake charmers.

While mingling with the crowds, several of us had our pockets picked but as we had been forewarned nothing valuable was taken. The square leads into the native souk, a covered market consisting of a labyrinth of alleyways in which an immense variety of stalls were placed. We learned with Tim's guidance to bargain for goods and we usually managed to knock the price down to about a third of the original cost, this often not being achieved until we were pursued by the stall-keeper half way down the street. We bought many articles of leather and copper, hats, flutes and hashish pipes at very reasonable prices.

After a dinner during which we were plagued by vendors trying to sell us their wares, we decided to visit the souk again; the place certainly had a fascinating appeal. No sooner had we walked a hundred yards than we were taken in tow by a small Arab boy who proudly strutted in front of us, leading us ever deeper into the souk. We were appalled to see such poverty and so many people living in great squalor. On every corner stood beggars asking for alms, while over all hung the nauseating stench of human existence. We were quite relieved when our Arab guide brought us out into the open again.

The next day we set off on the last stage of our journey. On reaching Asni we left the main road and took to the dust trail leading to Imlil, which we reached an hour later, surrounded by huge clouds of dust. Soon we were taken to the Head Man of the village, who found us a place in the village centre where we could camp and who provided us with lamps. After we had finished our meal a reed mat was spread out, on which we all squatted. A small brazier was brought and the head man proceeded with the ritual of mint tea. Everyone had three glasses, no more and no less, as is the custom. We soon became used to the flavour and found it most refreshing.

Next morning four mules were loaded with our food, tents and climbing gear. With bush hats protecting our heads from the hot sun, we set out on the 5,000 ft. climb to base camp which we eventually reached after an arduous ascent from the valley. For days our only contact with the outside world were the frequent visits of Berber shepherds to our camp, in search of old tins in which to carry goats' milk down to the valley. Around us towered jagged rock peaks, seamed with snowfields in their lower reaches, while beside us raged a mountain stream of cold crystal clear water, fed by melting snow.

Our party divided into three groups of four and hiked and climbed amid North Africa's highest mountains. Each group successfully climbed to the summit of the highest peak, the 13,660 ft. Jebel Toubkal, whence they enjoyed a magnificent panorama southwards across the Sahara Desert. The rock ridges of the Atlas give excellent climbing. The Toubkal arête, the ridge of gendarmes, the traverse of Les Clochetons, the slender rock spires and the ascent of Tadaft (13,156 ft.),

the most difficult peak in the Atlas, were all accomplished. To ensure an early start on the Tadaft climb, a bivouac was made under an overhanging boulder high above the snow line; there we spent twelve uncomfortable hours eating, drinking and occasionally sleeping. During the descent of Tadaft, when we were half way down a vertical cliff face, a sudden hailstorm burst upon us, hurling projectiles the size of marbles. The hail was ankle deep in half an hour. Climbing in the Atlas proved a fascinating experience; the mountains are a combination of Skye and the Swiss Alps. We found the rock generally good, with a few notable exceptions. Even in midsummer the heat was quite acceptable at this altitude. There are tremendous views, northwards across range upon range of mountains and southwards across the barren waste of the Sahara Desert.

After 8 days in the mountains we again loaded our equipment on to the backs of mules and descended to the small Berber village of Imlil and to partial civilisation. Here we reloaded our mini-bus and then travelled along the 12 miles of dust trail to the main road; thence to Marrakesh, Fez, Tangier and the long road home. We decided to spend our last night in Africa sleeping on the beach five miles from Tangier. Knowing that some of the local gentlemen might be a little light-fingered, we left one person to sleep in the mini-bus and another alongside the trailer. As dawn was breaking a harassed looking European rushed up to the boy sleeping by the trailer and blurted out "The thieves are coming", departing as quickly as he had come, in the opposite direction. Unfortunately, as we soon discovered, the thieves had already been and gone, having been very considerate in not disturbing us. There was a two-foot slit in the thick canvas hood of the trailer, through which brown hands had extracted kit bags containing eight sets of personal gear. Not content with this, they had unlocked the front door of the mini-bus and taken some money out of the locked glove compartment; all this without our guards batting an eyelid. Had we known then some of the stories we have since been told, we would have stayed awake all night armed with harpoon guns and anything else to hand.

In the morning we visited the British Consul in Tangier, who obligingly lent us enough money for the journey home.

We went on to the local Gendarmerie; the police there spoke only Arabic so conversation proved awkward. We only discovered this after spending ten minutes describing in unfluent French what we had had stolen; the occasional nod of assent from the policeman must have been a nervous twitch. However, undaunted we reverted to sign language and had a hilarious time describing underclothes and other oddities. We hastily swallowed some breakfast on the way to the boat, which then proceeded to be two hours late in departing. During the crossing to Gibraltar one passenger had such compassion on our plight that he offered to take a collection from the other passengers; naturally we gave this careful thought but as we already had enough money to get us home we reluctantly turned aside the temptation of receiving alms.

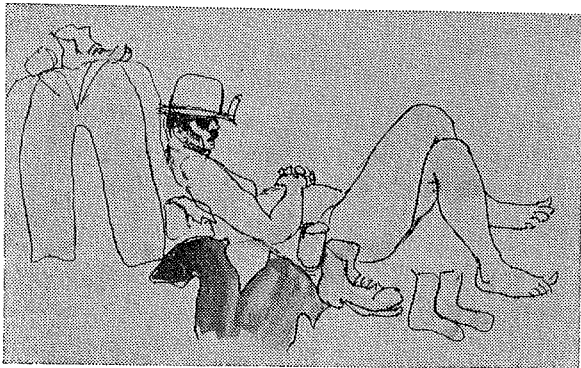
We reached Gibraltar after a two hour crossing and we spent the evening in this fascinating town. The older members of the party soon found that real draught beer was available in one of the many little pubs with which Gibraltar abounds, a welcome change from the insipid Continental beer we had been drinking. We dined in the narcotic atmosphere of "Smokey Joe's Eating House" where we enjoyed double chips double egg, double sausage and tomato, double bacon and beans and wrote suitable comments in his visitors' book after the feast. We slept on a beach below one of Gibraltar's highest cliffs and listened to a regular bombardment of stones and boulders pouring down the precipice.

The next day we drove the 560 miles to Madrid, getting there at midnight. We made straight for a three hundred year old restaurant built into the hollow walls of the old city and had huge plates of whole roast sucking pig—delicious. After Marrakesh, where we had experienced 100°F. in the shade, Madrid seemed to be the hottest place we had visited; even after midnight the temperature was over 80°F., but shortly before reaching the Spanish border the weather became cloudy and cool. We drove northwards through Bordeaux, Tours and Chartres; on our last day in France a wheel on our trailer collapsed, fifty miles south of Calais, so we had to abandon it, loading everything on to the roof of the mini-bus.

Many people ask what we learned from such an expedition. Firstly, the year's preparation in which each boy had some

responsibility whether it be writing letters, interviewing local firms, ordering equipment, obtaining medical supplies or helping to convert the vehicle to suit the rigours of the journey. All this in itself was very valuable experience and only through such thorough preparation was the expedition so successful. Secondly, in managing to live together often under cramped conditions, such as driving for 18 hours on end, without any serious arguments or quarreling. Thirdly, in taking part in what was to each member an ambitious undertaking and in carrying it out completely and successfully. Lastly, in meeting so many different people in Morocco, in seeing sights which have altered little since Biblical times and in the climbing of the rugged peaks of the Atlas mountains.

To us this occasion proved that a group of boys, whose average age is sixteen, can plan and take part in an expedition to a distant, uncivilised part of the world, achieve as much as does an officially financed unit, and obtain fascinating memories and an incentive for future excursions into the unknown.



CARLSBAD CAVES, NEW MEXICO

by A. J. Reynolds

JUST BEFORE Christmas 1964 the Technical Director of the firm for which I work asked me to go to the United States for about six weeks. I discussed the programme with the Chairman, who suggested that I should first make the plan upon what I wanted to see and then arrange the business appointments. Unfortunately the Rockies contain very little industry of the type I was interested in, so I had to be content with visits to the less attractive areas.

My first week end was spent in New York, and the second in New Orleans. I am sure that the readers of this Journal would not be interested in the night life of these two cities nor in the adventures that a solitary member of the Y.R.C. can get up to in moments of weakness. I shall therefore pass quickly on to the third week end and a visit to New Mexico and the wonderful desert country around Carlsbad. Fortunately there was a large petro-chemical plant at Odessa in Texas about 200 miles from Carlsbad and I was able to arrange an appointment for the following Monday morning.

On Friday night I caught a Dakota of Trans-Texas Airways and three stops later got off at Odessa. I was up early on Saturday and after a Texas breakfast, steak, chops and waffles, I drove through the oilfields into the desert and across to Carlsbad. Even with a speed limit of 65 m.p.h. it was possible to get to Carlsbad in under three and a half hours because the roads were straight and almost deserted.

After lunch in Carlsbad I drove to the Cavern, which is about 30 miles from the town. The caves lie in the National Park and the road goes along Walnut Canyon rising steeply at the end to climb on to the top of the hill. Although it was only mid-March the temperature was over 80°F. with cloudless skies and bright sunshine.

Around the entrance are the Museum, Restaurant, Souvenir Shop, Ranger houses and workshops. I bought a ticket for \$1.50 and joined the second party of the day waiting to go through the caves. By the time we started about 150 people of all ages had collected and, led by three Rangers, we were trooped down into the cave entrance. At the start we were

warned of the intense cold inside (55°F. constant), of the hardships of walking for three hours and of the fact that there is only one way out. One Ranger in front, one in the middle and one bringing up the rear, we pressed on down a zigzag path into the enormous cave entrance, 150 ft. by 100 ft.; this is filled with millions of bats during the summer evenings.

Down we went for about 400 ft. into the Main Chamber and almost immediately large formations began to appear. The first one, called "The Devil's Spring", did not look like Old Nick to me but there was a resemblance to certain Y.R.C. members. This was just the start of thousands of formations in the main areas around the cave walk and the "Devil" was closely followed by "The Whale's Mouth", lit beautifully from the inside. Past this to the "Baby Hippo", again Y.R.C. members came to mind, and on to the "Veiled Statue". This is a forty foot column looking very much like a sculptured statue with a cloth draped over the head. Along the path for some way and we came to the "Green Lake"; this is a small pool, only eight feet deep but so green that it looks artificial.

Now the formations start to come thick and fast. A frozen waterfall spouting out of a small aven some forty feet up in the air, lily pads where pools have dried out and a small stalagmite called "The Bashful Elephant". All this leads down to the lowest part of the system, "The King's Highway", 829 ft. below the surface. This path is festooned with stalactites, stalagmites and coral like growths; after 20 yards it opens out into the "King's Chamber" where there are literally thousands upon thousands of formations with colours from white through yellow to red. The most remarkable sight, only shown to a few, is an eight foot long straw hidden amongst the many others hanging from the ceiling. Between the "King's Chamber" and the "Queen's Chamber" is an enormous twin stalagmite called "The Frustrated Lovers" because the two columns are separated by a fraction of an inch. Past the Lovers is the "Queen's Walkway" where the bearded king sits on his throne looking into the "Queen's Chamber"; a smaller chamber but full of interest because of the vast growth of helictites on the ceiling and walls.

A further 1,000 feet on and we had seen the Papoose Room, full of small formations, drapes galore, and a section of broken



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B. E. Nicholson

stalactites, leading into "Titan's Castle" and then, round a corner, lo and behold, into the Lunch Room. This is a large cave with no formations at all, only counters, food stalls, candy shops and seating for one thousand people. This is the half way stage in the tour and the best is yet to come.

After a few small areas of formations we came to an enormous stalactite 50 feet high called "Rock of Ages". This is the gate-post to the "Big Room", a quite fantastic chamber some 2,000 ft. long and about 1,000 ft. across the T section of the cave. The path takes the outside wall of this cave and returns to the waiting room for the trip to the surface. The Big Room is all formations, millions of them; so many that it is impossible to take them all in, they say that even the guides see different things every time they go round. Next come pagoda shaped formations, the largest active formation in the cave called "Crystal Spring", Dome Castles, Mirror Lake, a 200 ft. pit, a green frozen waterfall all coloured with algae from the surface. The "Totem Pole" sticks out in my memory, 4 feet high, 12 inches in diameter from top to bottom and quite a lot out of the vertical. This is close to the "Cave Man" looking very much like Rodin's "The Thinker" to me. Just around the next corner is "The Breast of Venus"; Venus must have been a big girl, but of course this is very near Texas where everything is big.

A large coral-like stalagmite made everyone stop for some time but the Rangers kept us moving to get round the caves inside three hours. The "Temple of the Sun" is another enormous formation with a decided yellow colouration, it stands some 40 feet high and possibly 6 feet in diameter at its widest point. "Fairyland" follows, a section with thousands of small, very pretty formations, then on a few yards to the last and most impressive part of the cave, the "Giant Dome" and the "Twin Domes". The first is 62 feet high and 16 feet in diameter, it is a full column stretching from floor to ceiling and gives the impression of a many tiered waterfall made from icing sugar. Although generally dry, it is occasionally found to be damp as water seeps in from the surface. Standing right behind this column are the two domes, only slightly smaller than the column; the three make an inspiring sight as they stand on the top of a mound covered in white crystals.

This is the end underground, but looking back down the Big Room it was possible to see, stretching into the distance, a procession of these enormous stalagmites fully fitting their description as the "Hall of Giants". To get to the surface 700 feet above us was the easiest part of the whole trip; twin lifts took 150 people up within ten minutes. Why not a project for Gaping Gill on these lines? I thought at that moment of long ladders, winches and buckets, waterfalls, wetness, cold, late-at-nightness and realised potholing was never like this.



REMINISCENCES

Part III: *The Dauphiné*, 1910

by E. E. Roberts†

AS EARLY as 10th July Davidson and I arrived in Grenoble with two complete novices, the brilliant rock climber Robertson Lamb and an undergraduate, Crawford, who was one day to share in two Everest Expeditions. The weather had been shocking and replies to questions about it were of the nature, "We never had weather like this before". We were amazingly successful, three weeks to the day between first and last of ten peaks, but were severely criticised at the Alpine Club for taking such a party.

The flower display in the Dauphiné is incredibly glorious. There are many Alpine regions where it is magnificent, but they all pale beside the Dauphiné. The snowfall had been prodigious and came low but the weather was quite good enough. Our H.Q. was La Grave, Hotel Juge, pension 7 francs; think of it, under 6 shillings a day!

The Pic du Combeynot must normally be easy rock, but we had four hours of mostly soft snow and much opportunity of timing the rate on decent stuff as thirty-five steps per minute. It is often ascended from Lautaret Col, but not often crossed as we did. Not easy but excellent training. Our next was the Pic d'Arsine. The snow was awful and on anything bigger we would have failed. From the foot of a great snow slope, one hour from the Châlet de l'Alpe, we were four hours on a second fine hot day. Near the top it was very steep and avalanchy, decidedly thrilling. From a fairly solid point the leader went out on the level, 80 ft. to the summit rocks, thrusting his arms deep into the very soft snow. Coming down took a lot of thought, the snow was softer and the solution was to lower Lamb on all our rope from the lowest rock with instructions to kick hard right and left. This was so successful that I went down in a great trench to where the slope was safe. The finish was delightful. Lamb knew nothing about glissading but feared nothing and assumed the thing was absolutely safe. He just flung himself on the snow so promptly that I could not make out what had become of him until I saw there were three men below waiting. Davidson reported that

Lamb had travelled head down at times.

The off days with the flowers were simply glorious and the peaks more glorious still. Two days later we were lucky to get over the Pic de Neige Cordier to Ailefroide, meeting our first climbers and seeing the first old steps. Two more and we were at the Pelvoase Hut and helped by a very cold night we were able to do the three little summits. A perfect descent half way and then terrible conditions but all down hill, and we were back in eight hours, the first ascent of the season. We had neglected to inspect the food ordered and rations were very short. However weather went stormy and we were glad enough to force our way over a pass to La Béarde, starving.

I have no complaints as to sufficient food in Dauphiné, but the enormous amount of meat the French ate was beyond us and sweets were totally inadequate. I seldom eat nuts but I regard the prospect of so doing as not disagreeable, for every dinner I finished by hogging nuts. In a plain little hut like the Châlet de l'Alpe the agreement bound the gardien to supply two meats and not knowing this we were once only reduced to cutting four little bits off a magnificent joint of mutton.

No one had done either the Meije or the Râteau that season, but we felt sure the Râteau at least must be possible, so two days later we went up in 4 hours to the Meije Hut and after an hour's trip above decided the Meije would go. Leaving Lamb at the hut to bring up some wood, Davidson, Crawford and I did the Râteau between 4 a.m. and 9.30 a.m., a pleasant little summit ridge, with a steep snow slope, soft and just right for lying glissades, but terrible across to the hut. Crawford actually went to La Béarde and got back by 6.30 with a porter, food and wood..

July 25th was a red letter day in one's life. Crawford was pushed off with the porter over the Col Clot des Cavales leaving the message, "You will leave your skins on the Meije". By lantern at first of course over ground explored, the Promontoire was reached over good rocks in 2½ hours, only incident a nasty knock from a stone on my elbow. The route was not easy to follow, Davidson led grandly and out on to the Great Wall and successfully turned right at the proper time and up on to the Glacier Carré. It had been a splendid climb and the Pic de Glacier Carré was a grand sight. I cut up the Glacier at

a furious rate in fine form, 25 minutes, and brought us to book time.

Davidson led up the final peak, 10.15, and as he saw the magnificent row of 4 gendarmes to the Pic Central exclaimed, "Why, it's miles and miles". The descent to the Zgismondy Gap was very slow, ice and snow on the rocks, but luckily cutting off very clean. Conscious we must secure our retreat Davidson came down without abseiling, Gap 12.30.

Up the famous climb he went, avoiding the use of the rope which had at least been there since last summer. "You won't much like this", when I got to him but the rest was straightforward. Outstanding as Lamb was, he had no pride or false shame; he simply grabbed the fixed rope and came up amid violent protests. It was cold and the snow holding good we were able to tread round the 3rd and 4th gendarmes, reaching the Pic Central just 12 hours after leaving the hut. We saw nothing, but the way home clear enough; between us and the glacier was a good descent to a col and then the famous ice slope which had got more than one English party into trouble and a night out. Davidson had refused to let me relieve him latterly, but at the col I set to spend the rest of the day chopping. It would not be ice but very hard nevé and for the first hour I knew that only a turn of luck would get us off in good time. It came—I felt a softer few inches and by and by there was enough to hold sufficient toe for Lamb and me to kick like lunatics and go down stable-ladder fashion, backwards.

We were on the steep narrow glacier and soon after five stood together for a minute to realise we had got away with it, and then shot away glissading to the Rocher de l'Aigle in thin cloud. Here a hut was being built and a deep track saved us all anxiety over the best way and the crevasses. La Grave 7.20 p.m., the first ascent of 1910. Much joy. Two days' loaf was our reward. On the second we watched the only other two parties to do the Meije that year follow our footsteps. One got in but the other did not. My diary does not say if they were benighted by the Rocher de l'Aigle, but it was serious.

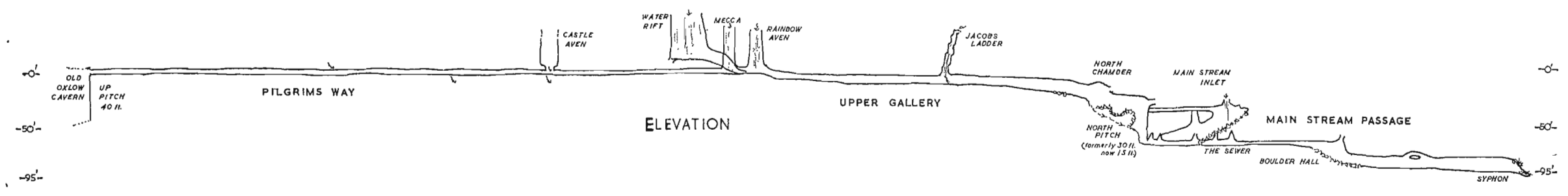
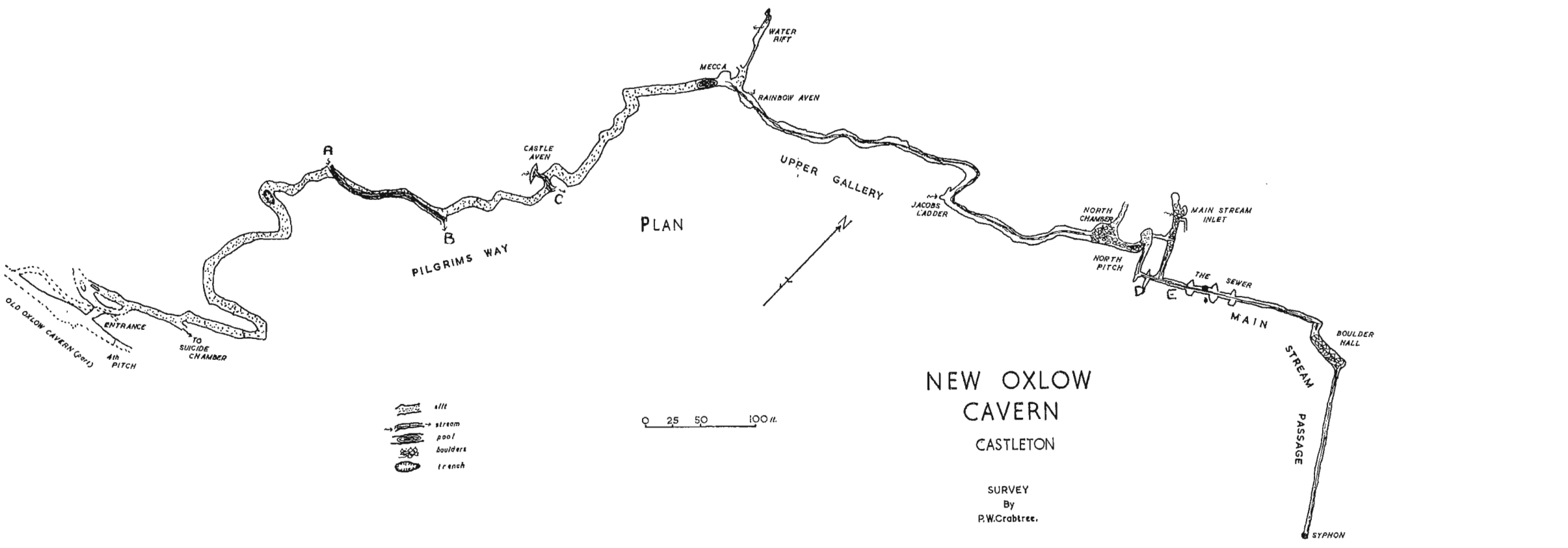
We had started at 4 a.m. for the rocks on the Aiguille d'Arve, and tramped through meadows of marvellous flowers and on for 7 hours to the Col Lombard. It was a most inter-

esting climb with a really bad bit, the Mauvais Pas. Davidson had been trying to make good the inadequacy of sweets and was unhappy all day. This meant that, backed by Lamb, I considered it entirely on my own and got up. May we be forgiven for the lies we told about the security of our position!

The night was spent at a real primitive Alpine chalet, making cheese, and we ascended a huge snow slope to the col between the North and Central Aiguilles, then up to the North. Slowly returning down the gully from the col to the snow we all had a perfect view of a gigantic slab quietly lean over from the base of the cliff on our left flat on to our tracks and sweep them away for 1,000 feet. Below the three great crags the slopes are shale and I expect our easy snow traverse to the Col Lombard under the Aiguilles is normally not at all nice.

We should have done well to stop and do the Central Aiguille as our weather luck was out. We crossed the Brèche de la Meije from La Grave and went on to the Ecrins Hut, but in 36 hours of thunderstorms we parted. Crawford and I returned by his pass and bagged the little Pic des Cavales.

Neither of us had finished, for I trained to Visp and walked up to Sas Fee to join my people. With Greenwood (Y.R.C.) and Bishop the bag was seven peaks, my brother Walter on two of them. He was climbing with the Dent party and they actually found an unclimbed summit, next but one north of the Ulrichshorn. Also they put him in the Alpine Club.



P.W.C.
24.11.62

RECENT EXTENSIONS TO OXLOW CAVERNS

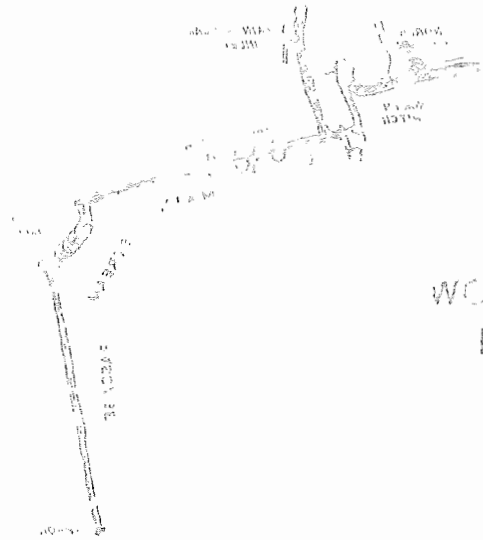
by J. R. Middleton

THERE WERE MANY new caving discoveries during 1964, but none perhaps as surprising or as interesting as that made in Oxlow Cavern, Derbyshire, by the British Speleological Association in March of that year. Surprising because the entrance to the new section, 40 feet up the North Wall and 60 feet from the bottom of the 4th pitch, although noted on various occasions, had never been previously entered. Interesting because the new passage, of which there are more than 2,000 ft., exhibits characteristics that appeal to every type of underground explorer.

The entrance shaft to Oxlow Caverns is situated at National Grid Reference 126824, $1\frac{1}{2}$ miles due west of Castleton; it is reached by taking the Sparrowpit road from Winnats Pass, continuing about 300 yards, passing Oxlow Farm and following a wall southwards to a depression on a hillside. Old Oxlow Cavern was explored in 1922 by A. Humphreys, H. Humphreys and B. Holden and is described fully in *Y.R.C.J.*, Vol. V, No. 16, page 135, by A. Humphreys. A number of changes have taken place since that time, these and a correction to the original survey are noted at the end of the present account.

The British Speleological Association have now erected a rigid metal ladder up the smooth and unclimbable North Wall leading to the entrance to the new section. This is roughly circular, some 7 feet in diameter but within 20 feet the floor rises to within 18 inches of the roof. At this point by squeezing over a coffin shaped boulder one enters "Pilgrims' Way"; to the left there is a mud choke, to the right, 950 ft. of hands and knees crawling. Within 60 ft. an even lower flat out crawl to the right leads to "Suicide Chamber", an exceedingly loose place which is traversed by following the right hand wall to a 15 ft. pitch. Care is needed for the descent of this to a boulder strewn floor where, in certain places, stones fall a considerable distance.

Back in Pilgrims' Way the crawl goes on, hand and knee places must be chosen with care, the shingle although small is sharp; it leads past a few small calcite formations, over a shallow but



muddy pool and on to where a small stream, entering from an impenetrable crack (A), follows the passage for 115 feet and vanishes down an equally impenetrable crack (B). There follow more formations, this time of a reddish colour, then a further stream enters, crosses the passage and sinks (C). This sink is more interesting as the water is thought to join up with that in Oxlow Passage of Giant's Hole; consequently some enthusiastic work has been done on enlargement.⁽¹⁾ Following this small stream back across the passage and through a short crawl, one reaches Castle Aven down which it showers, this is worth a visit if only for the fact that one can stand up. Forward once more for another 200 ft. of monotonous crawling and one arrives at Mecca Aven, small but fairly high. Opposite the point of entry the crawl continues for a few feet till the passage divides, the left hand branch leading to Water Rift, very high with a pool in the floor, the right hand branch going on to Rainbow Aven, attractively decorated in coloured flowstone.

From now on the main passage, Upper Gallery, takes on more impressive proportions and shows a definite downward trend; Pilgrims' Way is all on the same level. Several crawls, some extensive, lead off to the right. Further on a very sporting climb can be made up the cascades of Jacob's Ladder down which showers a stream. The passage becomes even larger and goes down a 5 foot drop into North Chamber, a boulder strewn and rather loose place from which a short passage leads to a 20 ft. pitch. At the top a tight fissure can be followed with difficulty to a small aven. At the bottom of the pitch is a medium sized chamber from which a short high passage continues at right angles as a crawl in water (D). The roof soon rises and a fissure passage enters from the left, this is "Main Stream Inlet" and can be followed for about 100 ft. to an aven.

Continuing down Main Stream Passage there used to be a 'duck' called "The Portcullis", now no more than a stomach wetter (E). Then follows "The Sewer", a hands and knees crawl in water, ending suddenly in a large chamber "Boulder Hall", with a rock strewn floor. From here the passage changes

direction to the south-east and to the final straight, a high but not too wide stretch leading to a small, dismal and undiveable siphon. The depth is the same as Old Oxlow but still considerably above the water table. The stream is thought to join up with that in Speedwell Caverns and finally to resurge at Russet Well, Castleton.

Since Humphreys' account of the 1922 exploration many changes have taken place, due partly to the loose character of the cavern and partly to the visits of large numbers of cavers. The mineral rights are owned by the British Speleological Association from whom permission should be obtained before a descent is made.

To prevent sheep from falling down the entrance shaft a concrete surround has been made and a metal lid put on; the belay for the first pitch is a metal bar across the top. Humphreys mentions a shaft in the chamber at the bottom of the first pitch (page 136, line 19); this is now choked up. The belay for the second pitch is a wooden beam directly above the pitch and a rawlbolt further back. All the stemples have now been removed and the hole at the bottom (page 137, line 22) has also collapsed and filled up. Stemples on the fourth pitch have rotted away or been removed.

Humphreys mentions "a sump of no great depth" (page 138, line 5) at the end of the narrow passage leading to the two last pitches, this hole is now much enlarged and an easy, comparatively dry, descent can be made. The water comes from Maskill Mine and a party of experienced cavers can do the round trip. From the bottom of the fifth pitch a short passage leads to the short 12 ft. pitch, usually very wet indeed, at the bottom of which is the final sump, 450 ft. below the surface, not 550 ft. as it appears on the 1922 survey. The main mistake then made seems to have been over-emphasis of the slope between the third pitch and the fourth.

When reading Humphreys' article in these days one can feel nothing but admiration for the old-time cavers with their un-gainly tarred rope and even more awkward wooden runged ladders. Had they been able to combine our modern tackle with their tremendous pioneering spirit, I feel that there would have been very little left for us to find today.

In point of fact, on 22nd May, 1966, after these notes had

⁽¹⁾ See final paragraph of this article.

been written, a party of Eldon Pothole Club members successfully forced a way through from the New Oxlow Extension into Giant's Hole. This new discovery makes the Oxlow/Giant's Hole system the deepest in Britain, in the region of 640 feet. If Nettle Pot could also be joined to Oxlow this would add yet another 100 feet in depth!

Hon. Editor's Note. A brief account of the discovery of New Oxlow Caverns was given under "Cave Exploration" in *Y.R.C. Journal*, Vol. IX, No. 32, page 331. This note erroneously gave the impression that the party mentioned in it was the first to enter the new passages; these were in fact discovered, as stated above, in March 1964, by members of the British Speleological Association. The Hon. Editor apologises for this mistake.



ON THE HILLS

1964

Raymond Harben and Bill Woodward spent two weeks in Chamonix and a week in Cortina. The weather was very mixed; they were able to get up the Aiguille du Chardonnet by the Forbes Arête but a two day traverse of the Domes des Miage, Aiguille de Bionnassey and Mont Blanc had to be abandoned after climbing the first peak. In the Dolomites the weather turned them back when they had nearly reached the summits of Tofana di Rosa and Monte Cristallo and they had to be content with climbing Cinque Torri.

Denny Moorhouse was in Austria where he did most of the harder climbs in the Kaisergebirge, which he found a most friendly place after the Laliderer Wall on the Karwendel. He was also in the Dolomites where he climbed the Brandler Hasse Direct on the North Face of Cima Grande (Grade VI+) and the Cassin Route on the North Face of the Cima Ovest di Lavaredo (Grade VI), the latter the only British ascent of the year.

Richard Gowing, David Smith, Penfold, Linford, Renton, Roger Allen, Frank Wilkinson and a guest found the Lötschental a perfect valley with perfect weather. Though snowfalls at night kept them off the higher peaks, they climbed the Mittag-horn, Ebnefluh, Rothorn, Wilerhorn and three others. Gowing and Allen went on to Zermatt where they did the Dent Blanche by the Wandfluh, the Pointe de Zinal traverse and the Alphubel by the Rotgrat.

Harry Stembridge was ski-ing at Sestrière with Dick Cook in March. In the Dolomites in September, with Alf Gregory and Fred Hoyle, he climbed Catinaccio, Sella Towers 1 and 2 and Cima Grande di Lavaredo by the standard route, they also did a lot of pass walking.

Marsden, Tregoning and Turner, based on Mayrhofen, found the Zillertal extremely attractive; they climbed the Grosse Mösel, Schwarzenstein and Au Kogel. Hilton was touring in the Dolomites, based on St. Ulrich. Watts walked in the Bregaglia in August and in December attended a "wedel course" at Zermatt, he did not learn to wedel but enjoyed the course.

Ian Crowther and Ian Stansfield spent a week camping and climbing in Torricon. Peter Bell, mainly with Terence Goodfellow, carried out a comprehensive pioneering exploration of routes up the near-vertical and sometimes overhanging Purbeck limestone cliffs extending for half a mile westwards from the Durlston Head Lighthouse, Swanage. They found many opportunities for first ascents and it seems that possibilities are by no means exhausted.

John Middleton was potholing with a party in the Tennengebirge; they got about 550 ft. down the Edelweisserrütenschacht on the Streitmandl when they were held up by a very deep shaft which the party was not strong enough to descend. Having gone 180 ft. down it they estimated its depth to be at least another 200 to 300 feet.

George Spenceley, with Pat and Peter Shorter of the Fell and Rock, visited Turkey, travelling overland by car. They climbed the Gross Venediger in Austria as a training exercise to break the monotony of a 3,000 mile drive, the main object of which was to visit the Ala Dag Taurus of Central Anatolia. From the village of Camardi, where they received unforgettable hospitality from the family of the muleteer whom they hired, donkeys were used to carry to a bivouac at 6,500 ft., which was sited at the foot of Demirkazik, 13,000 ft., believed to be the highest mountain of the group. From here a deep gorge leads into the heart of the range. The mountains are of limestone and an attempted first ascent of one peak had to be abandoned because of the dangerous looseness of the rock. The summit of Demirkazik was reached in 13 hours from the bivouac by the Hodgkin-Peck couloir, the 4th ascent by this route; the descent was made by the easier East Ridge. The party was caught out by nightfall and had to bivouac at about 10,000 ft. Total time for traverse 30 hours; main hazard, loose rock; chief discomfort, merciless sun and lack of water.

1965

Frank and Harry Stembridge, with John Godley, skied at Lenzerheide in January, Watts was at Gstaad and Grindelwald and in March Raymond Harben was at Kitzbühel. Snow conditions were good right through the winter.

Moorhouse, driven out of Chamonix by the weather in

August, fled to the Dolomites. He climbed the Carlesso-Sandri on the Torre Trieste South Wall and made the fifth ascent of the Hasse direct finish to this route (Grade VI+). During the two years 1964 and 1965 Moorhouse has completed 12 climbs in the Dolomites, of Grade V+ or over. At Christmastide he was again in the Dolomites, at the Rosengarten.

Marsden, Tregoning and Turner spent 8 days at Mürren in July, weather conditions prevented all ascents except the Butglassen. They tried to find the sun in Stresa and there the highest they got was the top end of Lake Maggiore in a steamer. The holiday finished at Zermatt with equally poor weather.

Crowther, with his family in Norway in June, did some climbing from the Juvasshyta Tourist Station and on the Jostedalbreen Glacier with a party of Norwegians, but found June a little too early, there was much snow. Richard Gowing, posted to Japan to erect a nuclear power station, climbed Fujiyama and spent a week ridge walking in the Northern Japanese Alps.

Harry Stembridge spent Easter walking in the Merrick area, walked in the Pindus mountains of northern Greece with Alf Gregory at midsummer and in September was fishing with Bob Chadwick and Jack Dossor in the Shetlands.

Paul Roberts, in August, was camping and climbing in the Encantador region of the Pyrenees, in the area of Salardu and Esport. For days he did not see a soul and had the mountains to himself. Much of the rock was rotten, swimming in the little lakes delightful and the sun shone, which it did not do in the Alps. He advises the use of mules to carry food up the long valleys but to settle the cost before starting off.

Hilton toured the northern Highlands in August in good weather. After exploring the extreme north and west he crossed to Skye, visited Glen Brittle, where he first started rock climbing in 1920, and inspected the new S.M.C. hut. He walked up the track from Loch Hourne Head towards Barrisdale to get the view of Ladhar Bheinn which he had missed at the Knoydart Meet.

Rusher, with eight members of his parish Youth Group, crossed to Cork at the end of July and hired two horse-drawn caravans at Matt Murphy's Caravanserai. They drove to Loo

Bridge, on to Kenmare, over Moll's Gap to Killarney. They soon learnt all about the horses, but had a little bother with the brakes on the steep twisting road down from Moll's Gap. Their only mishap was on the last day when one of the horses rushed a narrow gate; fencing wire served to mend the broken harness and held things together till they reached base.

Watts, in a hired Volkswagen, explored Crete and the Peloponnese, looking for remote Byzantine churches and visiting the ruins of Minoan and Mycaenean palaces. He also made the railway journey through the Postojna Cavern, near Trieste, with about 500 other folk.

John Middleton and Judson, with a strong party, went back to the Tennenberge determined to bottom the deep shaft found the previous year in the Edelweisserhüttenschacht. Their disappointment can be imagined when they found that at some time during the foregoing twelve months an enormous cavern collapse had filled and sealed off the big pitch with a tottering mass of boulders and debris. They were only able to get 60 ft. further down than did the 1964 party. They did bottom the Fieberhöhle, on the Fieberhorn, to a depth of 722 ft.; at this point it also was blocked by a boulder fall.

David Smith, Roger Allen, Renton and S. Allen were at Zermatt where they climbed Mont Durand, traversed the Zinal Rothorn from the Mountet Hut (1st ascent of season), climbed the Täschorh (1st ascent of season) and the Dom. Bad snow conditions on the Zermatt side of the Zinal Rothorn caused them to miss the A.C. Dinner.

Farrant, in July, finished the last of the 2,000 ft. peaks in the Lake District; his list stands at 190 but is contradicted by others as regards the actual total. In November, with one companion, he had a very cold camping week end near Tummel Bridge, but with an excellent day on Schiehallion.

George Spenceley was again travelling by car in Turkey. He did no serious climbing but toured the very beautiful mountains and coastal district of south-west Turkey.

1966

Frank and Harry Stembridge, John Godley and Douglas Mahoney again enjoyed perfect snow conditions at Lenzerheide; Harben and Woodward, at Mayrhofen, had some of the

finest deep powder snow they had ever experienced and Watts, at Gstaad, could ski from the Wasserngrat into his own garden until mid-April.

Tim Smith, in March, ascended Table Mountain by cable route and found it both airy and unsafe. Watts, in Persia in May, explored the ruins of Persepolis and Pasagardae; during a 6-hour delay at the Turkish frontier at Bâzargân he had ample opportunity to appreciate the majesty of Mount Ararat.

Moorhouse spent Easter at Berchtesgaden. From a hut on the summit plateau of the Untersberg they tried for two days to find the snow-covered entrance to a pothole, said to be an easy way to the foot of the South Wall, which they wanted to climb; in the end they had to abseil. Storm-bound half way up the wall they abseiled again and, to avoid wet snow avalanches, took the pothole route back to the summit, thinking that a quick dig through the snow stopper at the top would soon get them there. They dug at it for 3 hours, bivouacked in the cave and dug again for several hours next morning before breaking surface at the end of a twenty foot tunnel.

Richard Gowing, in Japan, took a boat down the Inland Sea, visiting the boiling mud springs at Beppu and Shuhodo Cave on Miyajima Shrine Island, huge formations but much of their beauty lost by their now being dry and dead.

Farrant camped in Glenshiel at Easter, he climbed three of the Five Sisters of Kintail and The Saddle via the Forcan Ridge, a truly magnificent snow and ice route of at least 2,000 feet. This was followed by a week of unbelievably good weather in Torridon, with successful ascents of Beinn Alligin, Beinn Eighe, Slioch, Stuc a' Choire Dhuibh Bhig (on Liathach), Bheinn Liath Mhòr, Sgùrr Ruadh and Maol Chean-dearg.

CHIPPIINGS

THE POLAR ROUTE. For anyone visiting Japan on business or pleasure the trip by the Polar Route is recommended, especially in summer. Flying over Alaska one has splendid views of the Yukon River, the Alaska Range and in particular the McKinley Group, which one flies past quite close. After leaving Anchorage for Tokyo one crosses a fine range of glaciers, ice-caps and peaks.

R.G.

ROCKS FOR CLIMBING. Dr. Peter Stubbs, *New Scientist* No. 448, 17th June, 1965, discusses how the holds available to the climber are very much a matter of geology. A classic instance is the Matterhorn; the repeated failures of Whymper, Tyndall and others to climb the mountain from the Italian side were partly due to the outward shelving strata. The holds were found to be more accommodating on the Swiss side. The earlier assaults on Everest from the north were brought up short by the steepening of the rocks which resembled the overlapping tiles on a roof; above the South Col the opposite edges of the layers jutted upwards and afforded a much better purchase. Dr. Stubbs goes on to describe the qualities desirable in the best rocks for climbing, millstone grit for its coefficient of friction, the limestone of the Dolomites for its verticality, its thin cracks ideal for gripping pitons and so lending itself readily to the laborious techniques of mechanised climbing, the clean frost-riven crystalline granite rocks of the Mont Blanc aiguilles and the almost too rough gabbro of the Cuillins, giving some of the best rock climbing in the world. But it is to the rhyolites, fine grained cousins of the granites, that we owe the main body of our native climbs, in North Wales, the Lake District, Glencoe and Ben Nevis; this type of rock has the merit of tremendous diversity, cracks, chimneys, 'side' holds, 'jug' holds and exquisite small incut holds which often turn up unexpectedly just as they are wanted, acute angled corners, horizontal edges for hand traverses, spikes for belays, finely situated isolated little ledges and, for beauty, trees and flora in abundance.

H.G.W.

HOW OLD ARE THE GLACIERS? This question is asked by André Reynaud in *Les Alpes* for the second quarter of 1964. Early 19th century geologists, by analysis of glacial debris, concluded that as much as 1,000 million years ago glaciers covered what is now South Africa and North America. Recent methods of dating have established three well defined glacial periods:—

- 1) The Pre Cambrian, 600 million years ago, of which traces have been found in North Greenland, Australia, India and China.
- 2) The Permo Carboniferous, 325 million years ago, extending over Central Africa and Australia. This coincided with a warm, humid climate in the northern hemisphere, in which flourished the exuberant flora of the European coal measures.
- 3) The Quaternary Glaciations, beginning 1 million years ago and alternating with warm periods. The last glaciation, of which Homo Sapiens was a witness, finished in about 15,000 B.C.

The alpine glaciers are as old as the Alps, some tens of millions of years, but the actual ice is very much younger; being a plastic substance it flows downhill, eventually melting at the tongue of the glacier. The famous moraine block on the Lower Aar Glacier, which in 1827 sheltered Hugi of Solothurn, moved 5.343 Km. in the following 135 years; in the interior of the glacier, 400 metres deep in places, the rate is lower and the ice at the bottom may well be 500 or even 1,000 years old.

An attempt to measure the rate of flow was initiated by Paul-Louis Mercanton who, in 1926, placed 8 shell cases in the nevé on the Jungfrauoch, two on the Berne and six on the Valais side; in several centuries these should appear at the tongues of the Guggi and Aletsch glaciers. In 1928 he put 19 more, sealed and containing documents, into the higher crevasses of the Rhone glacier and these are due to appear between 190 and 250 years later.

Isotope analysis can be used to determine the age of ice. Snow crystals formed in winter contain fewer atoms of Oxygen 18 than those formed in summer, thus the ice core of a boring gives full information on age as do the rings of a tree trunk. A borehole to 411 metres in Northern Greenland showed that the ice from the bottom was about 1,000 years



DOVEDALE FEBRUARY MEET 1965

R. Harben

old. The hydrogen isotope Tritium, which is continually formed in the atmosphere and has a half-life of $12\frac{1}{4}$ years, can be used to determine age up to 100 years. A Greenland sample taken from a depth of 40 metres was found to be 70 years old; extrapolating from this the ice on the rocky bottom, some 3,400 metres below the surface of the ice-cap, must have been formed more than 10,000 years ago, while that which has been pressed outwards and has made the 400 Km. journey to the coast may be 30,000 to 40,000 years old.

A Carbon 14 method has also been developed, this consists of measuring the Carbon 14 content of the carbon dioxide present in the air trapped in the ice at the time of its formation. The half-life of Carbon 14 is 5,568 years, so the method holds up to 50,000 years, but a lot of ice has to be melted to give a single small sample of air.

H.G.W.

A NEW CLIMB ON GREENHOW END—DEEPDALE

SARGASSO. 435 ft. v. difficult. A vegetatious route, but follows a natural line and has a nice finish.

1st ascent: J. Richards, G. Batty (alternate leads), 1st August, 1965.

START. 20 yards down the scree to the left of Deepdale Gully. Two short walls and a rib further left give a rock route through the lower jungle to a conspicuous V-shaped nick in the skyline.

1. 35 ft. Up the little wall on good holds, across a grass ledge to belays on top of jammed blocks.
2. 40 ft. Climb above the belay and scramble up to the left to a stance by a dead Rowan at the side of a steep rib.
3. 30 ft. Step left on to the rib and climb pleasantly up to more grass, which is followed by a Rowan belay at the foot of a chimney slanting up to the left.
4. 80 ft. Climb the chimney by bridging to an awkward exit on the left, continue up grass to belay.
5. 50 ft. Scramble back to right to good belay at foot of rib
6. 35 ft. Climb rib on good uncut holds to belay beneath grassy slabs.

7. 25 ft. Start the slabs up on the left, make an awkward step right and climb direct to grass ledge with small cave. Belay on right.
8. 40 ft. Climb above the belay up a rib overlooking Deepdale Gully to a stance and small belays, where a runner can be arranged to protect a downward traverse leftwards along a grass ledge to a good stance and belay on the slabby wall.
9. 60 ft. Using the belay as a hand hold make a strenuous pull to a narrow grass ledge which is followed up to the right to a square cut corner. Climb this to an overhung ledge on the right which is traversed awkwardly to a short V-chimney. Climb the chimney with the aid of an excellent spike on the right, further good holds assist the step on to a rib overlooking the gully. In a further 20 ft. there is a poor stance and assorted belays.
10. 40 ft. climb above the belays, the angle eases and scrambling leads to the top.

J.R.

GLORIES. In his book, *The Lakeland Peaks*, W. A. Poucher speaking of Glories says "These appear as a coloured ring round the shadow cast by the climber on the mist . . . especially if he is on a ridge enclosing a combe filled with mist . . . Each member of a climbing party can only see his own glory." A glory is thus understood to be a type of halo that surrounds what would otherwise be called a Brocken Spectre. When doing a recent winter traverse of the Snowdon Horseshoe however, my companion and I had an experience which does not seem to conform to the usual circumstances of this phenomenon. We had just started along Crib Goch when we noticed our shadows cast across the valley on the slopes of Glyder Fawr. The shadows were life size and were both encircled by one set of concentric rings in all the colours of the spectrum. Both of us could see the phenomenon and the atmosphere was very clear, with a total absence of mist. Mr. Poucher himself could offer no full explanation when approached on the matter and described the occurrence as "an incident which must be unique".

D.J.F.

THE RAPE OF WIDDYBANK FELL. Under the title "Where will all the flowers go?", *New Scientist*, 7th July, 1966, page 6, clarifies certain features of the proposal by the Tees Valley and Cleveland Water Board for a dam and reservoir in Upper Teesdale which cannot be anything but deeply disturbing to all of us who love the high and isolated regions of the Pennines.

The scheme is likely to destroy "a natural experiment which has been in progress for not less than ten thousand years". The Upper Teesdale assemblage of rare species preserves fragments of the vegetation which was widespread in Britain and North Western Europe 10,000 to 12,000 years ago. Their survival, as was pointed out three years ago for the flora of the Alps by Piccard and Stichelburger, depends on the maintenance of an adequate breeding stock to ensure that the essential characters continue to be reproduced in their progeny. The destruction of even a fraction of these populations would diminish out of proportion the value of the whole to geneticists. Detailed studies of the Upper Teesdale microclimate, which may well be entirely disrupted by a reservoir, have only just become possible with the recent development of transistorised recording instruments compact enough to be used in the field.

The reason for the reservoir is I.C.I.'s need, by 1970, for more water to supply its three Tees-side factories. Alternative supplies could be obtained by building a dam elsewhere but this would cost a million or two more and take at least a year or two longer. The issue boils down to "are the flowers on Widdybank Fell worth a million pounds?"

The I.C.I. Magazine, in a recent issue, dismisses another alternative, the desalination of sea water, as too expensive, though it might be possible in a plant of high capacity associated with nuclear power to reduce the cost to a reasonable figure. It goes on to say that the agriculture at Cow Green is limited to sheep grazing, that minerals are no longer mined there and that *there is no outstanding natural beauty apart from the valley itself which has the appeal of solitude*. It contends that few of the flora are rare in the absolute sense but it concedes that as a collection of unusual species brought together in one area they are of great interest. They are mostly minute flowers, nearly all likely to be overlooked except by the knowledgeable, though they "in some cases are believed to

represent survivals from the Ice Age". The reservoir, the total area of which would be 700 acres, abuts on one side of Widdybank Fell and would inundate about 20 acres of special botanical interest which contain one of the most interesting communities of flowers in the dale. I.C.I. has offered to finance a research programme on these 20 acres and to finance the provision of a warden during construction to ensure that no damage is done to Widdybank Fell above top water level. I.C.I. has also carried out microclimate studies on the Fell and experts have been consulted on the question of water table levels.

All this reads rather like the story of the young lady who had an illegitimate child and pleaded that it was only a little one.

It is not only the flooding of an irreplaceable area that is so saddening in this scheme, it is the far greater invisible and inexpressible tragedy that it will bring in its train. The noise, the mess, the traffic and the human invasion during the construction period, the artificial look of the finished work, the control of one of the few remaining untamed rivers in the British Isles, the seemingly inevitable planting of ugly conifers and above all the demonstration to the world of British indifference to conservation of what is rare and beautiful when Britain's own financial benefit is concerned. As *New Scientist* points out, a number of newly independent countries in Asia and Africa have courageously rejected immediate financial gain in favour of the conservation measures urged on them by the (largely British) World Wildlife Fund, the International Union for the Conservation of Nature and other bodies. The danger of the scheme in Upper Teesdale is that it could prove a drastic setback to conservation all over the world.

H.G.W.

LA SPELEOLOGIE EN FRANCE EN 1964 ET 1965

by Robert de Joly

WITH THE EXCEPTION of those detailed below, there were no explorations or discoveries of great importance in the caves of France during the years 1964 and 1965. On the other hand a number of accidents, some of them fatal, were to be deplored; all were due to faulty organisation and could have been avoided, in certain cases the reason was that the explorers themselves were not properly fit.

Dordogne. Monsieur Berny, who lives in the small market town of Domme, two years ago found a hole in the courtyard of his house. The cave which it revealed proved interesting, it had been inhabited by palaeolithic man. Recently Monsieur Berny has found a new painting representing an ibex and bones of that epoch have also been brought to light.

Hérault. At the bottom of the gorge of the river Hérault, at St. Guilhem le Désert, which used to be one of the halting places for pilgrims on their way to Santiago di Compostella, a large cave was discovered at the end of the last war by speleologists from Montpellier. Since it was splendidly adorned this group decided to arrange it for tourists; this has now been done for a section; the whole cave is not less than 5 Km. long. While the work was in progress the contractor went into a passage where a charge had just been exploded, he had not taken proper precautions, was asphyxiated and could not be revived. This cave is of special interest, containing as it does many Aragonite crystals and exceptionally fine stalactites, some more than 4 metres long.

Basses Pyrenées. The Paris Speleo Club, under the direction of Max Couderc, has carried on with its exploration of the immense cave La Pierre St. Martin. It found new galleries and descended to a depth of 1,100 metres.

Haute Garonne. There are big caves near Arbas which have been the object of exploration for several years. In the 'Pont de Gerbaut' four pot-holers were blocked by a flood which washed away some of their tackle. They had to wait till the water fell and were able to get out as soon as the flood torrent ceased to pour down the pot forming the entrance.

Isère. The Gouffre Berger, deepest pot-hole in the world

to date, was visited by the Pegasus Caving Club of Nottingham; they followed on after a Belgian group. They found impenetrable siphons. It must be borne in mind that the plateau of Sornin is very extensive and all the water of this catchment area is drained by this enormous cavity into the Isère; the weather was not kind during their stay underground.

Alpes Maritimes. Michel Siffre, who acquired much notoriety by his absolutely useless sojourns in caves, is preparing a new adventure for his friends in a pot-hole inland; Mademoiselle J. Laurès and Monsieur Senni are to be his guinea-pigs on this occasion.

Lot. Here it is a dozen women who are to be isolated in the cave of Lacave. This 'adventure', as useless as those mentioned above, will at least serve the purpose of ensuring good publicity for the cave, which is open to tourists.

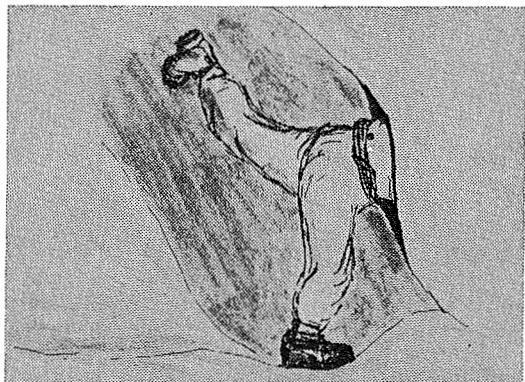
Ardèche. The most important discovery of the year was made by pot-holing parties from Trébuchon, in the cave of Orgnac. Thirty years ago R. de Joly, who discovered the cave, noticed two blowholes at the end of a chamber but the Municipality, who own the property, did not see fit to grant the means whereby they might be enlarged. This is what Trébuchon have now done, with sensational results. After a very large chamber they found another 'cat-hole' which gave access to an even bigger chamber, with wonderful formations. This chamber is not less than 200 metres long, 100 metres wide and 60 metres high; a side gallery goes down 90 metres. Everywhere there was a wealth of formations, some of them quite remarkable. After a third squeeze, which had to be enlarged, they found a great space with gigantic stalagmites and with crystals forming in saturated solution. There are beds of fossils and even a fish embedded in the wall. Not less than 1,400 metres were added to the 700 metres already known. Orgnac is becoming the biggest, most remarkable and best decorated cave in Europe.

Saint Marcel d'Ardèche, already big when first explored by Martel, and the known part extended in 1945 under the direction of R. de Joly, has been further explored by Belgian parties who have discovered a new system.

Gard. The Nîmes Caving Group made an interesting discovery near the River Cèze; the pothole 'La Salamandre' is a

big chamber, well adorned at a depth of 45 metres. It is indeed remarkable for such a cave to be discovered in 1965. Its position a long way from human habitation and hidden in thick woodland is the reason for its late discovery.

(Translated from the French by the Hon. Editor).



CAVE ABSTRACTS

by The Editor

UNITED KINGDOM

Survival Bag for Potholers. The *Yorkshire Post* describes a bag designed by Mr. Donald Robinson, Leader of the Leeds section of the Cave Rescue Organisation. The bag is made of expanded neoprene, is insulated and waterproof and is closed by a zip fastener running the whole of its length; the mouth of the bag fits snugly round the patient's neck and a built-in thermometer enables a constant check to be made of his temperature.

Exposure. The British Mountaineering Council and the Association of Scottish Climbing Clubs issued in November 1964 a joint circular describing the dangers of exposure, the signs and symptoms of incipient exposure and the methods of treatment. These notes are issued as B.M.C. Circular No. 380 and copies can be obtained from: The Assistant Hon. Secretary B.M.C., c/o 74 South Audley Street, London, W.1. Price: up to 20 copies, postage only. 20 copies and over, one penny per copy, postage paid.

Into the Dark. In *New Scientist*, No. 446, 3rd June, 1965, C. Lewis Railton gives a short survey of what there is about caves and potholes that attracts so many people from all walks of life and of all ages. The sounds made by water, the silence when water is absent, the formations, the history of the cave and of the water that made it, flowing possibly from hills and valleys now non-existent. The study of fossils and of existing animal life, the bacterial origin of 'moonmilk'. The tracing of underground rivers and the specialised adventure of cave diving. Finally the thrill of breaking through into new caves and passages and perhaps through two or three hundred centuries.

New Caves await the Scientists. *New Scientist*, No. 432, 25th February, 1965, reports a previously unknown system of caves leading away from the shaft of a disused lead mine near Wrexham. The caves are being kept closed to the public under the aegis of the Wrexham Caving Group until scientists have studied them in their untouched state. The article goes on to point out that limestone caves offer exactly the right conditions

for the preservation of bone. In Britain the vast majority of fossils found are of animals such as hyena and brown bears of the last 100,000 years. Some specimens have been found dating back hundreds of millions of years, but for a hitherto unexplained reason no caves have been found in the United Kingdom having any samples of the intervening tertiary period which began about 70 million years ago. (cf. *Y.R.C.J.*, Vol. IX, No. 31, page 203 and No. 32, page 333.)

New Ground in Dan-yr-Ogof. *The Observer*, 17th April, 1966, reports a big discovery by members of the South Wales Caving Club in Dan-yr-Ogof. The new system, reached by crossing four underground lakes and after a 500 ft. crawl, is reckoned to be at least 1½ miles long. It contains some fine formations and a 100 ft. cascade.

Swildon's Hole, The Mendips. During 1965 members of the Independent Cave Diving Group successfully passed an obstacle which had held up exploration since 1962, this being Sump 7. It was passed by using explosives and this made possible the passage through four further sumps to a 50 ft. deep Sump 12. The total length of the new passage is some 1,200 feet, with a vertical drop of 30 ft.

SWITZERLAND

Le Gouffre du Petit Pré de Saint-Livres. *Les Alpes*, Quarterly Revue for the 4th quarter of 1965 contains an account by Jean-Paul Guignard of the discovery and development of this, the second deepest pothole in Switzerland. The entrance, on the south-facing side of Mont Tendre in the Jura Vaudois, was discovered by three young cavers from Le Sentier in 1957. It lies at the base of a low limestone cliff and at that time was an insignificant hole surrounded by scrub. Echoes indicated the existence of an immense cavity. Explosives were necessary to enable an entrance to be made and even so there is a tight squeeze down a fissure before the cave begins to assume impressive proportions. Exploration by the Lausanne and Neuchatel sections of the Société Suisse de Spéléologie during the period 1957—1959 quickly carried the depth to 270 metres. Cylindrical pots of 40, 80 and 90 metres follow each other in quick succession. At 250 metres depth there follows a tortuous descending passage with narrow places and

stalagmite barriers; in 1962 a depth of 300 metres was reached and in 1963 a party was stopped at 360 metres by a 35 metre pot. Meanwhile an alternative entrance was made and in July 1964 what appeared to be an impenetrable fissure was reached at 426 metres. Petit Pré is thus second, in Switzerland, in depth only to Gouffre de Chevrier, 504 metres, above Leysin. Petit Pré, with its exceptional depth, its geographical and geological position, poses a number of questions in respect of its existence, its formation, its age and its relationship with the geology of the district, which are discussed briefly in Monsieur Guignard's article.

Société Suisse de Spéléologie. *Les Alpes* Monthly Bulletin, January and February 1965.

The Société Suisse de Spéléologie celebrated in 1964 the 25th anniversary of its foundation. It owes its origin to the fact that several cavers from Geneva found themselves, at the outbreak of war in 1939, in the same mountain brigade; they persuaded their commanding officer to allow them to form a cave section. To give the enterprise an official basis the S.S.S. was formed. It now has 15 sections and more than 300 members and produces, four times a year, a bilingual journal, *Stalactite*. The issue for September 1964 gives the numbers of caves already listed in the cantons of French Switzerland and in the Ticino:—

Vaud	...	...	467	Valais	...	...	29
Neuchatel	...	...	176	Fribourg	...	...	13
Bernese Jura	...	...	168	Ticino	...	...	104

FRANCE

Grotte de Saint Marcel, Ardèche. Bulletin d'Information of the Equipe Spéleo de Bruxelles, Nos. 20 and 24, give accounts of recent explorations by members of the E.S.B. The cave was first visited by them in 1960 and 1961, when, after prolonged drilling, they discovered a system of three potholes going down to a depth of 71 metres, which they subsequently named "Réseau Pierre Solvay". (see *Y.R.C.J.*, Vol. IX, No. 31, page 215). Visits in 1962 and 1963 were mainly for reconnaissance and for clearing obstructions but in 1964 the group discovered an entirely new system 800 metres long and containing ten side passages. The 1965 expedition made no new dis-

coveries, most of the time being devoted to further reconnaissance and to the training of young, newly joined members. One of the highlights of this visit was made by the leader of a revictualling party, who tossed pancakes at midnight more than 3 Km. inside the cave.

Résurgence de l'Ecluse. Two dives were made into this resurgence, which is 200 metres from the entrance to the Grotte de Saint Marcel. The water entering the Ardèche at this point is, in summer, several degrees below the temperature of the river and it is thought that a passage might be forced through the resurgence into the Saint Marcel system. The diver reached a depth of 27 metres and was only stopped by the rope jamming when he was 75 metres from the point of entry. He reported that he was in a very big under-water tunnel and that the erosion of the rocks bore evidence of the passage of a large quantity of water.

BELGIUM

The Pionjär Drill. This portable drill, the 'Pionjär BRH 60', made in Sweden, weighs only 35 Kg. (77 lbs.), is 3 ft. 6 ins. high and can easily be carried on a man's back and taken through narrow places in caves. It is driven by a single cylinder, opposed piston, air-cooled engine, integral with the drill and the fuel is a 12 to 1 mixture of petrol and oil. A jet of air keeps the drill hole clear of dust during drilling. This drill was used by the Equipe Spéléo de Bruxelles for opening up new passages in the Grotte de Saint Michel d'Ardèche. (Copies of E.S.B. Bulletins Nos. 20 and 24 are in the Y.R.C. Library).

Bats in Quarries. The Hon. Editor acknowledges with thanks a monograph by Guy de Block, of Equipe Spéléo de Bruxelles, dealing with this subject, entitled "Notes sur les Chiroptères des Carrières Souterraines de Lives sur Meuse". This is in the Y.R.C. Library.

Equipe Spéléo de Bruxelles: Change of Address. Monsieur Guy de Block, from whom information about Belgian caves can be obtained, (see *Y.R.C.J.*, Vol. IX, No. 32, page 309) has changed his address from 54 rue de la Limite, Brussels, 3, to 221 rue de Haerne, Brussels, 4.

REVIEWS

STUDIES IN SPELEOLOGY: Vol. I, Part 1, 1963; Parts 2 and 3, 1964/65.

This journal is published annually by the Association of the Pengelly Cave Research Centre, which was founded in 1962 and which supports the Research Centre at Higher Kiln Quarry, Buckfastleigh in Devonshire. The Centre is named after William Pengelly, pioneer nineteenth century excavator of Devon caves.

Part 1, 1963

William Pengelly, 1812—1894. A short biography.

Bats and the Amateur Naturalist, by J. H. D. Hooper.

Difficulty of observation in natural conditions; use of transistors to detect ultrasonic squeals; technique of ringing.

Conservation of Caves in Great Britain, by G. P. Black.

Work of the Nature Conservancy and scheduling of numerous caves as sites of special scientific interest.

Gamble's Cave, Kenya, by L. S. B. Leaky.

Borneo Caves, by Tom Harrison.

Archaeological discoveries going back 100,000 years.

Post Pleistocene Changes in the Mammalian Fauna of Borneo, by Lord Medway.

Archaeological evidence from Niah Caves.

The New Zealand Glow Worm, by A. M. Richards.

The Study and Interpretation of Archaeological Deposits in caves, by Andrée Rosenfeld.

Work at Moulis points to a bacterial origin for the sticky red clay common to all limestone caves.

The Lava Caves of Mount Suswa, Kenya, by J. A. McFarlane.

Cave Research Centres in the U.S.A., by R. L. Curl.

Parts 2 and 3, 1964/65

Cave Studies in China Today, by K. Kowalski.

A description of some of the Karst regions of China, including Choukoutien, where the remains of *Sinanthropus Pekinensis* were found and Leng Chai Shan Cave, the site of the discovery of *Gigantopithecus Blacki*.

Problems of Cave Conservation in the U.S.A., by Victor A. Schmidt.

A paper well worth reading by all who are interested in preservation against the action of vandals, commercial despoilers and unenlightened tourists.

The Theory behind Stalagmite Shapes, by H. W. Franke.

Stalagmite formation is not a function of the rate of evaporation of water from a solution, but of the quantity of carbon dioxide present in the percolating water and of its rate of diffusion between water and air. The shape of a stalagmite can give an indication of the climate

prevailing at various stages of its formation and of the nature of the surface soil through which the water percolated during those stages.

The Growth of Fungus in Caves in Great Britain, by Ann Mason-Williams.

Observing the Natural Behaviour of Bats in Flight, by Andrew Watson.

The Holgate Ultrasonic Receiver makes it possible to listen to the ultrasounds made by bats and to identify the different species.

Planning England's First Cave Studies Centre, by Antony J. Sutcliffe.

An account of the origin, setting up, development and possible ultimate objectives of the Pengelly Research Centre.

The Presentation of a Cave Survey—Part I, General Introduction— by M. A. Rennie.

An outline of the basic principles of cave surveying, with special emphasis on the use of symbols to illustrate detail and on the superimposition of surface topography on cave plans. This is the first of a series, other articles are to appear in future issues.

On the Accidental Discovery of Human Remains in Caves and Rock Shelters by Don Brothwell.

What to do in the event of a discovery of human remains, and particularly what *not* to do.

Some Present Day Problems of Cave Research in Ceylon, by P. E. P. Deraniyagala.

Caves and the County Naturalists Trust, by N. D. Riley.

H.G.W.

THE BRITISH SKI YEARBOOK

No. 45, 1964

The National Ski Federation of Great Britain, by Brigadier E. A. L. Gueterbock.

The Chairman describes the development of the Federation since it was set up on 11th March, 1964; its main objectives, namely to deal with national activities such as racing and its problems of how to raise its own funds.

Of Tundra, Vidda, Lapps and Ski, by Roland Huntford.

A ski tour with a 'pulka' on the Finnmarksvidda.

Ski-ing in the Lebanon, by Peter Lunn.

Racing in Roumania and Yugoslavia, by Wendy Farrington.

F.I.S. racing behind the Iron Curtain, at Braşov in Roumania and at Maribor in Yugoslavia.

Bivio 1964, by A. Mackenzie.

The conversion to touring of a confirmed 'piste' skier.

A Ski-ing Holiday with Young Children, by Shirley de Larrinaga.

The sting of this article is in the tail, "For anyone contemplating taking children of this age (6 and 4) ski-ing, a word of warning. You must enjoy being with your children and be prepared to make some sacrifices. Of course you could always take that Aunt along with you to baby-sit, the trouble is Auntie might want to ski as well!"

Mont Blanc by Helicopter, by Arnold Lunn.

Sir Arnold, at 75, fulfills, by mechanical means, a life-long ambition; attempts to do so by 'fair means' in the past were frustrated by circumstances beyond his control.

Equipment Section. "Clip boots are in."

Correspondence. "What do I get if I join?" from Neil Hogg. (See also *Y.R.C.J.*, No. 32, page 316.)

No. 46, 1965

Levavi Oculus, by Arnold Lunn.

The pleasure of using one's own judgment, about snow conditions, about planning a run correctly to take advantage of what good snow there is, about timing so as to avoid danger and about the deep appreciation of beauty to which one has climbed, not been conveyed.

The Scottish Scene, 1964/65, by Lewis Drysdale.

Kärki the Dog, by Roland Huntford.

Again a ski tour in the Arctic, this time from Abisko on Lake Torneträsk into Northern Norway. The adventure lay in the companionship of the Alsatian dog.

Little Haute Route, by B. Wilberforce-Smith.

A four day trip from Cabane des Diablerets to Kandersteg, including one day to climb Les Diablerets from the Cabane. (There is now a lift.—*Ed.*)

Climbing and Langlauf in Norway, by Alan Dredge.

Langlaufing from Geilo and climbing on ski some of the numerous peaks round Leirvasbu.

Equipment Section. "On choice of metal ski", by Peter Lunn.

"Till I tried last winter my new, and completely standard, (Attenhofer) Giant Slalom ski, I had not believed there might exist a ski which could give one all the pleasure of a racing performance on hard snow and yet be easy to use when joyfully cutting one's own fresh track across the virgin powder."

H.G.W.

POTHOLING: Beneath the Northern Pennines, by David Heap. (Routledge and Kegan Paul, 206 pp., 7 surveys, 22 photographs, 35/-)

This attractively written and well illustrated book provides the reader with a good general idea of what 'potholing' is about and why it appeals to so many people. Without going into too much detail the author describes expeditions into several of the better known systems, ranging in degrees of difficulty from Calf Holes, Easegill, through Lost Johns' to the depths of Pen-y-Ghent Pot. He is careful to point out the dangers as well as the delights of cave exploration. The glossary of potholing terms at the end of the book is enlivened by some amusing drawings. The last chapter, entitled 'The Future of Caving', mentions the recent exploratory activities of several well-known clubs,

but the Y.R.C. is not mentioned in this connection, all references to our Club are in the distant past, a point that we should regard as a challenge.

A map showing the positions of the systems dealt with would have been a help to readers unfamiliar with the district.

H.G.W.

MOUNTAINEERING: by Alan Blackshaw. From hill walking to Alpine climbing. (Penguin Books 1965, 18/6).

The best and fullest handbook on mountaineering to appear for years, perhaps the best ever. It covers equipment and techniques in great detail, it is very well illustrated, and extremely good value for its price.

A.B.C.

KINDRED CLUB JOURNALS

Midland Association of Mountaineers. Journal 1965.

The First Ascent of Kulu Pumori, 21,500 ft., by Robert Pettigrew, (Kulu District, Kashmir).

Iceland, 1964, by Dorothy Lee.

A Bionassay-Mont Blanc Traverse, by Stuart Hutchinson.

The North Face of Piz Palu, by Roger Wallis.

Eulogy on a Climb, by John Harwood (Sabre Cut, Cromlech).

Rocky Mountaineering, by Bob Kamper (Colorado).

Life, Lyskamm and the Leiterspitz, by Roger Wallis.

University of Leeds Climbing Club. Journal, Summer 1965.

Impressions of a Reluctant Extremist, by Dave Nicol (Vector, Tremadoc).

Impressions of a North Wall Novice, by P. B. Scott (Piz Badile).

C.B.—A Early Ascent, by G. Barker (1920's). *C.B.—A Recent Ascent*, by W. G. Barker.

Phillip Flam, Quota I.G.M., by R. S. Lewis.

Barre des Ecrins, by Malcolm Copley.

Scottish Mountaineering Club Journal, May 1965.

The First Winter Traverse of the Cuillin Ridge, by Tom Patey.

Minus Three in Summer, by J. R. Marshall (Nevis).

The Scottish Andean Expedition (Cordillera Veronica).

A Climb Called "King Kong", by B. W. Robertson (Carn Dearg Buttress).

First Ascent of the Curtain, by D. Bathgate (Carn Dearg Buttress).



SENIOR
MEMBERS

S. A. Goulden

The Alpine Journal. November 1965.

The Matterhorn Centenary, by B. R. Goodfellow.

Special Occasion—July 14th, 1965, by H. K. Hockenhull.

The Matterhorn: A Diary of Events after the Disaster of 1865, by D. F. O. Danger and T. S. Blakeney.

More Climbs in Swat, by R. J. Isherwood.

The Ascent of Annapurna South Peak (Ganesh), by Shoichiro Uyeo.

Peru 1964, by Malcolm Slessor (Cordillera Veronica).

Climbs on Limestone in the Alps, by Colin Taylor (Kaisergebirge and Vercors, Grenoble).

West Nepal Expedition, 1964, by John Cole (Kanjiroba Himal).

Spirit of the Storm, by Warwick Deacock (Heard Island).

Alpes Maritimes, by Richard Ayrton.

The North Face of the Schermberg in Winter, by Karl Lugmayer.

The Grand Traverse of Mount Kenya, 1964, by T. B. H. Phillips.

Rucksack Club Journal, 1965.

Per Ardua, by R. G. Harris (East Ridge of the Crocodile; South Ridge of Aiguille Noire de Peuterey; Bonatti Route, East Face of Grand Capucin).

Moorland Pleasures, by Phillip Brockbank (Kinder and Bleaklow).

Turkey and Persia, by Basil Goodfellow (Kaçkar Dag, Pontic Alps; Elburz mountains).

Ruled by the Rock, by A. J. J. Moulam (Cromford; Black Rocks; Cratcliffe Tor; Wales).

Alpine Encore, by B. Bowker.

Yorkshire Mountaineering Club Journal, 1965.

A Day in the Paine, by Ian Clough (North Tower).

Sun-day, by Jack Baines (Skye Ridge).

Extracts from the Alps, by R. B. Evans.

To the Ben, Again, or Feed Him Kippers if he Falls, by McAnon.

Six Weeks in the Ruwenzori Mountains, by Roy Smith.

The Librarian also gratefully acknowledges receipt of the journals of the following clubs and regrets that limitation of space will not allow him to include details of them:—

Alpine Journal, 1964, 1965 No. 1; Appalachia 1964, 1965; Appalachia Bulletins 1964, 1965; Bristol University Speleological Society Proceedings 1963-64, 1964-65; Cambridge Mountaineering, 1964, 1965; Deutschen Alpenvereins, Jugend am Berg 1964, 1965; Equipe Spéléo de Bruxelles, Bulletin d'Information, 1964; Fédération Spéléologie de Belgique, Bulletin d'Information No. 2, 1965; Fell and Rock Climbing Club Journal, 1964, Friends of the Lake District, Report and News Letter, 1964, 1965; Himalayan Journal, 1962-63, 1964; Lancashire Caving and Climbing Club Journal, 1964, 1965; Manchester University

Mountaineering Club Journal, 1963-64; Mountain Club of South Africa Journal, 1963, 1964; National Speleological Society: Bulletins 1964, 1965, News 1964, 1965; Northern Caving 1964; Oxford Mountaineering 1964; Rucksack Club Journal 1964; Pinnacle Club Journal, 1963-64; Scottish Mountaineering Club Journal, May 1964; Société Suisse de Spéléologie, Stalactite 1964; South Wales Caving Club, Newsletter, 1964, 1965; Speleo Club Bologne, Sottaterra 1965; Spéléo Club de la Seine, L'Aven, 1964, 1965; Spelunca, 1964, 1965; Swiss Alpine Club: Bulletins 1964, 1965, Reviews 1964, 1965; Wayfarers' Journal 1964; White Rose Pothole Club Journal 1964.

A.B.C.

IN MEMORIAM

Since the publication of the last *Journal* the following members have died: Davis Burrow, W. Wells-Hood, W. H. Watson.

DAVIS BURROW

By the death of Davis Burrow in November 1964 one more link was severed in the chain connecting potholers of today with the Golden Age of cave exploration in the early years of the century. Davis was only fifteen when, in 1905, he was introduced to potholing by Mr. F. Haworth, a master at Leeds Modern School and Mr. E. Simpson. In that year, with his cousin Charles Burrow, he was a member of the first party to force a way into Mere Gill, when the top of the second underground pitch was reached, a remarkable performance, bearing in mind the extreme youth of some of the party and the heavy 12 in. ladders then in use. Their appetite whetted, the little group decided to form a club and so the Yorkshire Speleological Association was born, probably the first purely caving club started in Britain, which flourished until its members were scattered during the first World War.

The attack on Mere Gill was renewed in 1906, but continuous bad weather prevented further progress and the efforts of the party, including Davis, were switched to the newly discovered Hardraw Kin, which was descended for the first time. The years 1907 and 1908 were both very active; Davis took part in one of the earliest explorations of the now notorious Dow Cave, Kettlewell, penetrating 500 yards. Rowten Pot, Rift Pot and Jingling Pot, Kingsdale, were bottomed for the second time. Much exploration took place in Gaping Gill where new discoveries included the 90 ft. pot under the West Slope and a circular route beginning at the west end of the Main Chamber, going by way of the West and Pool Chambers to the east end of the Main Chamber. Another major success was the discovery of the through route from Long Kin East into Rift Pot. But without doubt the greatest feat of the two cousins was the finding and forcing of the Flood Exit route into Gaping Gill in 1909, perhaps the first successful potholing "dig" in Great Britain. That its discovery was not the result of a lucky chance but of scientific observation and deduction throws an interesting sidelight on the mature and competent approach of the young cousins.

In the 1914 to 1918 war Davis served in the R.F.C. (now R.A.F.) and later was transferred to the Argyll and Sutherland Highlanders. He narrowly escaped death when hit on one occasion by four machine gun bullets and he finished the war with a duodenal ulcer as well as a bullet-scarred body.

Davis and his cousin joined the Y.R.C. in 1919, where Davis' wonderful spirit enabled him to take up again his pre-war interest in potholing and climbing. Although his physical strength was diminished his fertile mind, his competence as a craftsman in wood and as an



DAVIS BURROW

engineer and above all his ability to make friends and impart his enthusiasm to others, made him a tower of strength in the Club. In those days immediately following the ladder era, the usual entry into Gaping Gill was by bosun's chair lowered from the end of the Jib Tunnel by a painfully laborious wooden hand winch. The two cousins very soon engineered a new line of descent by the main shaft using a steel winch powered by a petrol engine. Davis gave considerable thought to the design of ladder rungs with the object of combining lightness with strength and he constructed the first rope ladders used by an Everest expedition. He had a great capacity for fun and good humour and, with Arthur Horne, originated the series of 'stunts' which helped to make the Hill Inn Meet so immensely popular.

Davis served on the Y.R.C. Committee from 1922 to 1924 and from 1925 to 1928. In 1929 he became Honorary Secretary and continued as such until 1946, the last few years jointly with F. S. Booth. He was a Vice-President from 1946 to 1948, became a Life Member in 1950 and was elected President from 1950 to 1952. The Club honoured him by making him an Honorary Member in 1959.

In 1917 he married Miss Winifred Yates and, because of her great practical interest in Girl Guides he also helped. This led him towards the Scout Movement in which for twenty-one years up to 1956 he played an important part in Central Yorkshire. For many years his main interest was with Rover Scouts, young men over eighteen and he introduced many of them to the caves, crags and hills he loved so well. In 1949 he was appointed County Commissioner, responsible to Chief Scout for the welfare, progress and training of some ten thousand boys and over a thousand adult leaders. On his retirement he was awarded the "Silver Wolf", Scouting's highest award, "for services of the most exceptional character".

Davis was head of the family business and served for many years on the National Committee of the Brush Manufacturers' Association and as its President during 1948/50, two of the difficult years immediately after the second World War.

Ill health prevented him attending many Club Meets in his last few years but in his earlier days he was a strong rock climber and few were his equal in underground techniques. Clearly he was a leader of men, but the quality that many of the older members will never forget was his great friendliness and his ability to make the newly joined member feel at ease and one of the Club on his first Meet.

In Davis Burrow the Club has lost one of its stalwarts and to many of those who knew him well, a very good friend.

H.L.S.
F.S.B.

CLUB MEETS

1963/64. Sixteen official Club Meets were held and the average attendance, not including the After-Dinner Meet, reached the record figure of 26. There was also an unofficial Alpine Meet in the Lötschtal and at Zermatt, at which eight Members were present.

The Club's Fiftieth Annual Dinner was held at the Hotel Majestic at Harrogate, on 16th November, 1963. The President, R. E. Chadwick, was in the Chair and the Guest of Honour was John A. Jackson. Seven Kindred Clubs were represented, the Alpine Club by T. Howard Somervell. Of the seven living past Presidents six attended the Dinner and it was very good to see Clifford Chubb, President during the war years 1938 to 1946, back in the North after an absence of some 10 years. The After-Dinner Meet took place at "Harden", Austwick; the weather showed a deceptive promise as Members dispersed into the hills but most of them returned for tea having received a complete drenching. After tea John Jackson projected his unique composition, "Mountains and Music".

For the first Meet of the Club Year at the Milburn Arms in Rose-dale, the Club was fortunate in having as guide the National Park Warden for the area. In such competent hands 24 Members and their guests could relax while walking instead of having to concentrate on map-reading, though in a locality with a disused chimney, visible for many miles around, as a marker for base, and three high spires as secondary landmarks, it would tax the ingenuity of the most resourceful Member to get himself lost. The ancient crypt of Lastingham Church was visited and those insistent on pursuing yet further the Club's second objective (*Y.R.C.J.*, Vol. I, No. 1, page xii) were duly impressed by the Roman Road and, incidentally, by the Fylingdales Early Warning Station.

Sixty-two Members and their guests sat down to dinner at the Hill Inn in mid-January. The Meet was one of curiously mixed tradition and innovation; the new proprietors, Captain and Mrs. Flint, produced a very satisfying meal cheerfully served under the usual conditions of overcrowding, leaving the Club confident that the hospitality of the Hill Inn is safe in their hands. The meal probably accounted for a shortage of explorers in "Barn Pot", the majority being content to watch a spontaneous demonstration of Members' photographic slides. Outdoor activities included Whernside before breakfast, the Three Peaks, Wild Boar Fell, Sunset Hole and 'becking' in Ling Gill.

What a week-end in Low Hall Garth history was the February Meet! The President and 29 Members, no snow, a new fireplace and 23 active rock climbers. Saturday showed bright blue sky, glorious sunshine and beautiful colouring; ten men were on Dow Crag, ten on the Langdale Pikes while four searched for snow and ice in Great End Gully. A mist at the end of the day brought forth a Brocken Spectre seen from the upper slopes of Coniston Old Man. On Sunday there was a mass exodus to Gimmer, 16 Y.R.C. men on the crag at

the same time. Congestion at the Old Dungeon Gill revealed the fact that the Fell and Rock and the Rucksack Clubs had Meets in Langdale too. The solitude normally associated with the Mungrisdale part of the Lake District was interrupted when, for the second week-end in March, the President and 30 men descended upon the Mill Inn. In perfect weather on Saturday there were parties on Blencathra and in Skiddaw Forest; climbing on Carrock Fell was difficult owing to the need to avoid inhabited ravens' nests, cold fingers forced a party off the rocks at Hutapple on to the Fells at Fairfield and St. Sunday crag. On Sunday the rock climbers converged on Castle Rock, where several leaders seemed to disappear into thin air.

The President and 18 men assembled for the Easter Cairngorm Meet on the camp site at Coylumbridge on Good Friday evening, but the day's activities in the snow forced them to congenial surroundings in Aviemore to slake thirsts. Here one group decided to put a high camp at Loch Einich, while those who elected to stay at Coylumbridge did so ostensibly to ski or, possibly, to keep in closer touch with the fleshpots at Aviemore and Carrbridge. The Loch Einich party were foiled on Saturday by a strong wind and snow from completing a horseshoe walk after a fine ridge scramble to the head of the valley, but on Sunday some made the round of Braeriach and Carn Toul while others bagged the Feshie summits. Two men stayed on to explore the northern corries of Braeriach on Monday, the remainder retiring to Coylumbridge to ski. Snow conditions were well suited to ski-ing and walking, but were dangerously unstable for climbing, though one party attacked a gully at Coire an t-Sneachda but were repulsed by arctic conditions.

It was 17 years since the Y.R.C. had last potholed in South Wales and considering the long trek thirteen men was a goodly number for the April Meet at the South Wales Caving Club's headquarters. On Saturday six men went into Ogof Ffynnon Ddu, where they took a large number of photographs; five fully explored Tunnel Cave and subsequently Quarry Cave Cwm Dwr, while two walked over Brecon Beacon. On Sunday, thanks to the help given by Mrs. Price of the Gwyn Arms, an old friend of Ernest Roberts, permission was obtained to visit Dan-yr-Ogof, first explored 27 years ago by a Y.R.C. party consisting of Roberts, Gowing, Nelstrop and Platten. After wading two lakes and swimming another two, members reached Boulder Chamber and thence were able to enter some new passages and to find a small sapphire blue stalagmite. It was a great pleasure to learn how the name of Ernest Roberts is still remembered and respected in the Upper Swansea Valley.

At Whitsuntide the romantic appeal of the forbidden Isle of Rhum proved irresistible to the President and 36 Members and guests; the Club's thanks are due to the Nature Conservancy, who made the Meet possible and who provided transport for a vast quantity of gear and supplies from the landing at Loch Scresort to the camp site some 3 miles to westward. Activities were many and various, there was

walking on the northern hills and along the magnificent sea cliffs, bays and beaches; parties traversed the main ridge in from nine hours upwards and there was rock climbing on Askival and Runival. The walkers collected mushrooms and the anglers harried, and even collected, trout. Painters painted, bird watchers watched birds including Stonechat, Corncrake, Wood Sandpiper, Dotterel, Red Throated Diver, two pairs of Eagles and a whooper Swan; botanists prepared a report on flora, and the weather, despite a wet start, was kind. The 'Long Walk', scheduled for the first week-end in June, from Kirk Yetholm to Bellingham along the northern end of the Pennine Way, may well go down in the Club's chronicles more for the odd incidents and unusual diversions that befell Members, than for the actual walk itself. Lurid stories of primaevial bogs, wild bulls, man-eating vipers and a certain unpleasant breed of bird that makes its presence felt by climbers, were reported by hysterical Members, some of whose faulty navigation led them into the wild fastnesses of the darkest Border country and consequent 20-mile diversions. The Meet gathered at the Kirk Yetholm Youth Hostel, kindly made available by the Scottish Y.H.A., and the start was at 4 a.m. on the Saturday morning. The first ten miles as far as the Cheviot, and a second breakfast, were the most interesting, after which the route lay across the rather featureless and very isolated Northumbrian fells and it was in this section that a number of parties went astray and got into the wrong valley. The attractions of the Byrness Hotel were such that nobody did the last section from Byrness to Bellingham, the deviationists giving as their excuse that they had in any case covered an equivalent distance.

Rain and wind welcomed the President and 30 men when they arrived on the Friday evening for the Midsummer High Camp at Sty Head Tarn; Saturday morning brought little change but revealed a high standard of tent-pitching under difficult conditions. The President was on Great Gable and there were climbers on Kern Knotts, Raven Crag and Gillercombe Buttress, where one leader found three brand new slings complete with karabiners. Two walkers did the Keswick Round. Sunday was a day of sun and wind; rocks were climbed and hills trodden all over this, the most beautiful part of the Lake District. For the July Meet at the Lowstern Hut the B.B.C. announced 72 hours of bright sunny weather, but the Postal Strike delayed attendance advices and Members were down deep potholes in Austria, climbing in the Alps or wandering round Asia Minor in a Volkswagen. The result was that only the Hon. Secretary and 7 men put in an appearance and, despite an almost continuous downpour on both the Saturday and the Sunday, attacked Lost Johns' as far as the next pitch after the Dome and gave Lowstern a spring cleaning. Meanwhile, and indeed for most of July, seven Members and a guest were holding an informal Alpine Meet of the Club based mainly on the unspoilt and peaceful Lötschental. Setting out from Blatten they broke all records by bivouacking on the first night, having failed to reach the Hollandia Hut by dusk. Parties climbed the Mittaghorn and the Ebnefluh, then,

after a night's heavy snowfall, decided to explore the richness of the Alpine flora while the Bietschorn got back into condition. But a further storm robbed them of this peak and they had to be satisfied with the Willerhorn. Separate groups then climbed the Petite Dent de Veisivi, the Tellispitzen, the Pointe de Zinal and the Alphübel, two Members also enjoyed a long day on the Dent Blanche.

Only ten persons turned out for the Pothole Training Meet at Lowstern in August to take advantage of the excellent and valuable instruction in safe potholing given by the Club's Hon. Treasurer. Saturday morning was devoted to a lecture, demonstrations and practice and the afternoon to laddering in Pillar Holes and Fluted Hole. On Sunday the 320 ft. deep Long Kin West was laddered with electron and one man reached the bottom of the shaft. The Joint Meet with the Rucksack Club took place at their Bewdy Mawr Hut the first week-end in September; the President, with 21 Members and Guests represented the Y.R.C. After a fortnight of ideal weather it was disappointing to find low cloud on the Saturday morning; nevertheless parties dispersed to the Slabs, Llywedd, the Glyders, Tryfan and the Horseshoe: anyone venturing higher than 1,500 ft. came back soaked to the skin. Sunday was not much better but in the afternoon a number of well-known classical routes on the Three Cliffs of Cromlech were chalked up. Six men stayed over Monday and got well and truly soaked again on the traverse of Moel Siabod; two optimists who stayed till Tuesday had a good day on Myrdd-Drws-y-Coed.

The President and 40 men made up the Y.R.C. contingent at the annual Robertson Lamb Hut Meet with the Rucksack and Wayfarers' Clubs. As usual some stayed at R.L.H., some at Raw Head and there was a large overflow at Low Hall Garth. The R.L.H. party walked on Bow Fell, Crinkle Crag and Wetherlam, the Raw Head party festooned the Langdale Crag while the L.H.G. group, besides revelling in the newly installed electric supply and presenting unusually clean-shaven faces, climbed Central Chimney and other severes on Dow Crag, The Main Wall and The Crack on Gimmer and several routes on Raven Crag. Walkers picked a route up Greenburn Beck to Wetherlam, got splendid views from Seathwaite Fell, of Harter Fell and the Duddon and Eskdale Valleys ablaze with autumn colour and returned by Coniston Old Man and Dow Crag. A late L.H.G. party on Sunday assaulted the slabs on White Gill and, on moving round to Scout Crag, found a group of Y.R.C. climbers being led up Ramblers' Hang-over by one of their number with a left leg in plaster using a piece of car tyre for heel friction.

No potholers appeared till Saturday evening at the Harden October Meet, so the day was spent walking in Crummock Dale, over Simon's Fell and Ingleborough, some even going as far as Pen-y-Ghent. In spite of a very wet forecast for Sunday there was good potholing in Disappointment Pot and a small party did several strenuous routes on some newly pioneered limestone climbs. The last Meet of the Club Year was at the Punch Bowl Hotel at Low Row in Swaledale, the

President and 21 Members attended, the weather was fine and frosty and a hardy minority camped on the aptly named Crackpot Moor. On Saturday the Meet split into two halves to walk the Pennine Way between Middleton-in-Teesdale and Tan Hill. Both groups had a close look at the interesting God's Bridge and with the high degree of efficiency always associated with the Y.R.C. contrived to pass each other at exactly the right place at the right time and to exchange the right car keys. On Sunday everybody walked the moors between Swaledale and Arkengarthdale; the colouring of the trees was superb, the sunshine bringing out the full brilliance of the yellows, reds and russets.

1964/65. Fourteen Club Meets were held and the average attendance remained at the high figure of 26.

Some 154 Members and Guests were present at the 51st Annual Dinner at the Hotel Majestic at Harrogate on Saturday, 21st November, 1964. The retiring President, R. E. Chadwick, was in the Chair, Tom Weir was the Principal Guest and the evening was memorable for the excellence and wittiness of the speeches. On Sunday more than 80 of those present trod the fells and assembled for tea at the Fell Hotel, Burnsall.

The December Meet was at one of the Club's favourite hostelries, The White Lion at Cray, Buckden, and there was the usual large gathering of 32 men in spite of continuous rain for the whole of the journey thither on Friday. Campers had an unhappy time with fast flowing flood water during the night and there was little improvement on Saturday, though most Members dispersed over the fells to collect an appetite for the very fine evening meal and a thirst for the new President's traditional Punch. In the evening Eric Arnison showed his slides of bird life in the Shetlands and in India. For the Hill Inn Meet at the end of January about 60 Members filled the inn, Lowstern and the Gearstones Hut, kindly lent by the Gritstone Club. Permission was granted for a descent of Lancaster Hole on Saturday and a party of five penetrated to the Colonnade, the Graveyard, and reached the main sump. As was already known, the 16 ft. column of the Colonnade had been completely shattered by vandals and although the pieces had been collected and some attempt made at reconstruction this act remains one of wanton damage to a very fine formation. Skiers found wet snow to the north of Whernside and walkers were on this, traditionally the first of the Three Peaks, before breakfast. After supper there was a show of Members' transparencies which covered many and various activities from Club Meets through Alpine and other flowers to "unofficial and matrimonial Meets of 1964". On Sunday seven men went down Ease Gill as far as Easter Grotto and walkers on Ingleborough, Whernside and Dodd Fell enjoyed a glorious spring-like day. Members who arrived on Friday evening for the mid-February Meet at Low Hall Garth were awakened on Saturday

morning by an unholy banshee-like wailing which on investigation turned out to be a Member with The Pipes. In a strong wind most groups went in search of gullies on Great End, in Dove Dale, Deepdale, Fairfield, St. Sunday and Wetherlam. The gully in Dove Dale, after several strenuous attempts at a wet pitch, was declared impassable until a certain Life Member and Past President came up strongly from the rear, forced the passage and, near the top, spurned the rope and went on ahead. Sunday was bright and clear, more gullies were climbed on Helvellyn, Great Carrs and Wetherlam. Others were away to Fairfield and Grisedale, Grasmere, Easedale by Stickle Tarn to the Old Dungeon Ghyll and over Wrynose to Swirl How. Two people who stayed till Tuesday climbed in shirt sleeves to Rossett Gill and found a virgin gully on Great End. Many thanks were due to the Hon. Hut Warden and Mrs. Driscoll for ensuring that the 26 Members and their Guests were well fed throughout the week-end.

It was some years since the Club had held a Meet in the Cleveland and 26 men put in an appearance at the Blue Bell Hotel, Ingleby Cross for the first week-end in March, many hoping for interesting climbs on the sandstone outcrops of the northern escarpment. However, all the rocks and moors carried a thick carpet of soft snow; skiers found in Scugdale the best conditions of the winter and a party of walkers, having scrambled up the steep snow-covered scarp behind the village, made their way round the head of Scugdale, over Carlton and Cringle Moors to Kirkby where Mrs. Harry Haslam, the wife of a Member, provided them with a most welcome tea. A thaw set in on Sunday but ski-ing was still possible and there was walking from Chop Gate, over Hasty Bank and Urra Moor.

Sickness unfortunately struck off three of the Members who had intended to join the Mendips Meet at the end of March, with the result that only the President and four Members made the long journey to the camping site near Cheddar village. They spent a strenuous Saturday, after consulting notes made in 1929 by Ernest Roberts, exploring the tortuous system of Swildon's Hole, near Priddy, to the limits which lack of diving gear allowed. This included the recently discovered Shatter Passage/Blue Pencil Passages systems. Sunday was a glorious spring day and three Members explored the main stream passage in Eastwater Hole; they judged it to be awkward, wet, tight, dank, gloomy and slippery, so they spent the afternoon basking in the unaccustomed sunshine before driving back to 'wintry Yorkshire'. Of the sixteen Members and Guests at the Easter Glen Nevis Meet the most fortunate were the few who arrived in time to spend Good Friday traversing the main Mamore Ridge from Mullach nan Coirean to An Garbhanach. Saturday was wet but some Members visited the vitrified fort overlooking the Glen and walked the Mullach nan Coirean—Stob Bàn horseshoe. In spite of a gale warning for Sunday the President and his party traversed the Grey Coires from Sgùrr a' Bhuic on the end of Aonach Beag to Stob Bàn, pressing on in a 'white-out' to reach a 4,000 ft. summit.

After a week of early summer sunshine the weather seemed set for a good week-end as the President, with 22 Members and Guests, assembled at the Brotherswater Hotel for the mid-May high level camping Meet in the upper reaches of Dovedale. But by the time a start was made towards the camp site the tops were shrouded in mist and the site itself, on a plateau 2,000 ft. up between Dove Crag and Hart Crag, was found when reached to be well in the clouds. At this point the Meet leader disappeared to look for a cave, very soon a shout out of the mist signalled that he had found it about 100 ft. higher up and to this the party moved on. It was a great gash in the mountainside, 30 ft. across, 15 ft. deep and 6 ft. high, a magnificent situation; to the north the beautiful profiles of Hartsop How and St. Sunday Crag hanging with mist, further to the east Place Fell and the High Street group and between them a little corner of Ullswater. Saturday dawn was perfection; the day was spent climbing in Deepdale on Hutaple and neighbouring crags, finishing with a convivial evening round a camp fire in the cave with moving clouds occasionally showing the dark shapes of the peaks. Sunday was disappointing with mist swirling into the cave and hardly a peak in sight. Some set off for Helvellyn, some walked down the valley but there was no climbing.

The President, eighteen Members and four Guests attended the Whitsun Meet at Knoydart. They sailed from Mallaig at 1 p.m. on the Saturday and reached the head of Loch Nevis an hour later. There they found an excellent camp site just above high water mark at the point of disembarkation. The head of the loch is very shallow so loading and off-loading was a laborious business by dinghy with the boat standing out about 100 yards off-shore. This part of Scotland is virtually deserted, access can only be made by boat and once past the village of Inverie on the north side of the loch and the hamlet of Tarbet on the south there are no further signs of human life. There are five Munros in this part of Knoydart; on the east Sgùrr na Ciche and Sgùrr nan Coireachan and between them a good ridge, Garbh Chiòch Mhòr which also tops 3,000 ft., in the centre are Meall Buidhe and Luinne Bheinn while further away is Ladhar Bheinn. Although there is plenty of rock on all the mountains, most of it is large sloping slab and there is virtually nothing suitable for rock climbing. Climbing the five Munros and their outliers formed the main activity of the Meet. Two parties each of four carried an advance camp to Barrisdale on Loch Hourn and tackled Ladhar Bheinn by way of Coire Dhorraic, a well worthwhile expedition, the mountain has a fine mile-long ridge. One Member, by no means the youngest, did a solo circuit of Meall Buidhe, Luinne Bheinn and Ladhar Bheinn in two days, sleeping out on Ladhar Bheinn. On off days Members fished and explored the shores of Loch Nevis, a wild cat was clearly seen, deer were stalked and seduced with Kendal Mint Cake, ptarmigan with young were found and an eagle was reported, near the camp a merganser was sitting on a large clutch. At Barrisdale the farmer feeds the deer in winter and they were still tame enough for it to be possible to get

within 15 feet of five fine stags as they came down for their evening meal.

The Long Walk this year was from Sedbergh to Ambleside, a total distance of 31 miles; it took place in perfect walking weather on the first Saturday in July. Twelve men walked and the President and seven others acted as support parties at feeding points for ferrying cars back from Sedbergh to Low Hall Garth. From a 4 a.m. start at Sedbergh the route lay over the grassy tops, rising to 2,220 ft. at Bram Rigg Top, over Uldale Head to Low Borrowbridge where breakfast was provided. A second feeding point at Hollowgate was reached just before midday by way of Grayrigg Forest and Whinfell. The next leg of 18 miles over Tarn Crag, Nan Bield Pass and High Street (2,718 ft.) to the third feeding point at the Kirkstone Inn proved somewhat formidable and it was nearly 6 p.m. before the first arrivals reached the inn. Early arrivals went on over Kilnshaw Chimney, reaching Ambleside at 8.30. By 10 p.m. most Members were gathered into L.H.G. to enjoy an excellent meal provided by the Hut Warden. The President and eighteen men were present at the Lowstern Hut for the potholing Meet at the end of July. A party of eleven, four of them having their first experience underground, laddered two pitches in Easegill on Saturday and negotiated two interesting crawls and a tight chimney, the route being to County Pot, through Stock Pot to Holbeck Junction; lack of time prevented them from reaching Easter Grotto. On Sunday five men laddered three pitches in Sell Gill and at the bottom found nine inches of water, a cartwheel rim and the frame of a lady's bicycle. The Climbers' Club kindly lent their hut at Helyg for the first week-end in September and the President, with 19 Members and Guests, all got wet on both Saturday and Sunday. Some climbed on Tryfan, some went to Cnicht, others to the Lleyn Peninsula, parties walked the nearer hills and ridges, one Member cruised the Menai Straits, and all were rained upon with equal impartiality. Another thoroughly wet week-end greeted the 32 Y.R.C. Members at the annual Joint Meet with the Wayfarers and Rucksack Clubs at the Robertson Lamb Hut. Parties disappeared into the misty waterlogged hills; one lot ("At least we shall keep dry", they said) explored the Hodge Close Mines and the Halls of Silence and came back with the water pouring out of their boots. Really bad weather usually means an early return to the huts and favours the formation of discussion groups. Casual eavesdroppers who went the rounds learnt how to combat the wiles of perfidious builders and architects, how to make a profitable living out of insurance and how to sell a tin of dubbin to a customer who comes in to complain about the porosity of his newly bought climbing boots. The Low Hall Garth contingent organised a Wine and Cheese party and thereby uncovered a wealth of ballad singing and story telling talent.

CLUB PROCEEDINGS

1964—The week-end meets were: January 17th—19th, The Hill Inn, Chapel-le-Dale; February 7th—9th, Low Hall Garth; March 6th—8th, Mungrisdale; Easter, March 26th—31st, Coylumbriidge, Cairngorms; April 17th—19th, South Wales; Whitsun, May 15th—24th, The Isle of Rhum; June 5th—7th, The Long Walk, Kirk Yetholm to Byrness; June 26th—28th, High Level Camp, Sty Head; July 17th—19th, Lowstern Hut (Lost Johns'); August 14th—16th, Lowstern Hut (Pothole Training); September 4th—6th, Bewdy Mawr, Joint Meet with Rucksack Club; September 25th—27th, The Robertson Lamb Hut, Joint Meet with Wayfarers and Rucksack Clubs; October 9th—11th, Harden, Austwick; October 24th—25th, The Punch Bowl Inn, Low Row, Swaledale; December 11th—13th, The Lion Hotel, Cray. The average attendance reached the record figure of 26 and the Club Membership was 190. The deaths were recorded in 1964 of A. F. Falkingham and Davis Burrow.

The 72nd Annual General Meeting was held at the Hotel Majestic, Harrogate, on November 21st, 1964. The following officers of the Club were elected for the year 1964/65: President: W. P. B. STONEHOUSE; Vice-Presidents: B. E. NICHOLSON, J. A. DOSSOR; Hon. Treasurer: S. MARSDEN; Hon. Secretary: E. C. DOWNHAM; Hon. Asst. Secretary: W. C. I. CROWTHER; Hon. Editor: H. G. WATTS; Hon. Asst. Editor and Librarian: A. B. CRAVEN; Hon. Huts Secretary: F. D. SMITH; Hon. Hut Wardens: Low Hall Garth, J. D. DRISCOLL, Lowstern, J. RICHARDS; Hon. Auditor: G. R. TURNER; Committee: G. B. SPENCELEY, A. R. CHAPMAN, E. M. TREGONING, R. GOWING, J. R. MIDDLETON, W. WOODWARD.

The 51st Annual Dinner followed the Meeting and was also at the Hotel Majestic. The Principal Guest was Tom Weir and the retiring President, R. E. Chadwick, was in the Chair. Kindred Clubs were represented by T. Howard Somervell, President, Alpine Club; J. P. Cooper, President, Rucksack Club; F. E. Yule, Scottish Mountaineering Club; I. M. Waller, Climbers' Club; R. Cook, Wayfarers' Club; R. A. Davis, Midland Association of Mountaineers; F. Falkingham, Gritstone Club; T. Pettit, Craven Pothole Club; D. Casseldon, Bradford Pothole Club. The attendance was 154 members and guests. The after-dinner meet was at the Fell Hotel, Burnsall, where there was a gathering of over 80; after tea Tom Weir showed his splendid colour slides of the Scottish Highlands.

On February 3rd, 1964, Harry Stembridge gave a lecture to the Club at the Metropole Hotel in Leeds on "Mountain and Jungle in Peru", a trip which he had done with Alf Gregory in 1963. The slides, taken by Gregory, were excellent and the talk conveyed all Harry's enthusiasm for the mountains, for climbing, for the flowers and natural beauty and for the Indian people and the evidences of their history.

On April 9th, 1964, Alf Gregory, by joint arrangement with the Yorkshire Mountaineering Club, gave a public lecture entitled 'The Ascent of Everest, Distegil, The Karakoram and Solu Khumbu', with colour ciné films and colour slides.

1965—Week-end Meets were: January 22nd—24th, The Hill Inn, Chapel-le-Dale; February 12th—14th, Low Hall Garth; March 5th—7th, The Blue Bell Hotel, Ingleby Cross; March 26th—28th, The Mendips; Easter, April 16th—19th, Glen Nevis; May 14th—16th, High Level Camp, Dovedale, Lake District; Whitsun, June 4th—12th, Knoydart; July 2nd—4th, The Long Walk, Sedbergh to Ambleside; July 30th—August 1st, Lowstern Hut; September 3rd—5th, The Helyg Hut; September 24th—26th, The Robertson Lamb Hut, Joint Meet with Wayfarers' and Rucksack Clubs; October 22nd—24th, The Black Bull Hotel, Sedbergh; December 10th—12th, The Rose and Crown Hotel, Bainbridge. The average attendance at meets remained at the high figure of 26 and the membership of the Club was 189, including 4 Honorary, 20 Life, 2 Junior and 163 Ordinary Members. The Club lost two members by death in 1965, W. Wells-Hood and W. H. Watson.

The 73rd Annual General Meeting was held at the Hotel St. George, Harrogate, on November 20th, 1965. The officers elected to serve for the year 1965/66 were: President: W. P. B. STONEHOUSE; Vice-Presidents: J. A. DOSSOR, F. D. SMITH; Hon. Treasurer: S. MARSDEN; Hon. Secretary: E. C. DOWNHAM; Hon. Asst. Secretary: W. C. I. CROWTHER; Hon. Editor: H. G. WATTS; Hon. Asst. Editor and Librarian: A. B. CRAVEN; Hon. Huts Secretary: F. D. SMITH; Hon. Hut Wardens: Low Hall Garth, J. D. DRISCOLL, Lowstern, J. RICHARDS; Hon. Auditor: G. R. TURNER; Committee: G. B. SPENCELEY, A. R. CHAPMAN, E. M. TREGONING, R. GOWING, J. R. MIDDLETON, W. WOODWARD.

The 52nd Annual Dinner followed the Meeting and was also at the Hotel St. George; the menu card commemorated the centenary of the first ascent of the Mattherhorn by Edward Whymper, the Club's first Honorary Member. The Principal Guest was Sir John Hunt and the President, W. P. B. Stonehouse, was in the Chair. Kindred Clubs were represented by Eric Shipton, President, Alpine Club; Albert Ravenscroft, President, Wayfarers' Club; Ken Tarbuck, Rucksack Club; Francis Falkingham, Gritstone Club; Ron Brotherton, Fell and Rock Climbing Club; Len Cook, Craven Pothole Club; Maurice Church, Yorkshire Mountaineering Club. The number of members and guests present was 157. The after-dinner meet was at the Hart's Head at Giggleswick and the attendance was about 80.

On January 17th, 1966, Alf Gregory gave a talk, illustrated by his own slides, on mountain photography. Comment on Gregory's mountain photography is superfluous, but also included was a series of incredibly vivid and beautiful pictures of insects and flowers in the rain forests of Peru, the products of much patience, of time and of suffering caused by other, less photogenic, insects.

NEW MEMBERS SINCE JOURNAL No. 32

1964

Farrant, Darrell J. 19 Hartley Road, Birkdale, Southport, Lancashire.
Margetts, Anthony J. 680a Bradford Road, Birkenshaw, Bradford.
Carswell, Jack "Netherlea", Primrose Terrace, Harrington, Workington, Cumberland.

1965

Hamlin, John F. 290 Cross Flats Grove, Leeds, 11.
Watson, Graham Heaton Rise, Bradford.
Judson, David M. 3 Hilton Road, Leeds, 8.
Lythe, John The Cottage, Leathley, Near Otley.
White, Alec 22 Whinney Lane, Pannal Ash, Harrogate.
Josephy, Timothy W. 8 Weetwood Park Drive, Leeds, 16, Yorkshire.
Harris, Albert P. R. "The Chequers", 11 Boroughbridge Road, Knaresborough.

1966

Godley, David 29 Beech Avenue, Worksop, Nottinghamshire.
Church, Maurice "Brooklyn", 9 Doncaster Road, East Hardwick, Pontefract.

RESIGNATIONS

1964

M. Bowling.

1965

P. W. Bedford. J. A. Schofield.

1966

D. R. McKelvie.

DEATHS

1964

Davis Burrow. A. F. Falkingham.

1965

W. H. Watson. W. Wells-Hood.