

THE
YORKSHIRE RAMBLERS'
CLUB JOURNAL
1964

Edited by HAROLD G. WATTS

VOLUME IX NUMBER 32

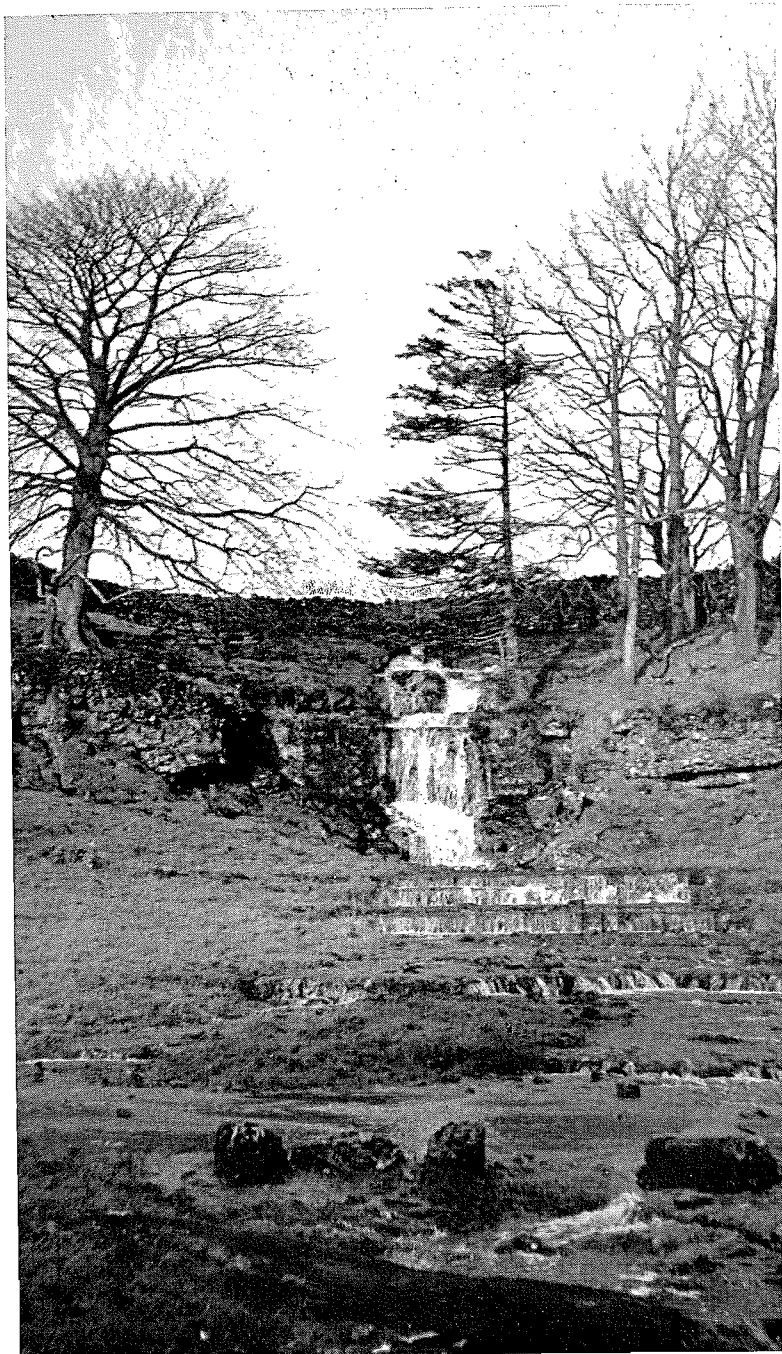
THE YORKSHIRE RAMBLERS' CLUB JOURNAL

VOL. IX

1964

No. 32

Edited by HAROLD G. WATTS



NR. CRAY, WHARFEDALE

S. Goulden

Contents

Mountains and Indians in Peru	H. L. STEMBRIDGE	233
In the Footsteps of the Fianna	W. C. I. CROWTHER	244
'Avalanche'	L. C. BAUME	252
Shambles amongst the Alps:		
Part 1. Dent du Requin	F. D. SMITH	255
Part 2. The Grépon	C. R. ALLEN	257
Part 3. The Roof of Europe	J. A. VARNEY	260
The Icefield Ranges of the St. Elias Mountains	T. H. SMITH	265
Ski Course, 1963—St. Moritz	H. G. WATTS	279
Dolomite Introduction: The Punta Clark	D. M. HENDERSON	283
Gullies: for or against	W. WOODWARD	287
A Day on the Matterhorn	R. GOWING	290
Skye: The Ridge	R. HARBEN	296
Cave Rescue: International Meeting, Belgium, 1963	H. G. WATTS	301
Notes on Kilnsey Crag	D. M. MOORHOUSE	310
On the Hills, 1962, 1963 ... ..	...	312
Chippings ... ..	...	316
Club Song: "1892 and All That"	J. HIRST & H. L. STEMBRIDGE	319
Cave Exploration:		
The Reyfad Area, Co. Fermanagh	J. R. MIDDLETON	321
La Spéléologie en France au Cours de l'Année 1963	R. DE JOLY	329
New Discoveries ... ..	...	330
Cave Abstracts	THE EDITOR	332
Reviews ... ..	...	335
In Memoriam: F. H. Slingsby; Bentley Beetham ... ..	...	344
Club Meets: 1962, 1963 ... ..	...	346
Club Proceedings ... ..	...	352
New Members, Resignations and Deaths ... ..	...	354

Illustrations

Near Cray, Wharfedale	S. GOULDEN	Frontispiece
Sketch Map of Cordillera Blanca ... ..	...	235
Huascarán (North Peak) from the East	A. GREGORY	236
Pisco (from below Col to the West)	A. GREGORY	236
Huandoy (South Peak) from below Pisco	A. GREGORY	236
The Three Peaks of Huandoy from the East	A. GREGORY	236
Chacararaju	A. GREGORY	236
Taulliraju from South West	A. GREGORY	236
Alpamayo from the South	A. GREGORY	236
Pucahirca from Punta Union Pass	A. GREGORY	236
Dent d'Hérens from Zmutt Ridge	R. GOWING	293
Centipede Pitch, Lost Johns'	W. J. ANDERSON	319
Reyfad Pot (Plan and Sections)	J. H. HOOPER	321
Main Chamber, Reyfad	B. E. NICHOLSON	322
Noon's Hole (Section)	J. R. MIDDLETON	327
Hugh Slingsby ... ..	...	344

Published by the Yorkshire Ramblers' Club, 42 York Place, Leeds, 1

THE
Yorkshire Ramblers' Club Journal

VOL. IX

1964

No. 32

MOUNTAINS AND INDIANS IN PERU

by H. L. Stembridge

IT ALL STARTED in a corner of the bar at the Old Dungeon Ghyll in Langdale. After a good dinner and a drink or two both Alf Gregory and I were feeling pleasantly mellow and in such circumstances obstacles, however formidable, tend to reduce themselves to manageable proportions. The talk ranged from Persia to Nepal but by bedtime we were committed to Peru. A few days later when I began to read the experiences of other expeditions I found a good deal of it to be decidedly off-putting.

All agreed on the magnificence of the mountains, but—and it was a big but—all talked depressingly of arid, wind-swept, rather drab uplands, of squalid sullen drunken Indians, of the necessity for a constant guard on trunks or tents against thieves, of the mosquitos of the Santa Valley whose bite produced either death or the dreaded Warts disease which is one stage worse, of the awful penalties of eating Indian food or of going high while insufficiently acclimatised. Moreover, there was no getting away from the fact that I was “getting on”, that Greg was ten years younger and decidedly a “tiger”.

So it was with some misgiving that I met him at Lima Airport around midnight on 21st May, 1963. But one by one my forebodings vanished and the nine vivid weeks we spent together were so crammed with beauty and excitement that even now, six months later, fresh recollections keep bubbling up in my mind to make me smile.

Although our main purpose was to get among the mountains of the Cordillera Blanca, we also wanted to see what the jungle of eastern Peru was like. I find it difficult to describe the

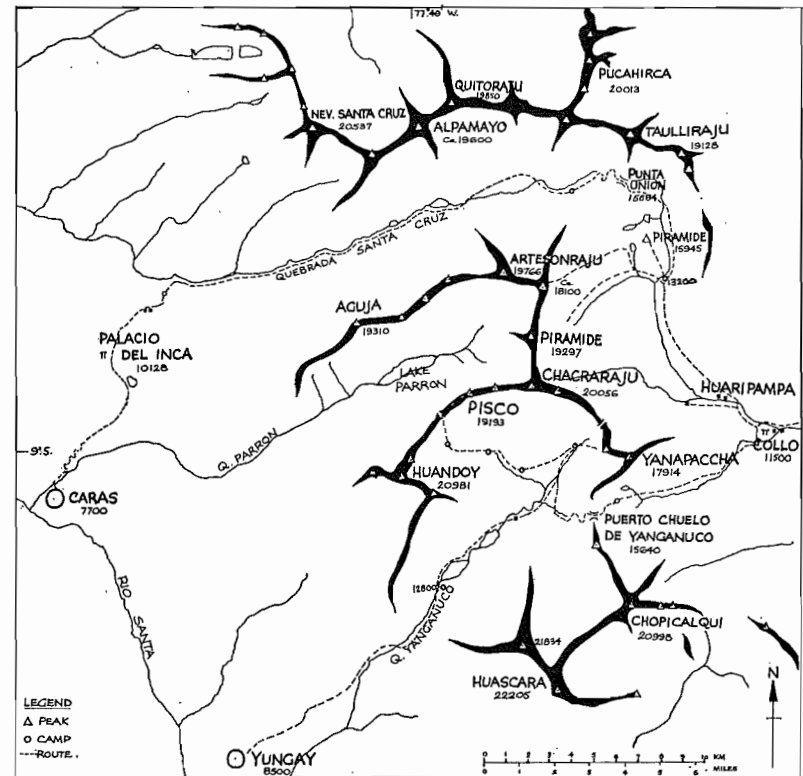
peculiar satisfaction of jungle travel. The thrill of shooting rapids in a dug-out canoe after being bogged down for days in a squalid shanty-town, the expectancy of wading up streams hemmed in by impenetrable forest never knowing what may be round the next corner, the flashes of colour, birds, butterflies, flowers, all larger than life, seen against the dark background of the undergrowth.

Nor can I attempt to describe the amusing crudities to which the Turkish-bath atmosphere gradually reduces the interesting characters who choose to live there, men who, despite their primitive surroundings, received us with a warmth of friendship and hospitality that made us wonder which were the more civilised, we or they.

Somehow in Peru, however much you have set your mind on doing certain things, history crops up round every corner and you become as absorbed in the wonders of the past and the people of the present as you do in the mountains you have come to climb. Who are these people whose forebears, 500 or more years ago, built the mighty cities and walls and terraces which still awe us by their permanence and strength? They are the Indians, still the majority in Peru, little changed through the ages, splendid and colourful in a barbaric sort of way, yet as squalid and dirty as we were told. Primitive, down-trodden, unreliable they may be but often hospitable and, on occasion, even gay. All these contradictory attributes enveloped them in an atmosphere which we never ceased to find intriguing and exciting, so if I write as much about people as about mountains, it is simply because I cannot get them out of my mind.

According to Greg the ideal number for an expedition is two or less and it certainly makes for ease of travel. Our plans were of the vaguest, often enough we changed them overnight, and the fact that we enjoyed ourselves so much was largely due to our freedom from organisation. At 4 a.m. on the day after we joined company a single truck left Lima carrying all the baggage and personnel of the Gregory/Stembridge Cordillera Blanca Expedition, for such was our pompous name, just as the tired business men with bloodshot eyes and unsteady gait were returning from the night spots of the city.

Dawn disclosed the Pacific rollers on our left, and on our



SKETCH-MAP OF THE CORDILLERA BLANCA

(Reproduced by the courtesy of the Alpine Club)

right, the pitiless sand desert which stretches for two thousand miles down the west coast of South America without a vestige of vegetation except beside the rare stream bed. Occasionally we passed through a village; adobe huts, people in rags, to our yet unaccustomed eyes all rather squalid and repulsive.

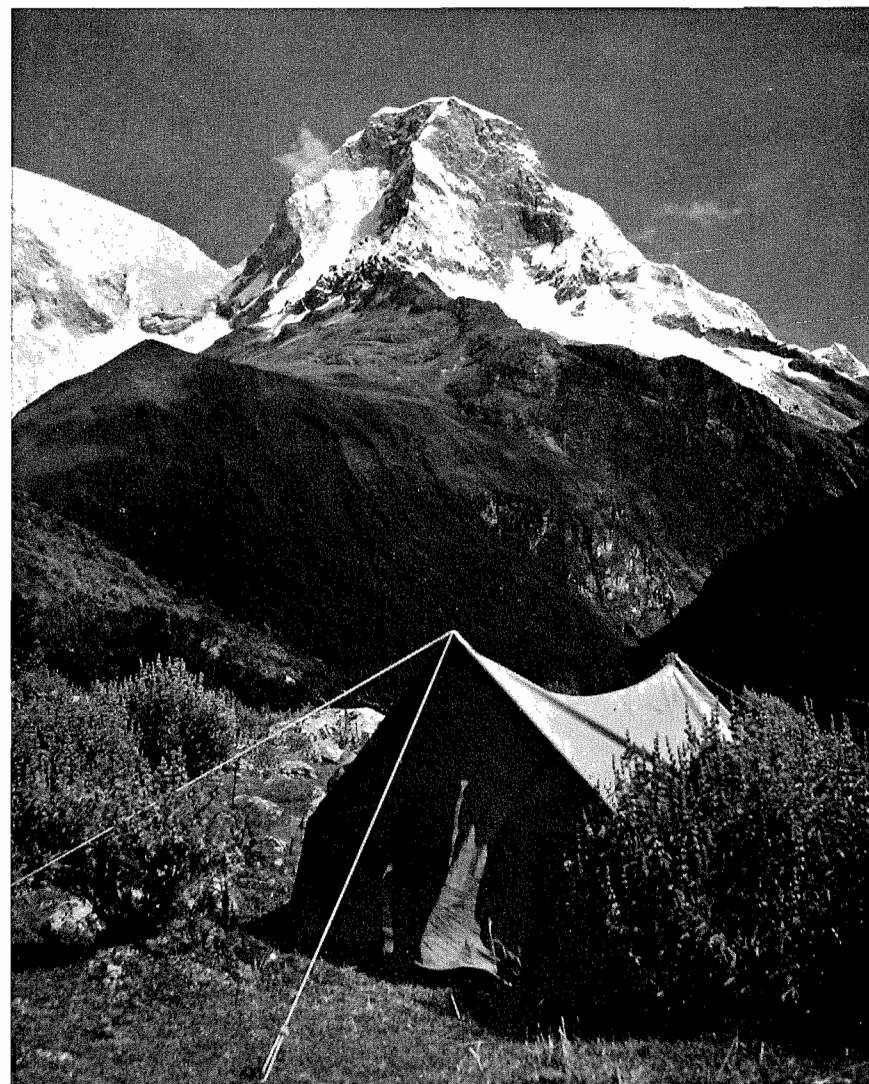
After some hours of desert we turned east on a rough and dusty track that followed a stream in to the recesses of the Cordillera Negra, the Black Mountains. Three times we broke down and it was already late in the day before we completed our 14,000 feet of ascent and reached the rolling Puna at the top of the range. Before us was the promised land, as far as the eye could see fairy tale peaks soaring upwards, remote and ethereal—the Cordillera Blanca. Between us and them lay the

Santa Valley, perhaps the most fertile in Northern Peru, and here we stayed for five days in a comfortable inn above the Indian town of Huaras. Every day we made forays into the surrounding hills, getting our bodies accustomed to the rarified atmosphere. We bought food and equipment, we engaged two half-breed porters, Donato and Juan, hired six donkeys and, in the evenings, enjoyed the hospitality of members of the Club Andinista Cordillera Blanca.

Towards the end of May we left the little town of Yungay on an old trail that zigzagged up the lower slopes of Huascarán, which at 22,205 ft. is the highest mountain in Peru; our donkeys laden with gear and basic food for three weeks, our two porters happy to be on the move, and Greg and I entranced by the flowers that smothered the landscape. Far from being drab, we had never seen such colour. The sweet scented broom of the valley gave way, as we climbed, to a profusion of blue lupins, bushes covered with yellow and flame flowers overhung the path, passion flowers trailed over the trees while underfoot clumps of giant daisies were surrounded by a carpet of pink gentians. Beyond the gorge of the Yanganuco, at a height of nearly 13,000 feet, we made our first halt by a turquoise lake and while the porters sorted out donkey loads, Greg and I scrambled up the steep hillside to a knoll at over 15,000 feet which gave us a fine view of the unclimbed north east ridge of the north peak of Huascarán.

The next day was typical of the pattern we were to follow in the carefree weeks ahead. A shortish march, often ten miles or less, a camp site by some rushing stream where donkeys could be turned loose to forage for themselves, while we set off to explore some side valley or climb some nearby hill or reach some vantage point from which we could photograph some of the magnificent mountains which surrounded us. Never have I seen such peaks, most of them over 20,000 ft., each standing alone, shapely, beautiful and very intimidating.

All too soon we lost the sun and by six it was quite dark except for the brilliance of the stars. The long cold nights are one of the problems of climbing in the tropics, and down clothing added greatly to our comfort. Sometimes we sat round a roaring fire while the Indians told us tales of the past, or Greg would yarn about Sherpas and Himalaya; more often we



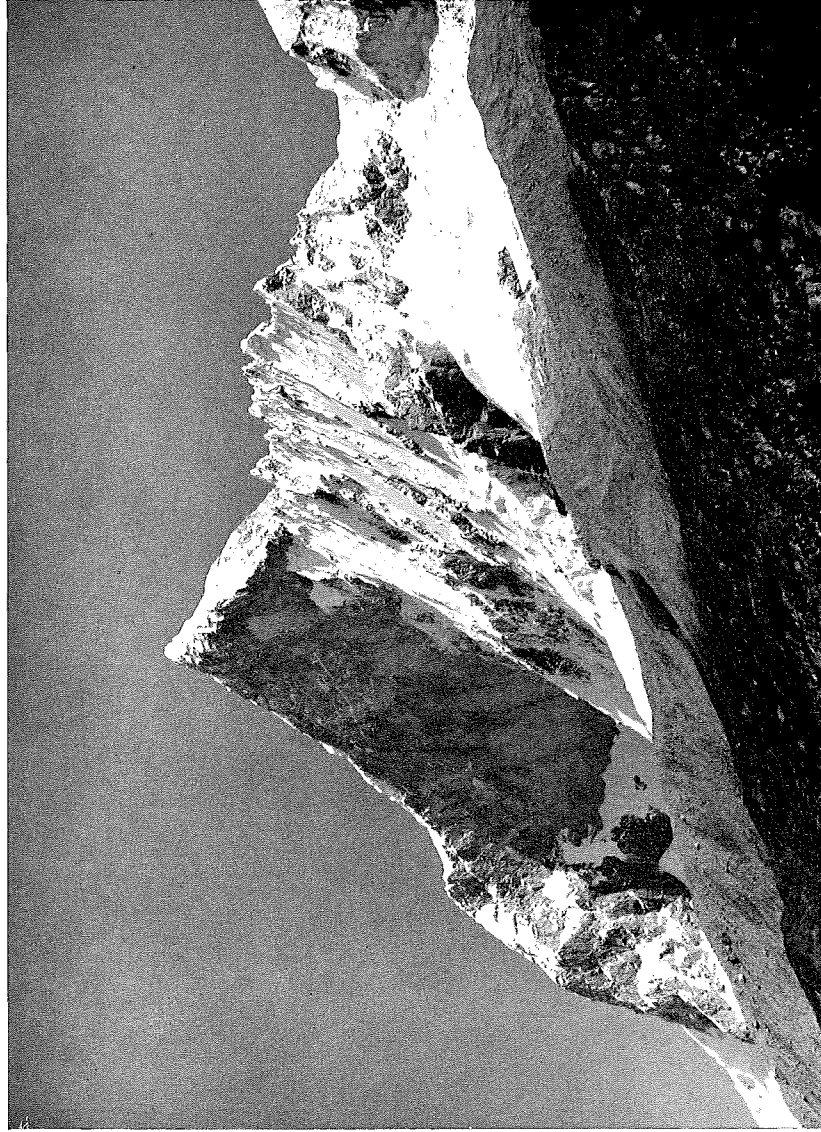
HUASCARAN (NORTH PEAK) FROM THE EAST

A. Gregory

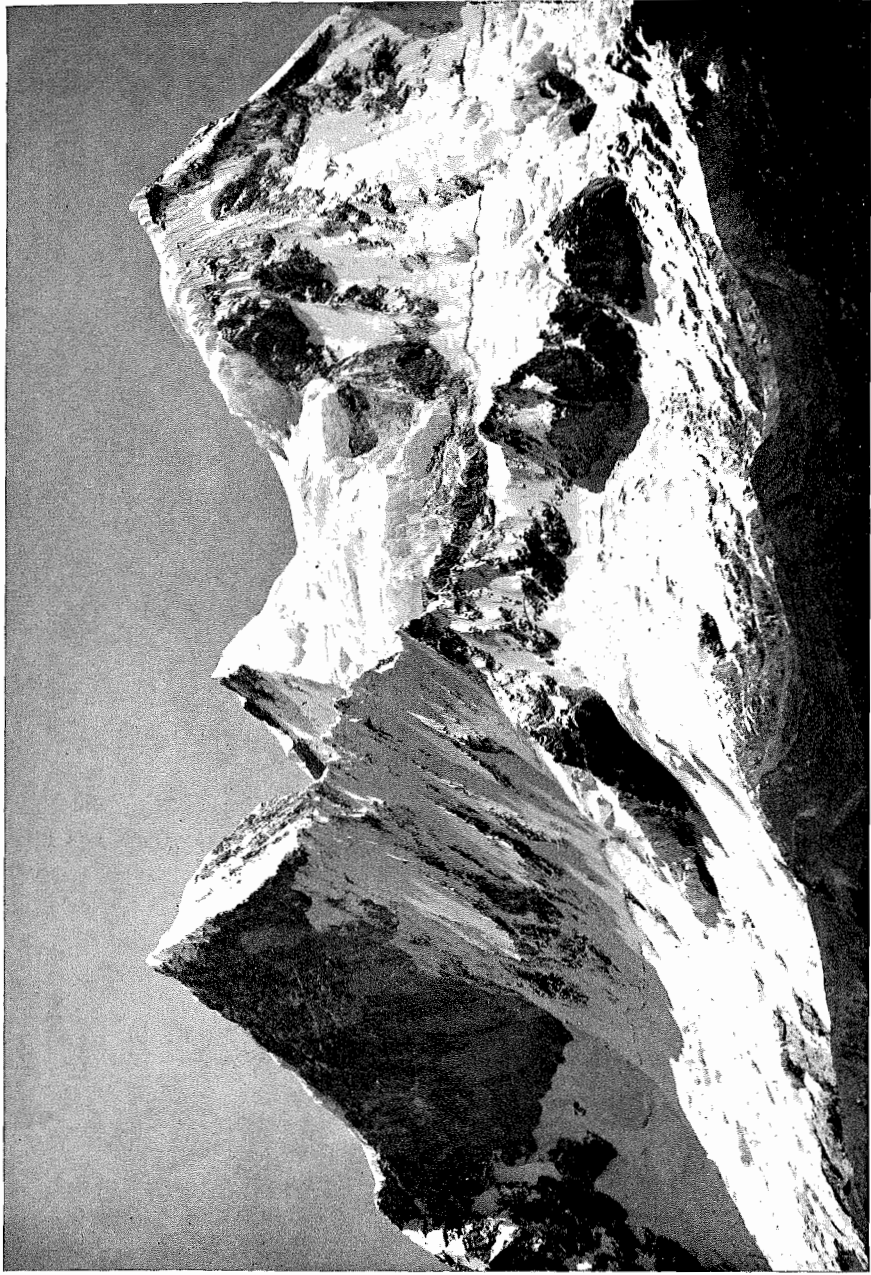
(Reproduced by the courtesy of the Alpine Club)



PISCO (FROM BELOW COL TO THE WEST) (Reproduced by the courtesy of the Alpine Club) A. Gregory



HUANDOY (SOUTH PEAK) FROM BELOW PISCO (Reproduced by the courtesy of the Alpine Club) A. Gregory



THE THREE PEAKS OF HUANDOY FROM THE EAST (Reproduced by the courtesy of the Alpine Club)

A. Gregory



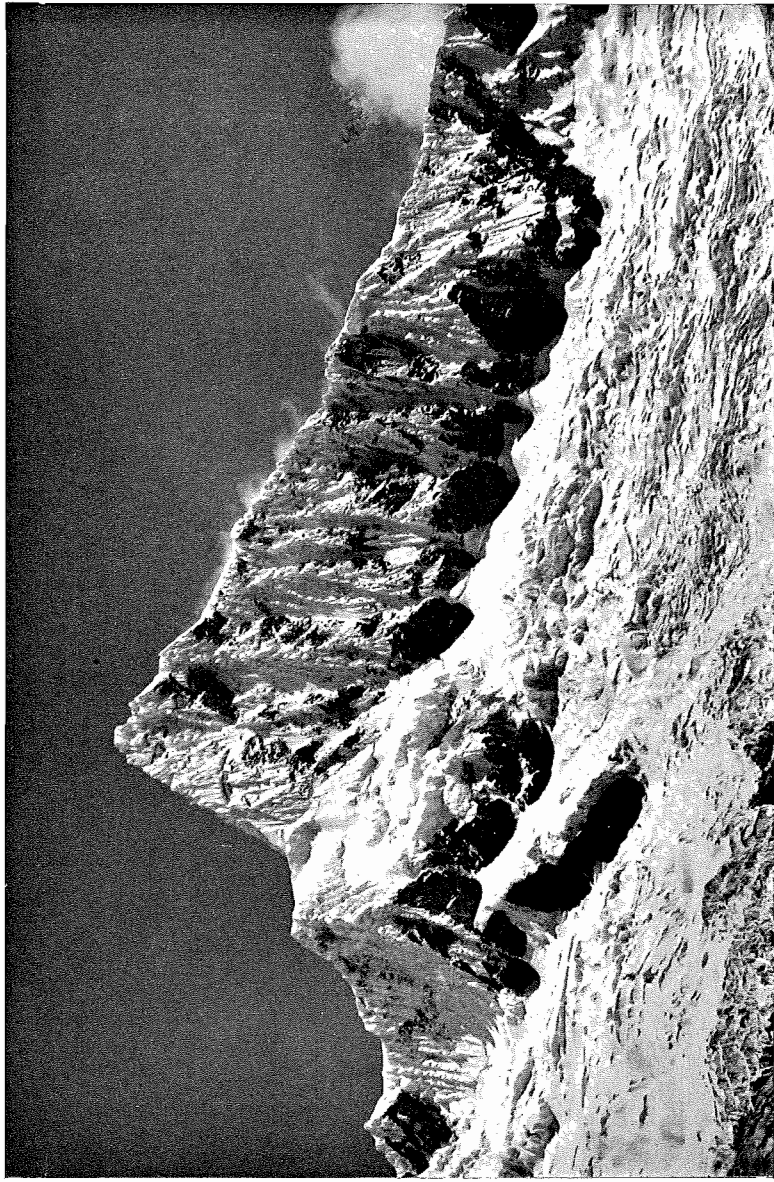
CHACRARAJU

A. Gregory



TAULLIRAJU FROM SOUTH WEST

A. Gregory



ALPAMAYO FROM THE SOUTH (Reproduced by the courtesy of the Alpine Club)

A. Gregory



PUCACHIRCA FROM PUNTA UNION PASS (Reproduced by the courtesy of the Alpine Club)

A. Gregory

would lie in our sleeping bags discussing the problems of a world which seemed very remote. On our journey our camps varied between 13,000 ft. and 15,000 ft. and of course it froze hard at night but with the weather set fair, we always slept with tent flaps wide open and when, at six each morning, the sun rose, as it did with clockwork regularity, the frost evaporated like magic and it was shirt-sleeve weather.

Our highest peak was Nevado Pisco, marked on our maps as "about 6,000 metres" (19,685 ft.); elsewhere I have seen it given as 19,193 ft. But whatever its height it was a wonderful climb, far higher than I had been before and, apart from a great shortage of breath, I was agreeably surprised that I felt none of the sickness or nausea that I had so often read is associated with ascents of high mountains. We managed to get the donkeys up to 14,700 ft., where we put up the bungalow tent as a base with Juan in charge. The same day Greg, Donato and I carried loads up a further 1,500 ft. where we all spent the night by a moraine in the two-man mountain tent. Not a bad night considering the congestion, the only unpleasantness being the ice crystals formed by condensation on the tent walls which fell and saturated our sleeping bags.

Between us and our mountain ran a glacier, large by Peruvian standards and so badly broken up that it took most of the following day to cross, moving slowly and carefully up ice slopes on which great boulders were balanced as precariously as any tipsy tightrope walker. By afternoon we were across and 1,000 ft. above it we found a good site for a second camp below an ice fall at 17,200 ft.

Despite a sleeping pill I had a poor night and felt lousy when we moved off shortly before six. Donato was in the lead and he went too fast for me up a steep moraine and the easy rocks which followed and I was heartily glad when we stopped to put on crampons. But when we took to the snow, with Greg leading at a sensible speed and cutting occasional batches of steps, I found life much more pleasant. Two thousand feet above our heads to our right our peak looked superb, the near vertical rocks of its south face glittering with flutings of ice and overhung by giant cornices fantastically shaped like Swiss rolls. Although the snow line in the Cordillera Blanca in May is as high as 16,000 ft., the

deposits above that height are not only enormous but appear to be extremely stable. Snow hangs on incredibly steep slopes and avalanches, at any rate while we were there, were a rarity.

We headed for a col between Pisco and Huandoy, whose triple peaks, the highest reaching 20,981 ft., lay well over to our left, looking far from easy. A good deal of step cutting became necessary as the angle steepened above the col. Then followed a crevassed area below groups of seracs before we reached the long slope that led to the summit. This caused us the only headache of the day for the sun had softened the crust and we kept going through knee-deep. Hard work at 19,000 ft. that made us gasp for breath, so much so that Greg, who was breaking the trail with his tongue hanging out, swore he had it sunburnt.

But such details were forgotten when we reached the top and gazed in wonder at the incredible west ridges of Chacraraju, not far away and seemingly unclimbable. Below us lay the Parron gorge with the shapely cone of Artesonraju at its head. Away to the north the great peaks beyond Quebrada Santa Cruz, Taulliraju, Alpamayo and Nevada Santa Cruz formed the skyline.

We had no time to linger if we were to be down by night-fall. Juan came up to the top camp and, with his help, we carried the lot down to base, although the glacier caused us even more trouble going down than it did coming up and I, for one, had had enough by the time I staggered into camp in the darkness.

During the off day that followed several condors soared overhead. Their eleven-foot wing span makes them the greatest eagles on earth and they certainly dwarfed the vultures which were a permanent feature of the skyline. Among the bushes of the valley humming-birds flashed like jewels as, with vibrating wings, they sipped nectar from the flowers. Tiny hawks, no bigger than thrushes, hovered nearby and wherever we turned myriads of strange birds of all sizes and colours piqued our curiosity for we had no means of identifying them. Here too were remains of old terracing and huts, although the valley was no longer inhabited, and all these had to be investigated. So with one thing and another it was dark all too soon.

Shortly after sunrise we headed down the valley until we could cut over a shoulder, itself a flowery paradise, and join the track that climbed to the Puerto Chuelo de Yanganuco Pass which, at 15,640 ft., crosses the main watershed of South America. As we reached the crest it was a sobering thought that, beyond the blue foothills ahead, over two thousand miles of tropical forest, almost uninhabited and largely unexplored, lay between us and the Atlantic. Beside a little tarn, not far down the eastern slope, we camped among the lupins and watched the last rays of the sun redden the snows of Chapicalqui, which looked all of its 20,998 ft.

It was a lovely walk next day, dropping into a valley that grew more fertile with every mile so that, by the time we reached the handful of thatched huts known as Colcabamba, the stream-side vegetation seemed truly tropical. Here we camped on a little knoll beside a field of ripening maize while, for three days, we explored the district, making friends with our neighbours who, poor as church mice though they seemed, were hospitable and friendly. From the fresh maize stalks they were brewing chicha, the maize beer, copious quantities of which are consumed at all Indian gatherings, and everybody we met was chewing the young stalks which were as sweet as sugar cane.

A conical hill rose a few hundred feet above our tents and here too was ample evidence of an ancient community. Scattered among the ruins, half covered by soil and undergrowth, were great blocks of granite, a yard square and a foot thick, on which carvings of animals or geometric designs stood out in relief almost as clearly as when they were sculptured over 2,000 years ago. We dug them out, made sketches and, weeks later at Lima, were tickled to be told that, although the site was recorded, the carvings were unknown. Tales of half-buried cities to the east intrigued us and we began to fancy ourselves as archaeologists!

But our journey took us north up the valley of the Huari-pampa to where a side valley joins it from the west. Here we stopped to climb a hill of 16,000 ft. marked on our map as Pyramide, from whose steep slopes the ridges and pinnacles of the east face of Chacraraju fairly took our breath away. Here too we climbed to a lake high above our tents. It was

one of those days when, with no great intentions, we kept pushing just that bit higher to see what lay beyond the next ridge. Greg and Donato were going as fast as they would at sea level. I was slower and, at around 17,000 ft., dropped out while they pushed on to climb, on the spur of the moment, a virgin peak of over 18,000 ft., which sprang from the ridge running north from Chacararaju. We followed the Huaripampa Valley until it petered out below the glaciers of Taulliraju. For hours we traversed below the precipices of its unclimbed south face, but try as we would, we could discern no possibility of a route up the 5,000 ft. of rock and ice that led to its summit.

For the first time the weather looked unsettled, heavy cloud blowing up from the east kept hiding the tops, and we were in some doubt whether to camp where we were or to put a high camp on a ridge to the east with the object of trying for a peak the following day, or to push westwards over the Punta Union Pass. The donkeys were far from fresh but against that there was little bite for them on this side of the pass and we had enough hours of daylight left in which to get over the watershed. Moreover, it was obviously snowing higher up and the prospects of getting a peak were uncertain, so we settled for the pass. But this certainly looked no cakewalk. Ahead lay a series of slabs leading up to an imposing rock ridge nearly 16,000 ft. high which was apparently sheer for the last few hundred feet. It looked impossible to get fresh donkeys over it, much less tired ones, heavily laden into the bargain.

But it wasn't! They climbed like goats and when we reached the top pitch which was indeed almost sheer, we had one of those surprises that make mountain travel in Peru so exciting and so different from anywhere else in the world. For there, zigzagging up the rock face, was a ramp, probably made in Inca times or earlier, and just wide enough for a laden donkey, which led us to a narrow cleft in the knife edge crest of the ridge. Once more we stood on the main divide of the continent, gazing westwards this time to the Pacific.

The far side was nothing like so steep and we dropped as quickly as the tired donkeys could travel until, by a stream bordered by lupins, we found a good site for the tents with plenty of herbage. We were on the fringe of a shallow combe, a mile or two across, that marked the beginning of the Que-

brada Santa Cruz which, for twenty miles or so, runs westwards to join the Santa Valley. The glaciers of Artesonraju seemed close above our camp, the great pyramids of the Alpaymayos, though not far away, were hidden in a combe of their own and, to the north, the many summits of the Pucarhirca massif looked confused against the proud single spire of Taulliraju.

All next day we stayed there probing this side valley and that, scrambling to any vantage point that would enable us to see just one more aspect of these superb mountains. I remember too that we contributed our quota to the spread of European culture by teaching our boys to play "boule" with rounded stones.

Next day's march was a fairly long one. To find grazing for the donkeys it was essential to get beyond the gorges of the Quedraba Santa Cruz. For the first few miles we kept dropping from one flat area to another, searching for places to cross a deep stream that meandered through marshy ground. The place was alive with birds, flocks of pied plovers, many waders and innumerable wild geese among the spongy tussocks that indicated the approach to a large lake. Here the flats ended and we had to clamber up the rocky hillside to dodge the cliffs that margined the shores.

Beyond the lake a few wild looking cattle were being rounded up by a trio of equally wild looking men riding bareback. As they rode up to greet us we noticed that one carried a rifle and he explained that they had been out hunting for venados, the wild deer of the Andes. A rough track led past their thatched huts and, a few miles beyond, descended by a series of steep zigzags into the gorge. Our donkeys kicked up clouds of the dust that covered the track inches deep and, hemmed in as we were by the narrow walls and tropical vegetation of the gorge, the air felt heavy after weeks among the heights. The eye wandered perpetually up the steep rocks to where the snows of Nevado Santa Cruz shone 10,000 feet above our heads. The rough stony track, the dust and the confined space made for heavy going and I was glad when, after what seemed an interminable time, we could see the end. Here the gorge was so narrow that a heavy door in a rock face sufficed to block it, though whether its purpose was to keep

marauders out or to keep cattle from straying, I couldn't make out.

Once beyond the door we were in a different world, a pastoral world of small red-roofed farms, each surrounded by a few cultivated fields and shaded by clumps of eucalyptus trees among which parakeets chattered. The maize was being harvested and we camped in a tiny patch of stubble where the donkeys ate their fill of the sweet green stalks, while we enjoyed freshly boiled cobs for supper.

We spent most of the following day climbing steadily in an endeavour to find a place marked on our map as "El Palacio del Inca". Repeated enquiries produced the vaguest of answers and it was late in the afternoon before we climbed a little hill and saw below us the great quadrangle, a hundred yards square, that must be the "palace". It was, in fact, one of the great storehouses built by the Incas and stocked with food and other necessaries at strategic points throughout their domains. Our little hill must also have been populous in ancient times for it was covered with the ruins of great walls and riddled with underground passages. Connecting it with an adjacent hill was an escarpment that dropped steeply to the Santa Valley 3,000 or more feet below, and along its edge the remains of a string of fortifications were now occupied only by scorpions and tarantulas.

For some reason the details of that evening stick in my mind, perhaps it was the peace of the place, but I can remember all the changing colours of the sky as the sun sank behind the Cordillera Negra; orange, red, lilac, then violet before merging into the navy blue of night. We were now torn between a desire to go on wandering through these gentle uplands and the more worldly attractions of the little Indian towns of the Santa Valley. In the end the valley won and we were not sorry for, while our boys drove the donkeys up the forty odd miles of dusty track from Caras to Huaras, Greg and I reached Yungay on the eve of the Corpus Christi celebrations.

If only I could describe the rapture of the crowds as the Host is borne through the streets, the chanting, the spreading of flowers, the thousands of lighted candles and the fervour of the kneeling multitudes. Or even attempt to convey a fraction

of the excitement that mounts during the fiesta that follows when one and all, whether dressed in their brightest and best or only in rags, take part in the boisterous tomfoolery that makes them roar with laughter. The mummers, the musicians, the jesters with their practical jokes at the expense of all and sundry, the drinking, the roasting of pigs in the streets; this must be the way in which our own festivals were celebrated in mediaeval times, long before Christmas became a commercial proposition.

That the Indians of Peru are, in the main, ignorant, poverty stricken and without hope is obvious, but to condemn them as sullen, drunken and unreliable is wrong; so should we be in their environment. What really is remarkable is that, after being downtrodden for centuries, they still retain that spark of gaiety which, given the chance, enables them to enjoy a bit of spontaneous fun just as much as the rest of us.

IN THE FOOTSTEPS OF THE FIANNA

by W. C. I. Crowther

IN JUNE 1963 I was able to fulfil a desire to visit County Kerry and so to fill a glaring gap in my mountaineering experience of the British Isles. It was to be a family holiday but my wife, being a good Y.R.C. type wife, accepted that as we were going to a mountainous region, I would naturally spend some time climbing.

When planning a visit to any of the Irish hills, particularly to the Killarney mountains, it must be realised that climbing is a very little followed pastime in Ireland, that guide books are virtually non-existent and that there are none of the obvious cairned tracks that criss-cross the English and Welsh hills.

Maps are also a problem. The ordinary Irish one-inch ordnance survey map has been little changed since the last complete survey was made under the British Government in the latter half of the 19th century. The printing is of poor quality and the maps are inaccurate. The one-inch ordnance survey "Tourist Edition" of the Killarney district, covering the best, but by no means all, of the Kerry mountains, is a little better but nowhere near the standard of the British one-inch ordnance. The Bartholomew half-inch is a fair alternative.

Through the good offices of the Y.R.C. Hon. Librarian, I was able to get in touch with the Hon. Secretary of the Tralee Mountaineering Club, Sean Kelly, who kindly sent me a copy of a small book by J. C. Coleman, *The Mountains of Killarney*, published in Ireland about 1948; I recommend this to anybody wishing to visit the district. Although there are many tourist guides to Killarney, there seems to be no other book on climbing. It is rather odd that this fine mountain area, crowned by the highest group in Ireland, Macgillicuddy's Reeks, and close to a world-famed beauty spot, the Killarney Lakes, receives so little attention from climbers.

The highest point, Carrantual, 3,414 ft., is a respectable peak by any English or Welsh standards and the whole range is very attractive and rather mysterious. The Tralee Mountaineering Club has kept a visitors' book at the summit of Carrantual since 1957, and it appears that only 500 people climb it

each year, which of course includes the ordinary tourist who wants to walk up the highest mountain in Eire as well as the serious climber. It is only fair to add that the "Tourist Route" up Carrantual, via the Devil's Ladder, is about the most strenuous route of its kind I have come across in the British Isles. Compare this number with the annual tally of those who reach the summit of Snowdon, or Scafell Pike. Hardly anyone visits the other peaks, in fact I saw nobody else on the hills during all the days I was there, except companions from the Tralee M.C. with whom I was privileged to climb on two occasions. The result of this is that there are almost no foot-paths and cairns appear only on the summits.

Good rock climbing is not there in abundance, which is, I suppose, the main reason for this comparative neglect. There is scrambling and grand ridge walking in plenty. The rock is mostly old red sandstone and the area is much affected by glaciation so rock is extremely broken. Furthermore, since the south west of Ireland is almost sub-tropical in climate, the vegetation is profuse, fine for the botanist and searcher for Alpine plants, but discouraging for the prospective rock climber. I am sure, however, that good long mountaineering routes of a fair standard are there for the finding, waiting for anyone who is not so concerned as I was with getting in as much as possible in a short time and who is prepared to do some gardening. They may be rather of the nature of steep scrambles interspersed with more difficult pitches. Coleman writes about possibilities under the summit of Caher, 3,200 ft., in the main Macgillicuddy's Reeks range and also on Manger-ton to the south east of Killarney. Personally I would like to explore the slabs and terraces rising up about 2,000 feet from Cummeenoughter. This is an interesting hanging valley on the north side of Carrantual, spilling its waters down into the lovely and lonely Hags Glen, where gather the waters from the northern flanks of the Reeks. I believe that this hanging valley could provide fine long routes up to the spectacular Carrantual-Beenkeragh ridge. Coleman mentions a first ascent there in 1935 by Kerrigan and Adair but I doubt if much information exists about their route.

I rented an excellent house in Glenbeigh, a few miles away, on the northern coast of the Iveragh peninsular, but camping

would be grand indeed, though I didn't see a single tent during my stay. A car is essential for a short holiday as there is hardly any public transport. All the locals seem to travel either by bicycle or the ubiquitous donkey cart. There are plenty of jaunting cars to be hired in Killarney and whilst this is a very pleasant way of going round the usual beauty spots and listening to the highly unlikely stories of the jarveys who drive them, it can hardly be classed as either suitable or economic transport for the mountaineer.

The main attractions of Killarney lie roughly in an east to west line starting with Killarney town at its eastern end, then come the justly famous Killarney Lakes which are really beautiful. West of the lower lake the Purple Mountains drop straight into the water; these rather bare heathery hills are separated from the main ridge of the Reeks by the great cleft of the Gap of Dunloe. This is the legendary stamping ground of the Celtic hero Finn mac Cumhal and his followers the Fianna, the tales of whose exploits I will leave to the guide books and the local story tellers. The northern end of the Gap is the normal starting off point for the traverse of the main ridge. This continues along a rough east to west line, winding somewhat, with Hags Glen to the north and the long valley of Cummeenduff to the south, until the top of the Devil's Ladder is reached at the point where it climbs up from Hags Glen to the col separating the main ridge from Carrantual. Here the ridge splits into two. One branch carries on westwards from Carrantual to the summit of Caher; the other strikes off northwards to Beenkeragh and runs above the Cummeenoughter slabs mentioned earlier. Between the two ridges, 2,000 ft. down, lie the three loughs of Coomloughra, and further still to the west is Lough Acoose beside the road from Glencar to Killorglin.

It was here that I started my first day on these hills, alone, driving my car eastwards from the main road by Lough Acoose, up a rough moorland track to a townland, called Derrynafeana on the map, lying under the shadow of Caher. I set off walking in intermittent showers towards the first peak on the Caher ridge, Curraghmore, 2,695 ft. The peaks were hidden by the cloud base which seems to lie perpetually at about 2,500 ft. The path soon petered out so I decided to leave

the stream and strike straight up the side of Curraghmore, a long, arduous and somewhat unrewarding slog up heath and grass. As I climbed up into the cloud it became steadily gloomier and once I had gained the summit cairn of Curraghmore I had to consult my compass to find the way up the ridge to Caher, visibility was very bad and the way not immediately obvious. I found that the compass was very important in these hills, which collect all the moisture blowing in from the Atlantic in an almost perpetual cloak around them. It is easy to get lost and the broken cliffs fall away steeply for 1,500 to 2,000 feet in many places, the friable nature of the rock adding to the dangers.

I made the summit of Caher but could see nothing at all. Coleman says that the summit is very bouldery but it did not seem particularly so to me. I did not stay long but pushed on along the ridge to Carrantual. The going now becomes more interesting and the ridge narrower and more rocky. The summit of Carrantual actually came as a surprise, I reached it so quickly that at first I was not sure whether or not I was there. However, the collection of hardware, stonework and joinery soon quelled my doubts as to whether this was really the highest point in Ireland. There is a large cairn which appears in the photograph in Coleman's book. Set into the cairn is a little shrine which consists of an old orange box with a Madonna inside, and another box containing the Tralee Mountaineering Club visitors' book. A bronze panoramic direction indicator has been set up nearby by the Irish Youth Hostel Association. Most impressive of all is a large wooden crucifix, about twenty feet high.

This miscellany annoyed me at first but by comparison with the tops of the highest mountains in some other countries it was in very good taste. I ate my lunch and smoked a pipe but it was cold, damp and windy so I had no desire to linger in that bleak spot. I signed the book and glanced through it but recognised no names except those of some Tralee M.C. members, then I went on northwards along the ridge to Beenkeragh. I did not intend to traverse the main ridge that day but to do the circuit of Coomloughra and return to my car at Derrynafeana.

The portion of the ridge between Carrantual and Beenkeragh

is the best on the Reeks. Whilst not up to the standard of the Skye ridges either in length or severity, it nevertheless provides a sporting traverse, with gendarmes, castles, slabs and crags falling away steeply on both sides. The wind was very blustery and I would have preferred to be roped for parts of this section, but I was alone so I did not tempt fate too much with any gymnastics. The exposure was splendid but the wind disconcerting. I found that Vibrams were not to be trusted too much on the lichen covered hard sandstone. I got an occasional view down into the three lakes of Coomloughra, black and shiny below me. The clouds blowing up from the valley with an odd dark peak appearing above them gave the place a weird atmosphere.

Carrying on from Beenkeragh, I traversed Skregmore, the last peak that can properly be said to form part of the ridge, and then descended in a southerly direction into Coomloughra, crossing the river at the head of the smallest and most westerly of the three lakes, Lough Eighter. It only remained to walk over the moors to my car. At Derrynafeana an old peasant woman offered me tea in her cottage and fed me on home-made bread and cakes with great solicitude, asking me to pay her only what I wished and to recommend her to my friends. Somehow I don't think she will ever do much trade in such a lonely place as this. I suppose she was as glad of the unusual company as of anything else.

My next day on the hills was spent away from the Reeks, on a semicircle of two and a half thousanders called "The Glenbeigh Horseshoe", near the place where I was staying. I was glad to have as my companion on this walk Tom Finn, of the Tralee Mountaineering Club. This little range of hills provides walking only, although the scenery is very attractive and mountainous. The most interesting thing hereabouts is the earthwork which appears to be some form of defence system and which runs all the way along the top of the horseshoe. I was unable to get any information about it, in fact nobody I met seemed even to know of its existence, although it is in good condition for most of its length. However, what is one earthwork in a country as full of ancient remains as is the "Kingdom of Kerry"? During the whole of my stay I did not meet anyone local who had climbed any of the hills, they are

just not interested. If climbers are considered a weird breed in England, just think how much more weird the Tralee M.C. members are thought to be by the locals of a country whose economy is still largely based on the homesteader or the crofter.

The following Sunday I was invited to attend a day meet of the T.M.C. to climb on Mangerton, which is part of another range to the south east of Killarney. The weather was really appalling and we spent most of it floundering about in the wettest, blackest and most primaeval bog it has ever been my misfortune to encounter. The day was so bad that we did not even reach the mountain, so I cannot give any first hand account of it. Coleman says that there is good climbing to be had there, on sound rock, and my companions told me that it was in the "Horses' Glen" (Gleann na Capull). When we had finally dragged ourselves, half drowned, from the quagmire, we ate and drank in a copse and spent a pleasant social hour or two discussing, among other equally important matters, the relative merits of the various brews of poteen known to the T.M.C. members. Very instructive; I can now tell at a glance a bottle of moonshine merely dangerous to drink from one that is positively fatal.

My stay in Kerry was now drawing towards the inevitable day when I would have to start off on my long drive northwards, right across Ireland, to Larne in Ulster and I wanted very much to complete my tour of the Reeks by traversing the main ridge. I decided therefore to use my last full day in the district to scramble up the normal tourist route to Carranual, the Devil's Ladder, then to turn eastwards along the main ridge, walking as far along it as was practical, bearing in mind that I had to return to the starting point to collect my car.

The usual starting place for the Devil's Ladder, and the place where cars must be abandoned, is the little village of Gortboy, or Gortbui, at the entrance to Hags Glen and north of the main ridge. A small concrete road bridge crosses the River Gaddagh, which flows from Hags Glen near Gortboy school. This is marked as a ford on the map, though the bridge has been there for many years. The track southwards from there up Hags Glen is something of a mystery, at least for its first mile or so, because it has virtually disappeared.

The start of the track is quite clear, a small wicket gate at the side of the road, near the concrete bridge, and the map shows it quite clearly as a cart track leading through the townland of Lisleibane, but it soon becomes a matter of beating one's way through virgin jungle, though it is possible to see traces of what must have been a passable track at one time. Anyway, keeping the sound of the river to my left and walking more or less due south, the mystery was solved when I eventually emerged from the wood. The townland of Lisleibane was deserted, and had been for many years by the look of it. Here the track can be picked up again and it is a surprise to see just how wide a track it in fact is. In the days when the houses here were occupied it would have served to carry turfs down from the peat beds further up the valley. These peat beds are still being cut and probably supply the people of Gortboy and the neighbouring townland of Alohart.

Prominent here, on the right hand side of the valley, are the rocky outcrops and promontories of the hill of Knockbrinnea, 2,782 ft., which are known as the "Hag's Teeth" and very odd they are. Unfortunately, on closer inspection, these imposing crags are seen to be nothing more than piles of loose and unsafe looking rubble, but they make a grand picture rising up above this lonely valley.

Actually the valley was not so lonely on the day that I was there because there was a sheep round-up going on and the hills echoed to the sound of barks, bleats and whistles. After reaching the tongue of land between the loughs of Callee and Gouragh, the track seems to lose itself again and I began to scramble over low lying slabs and terraces towards the scree shoot of the Devil's Ladder which could now be quite clearly seen rising from the head of the valley up to the col between the main ridge of Macgillicuddy's Reeks and the great mass of Carrantual itself. Further to the left is the hanging valley between the rocky and terraced west face of Carrantual and Beenkeragh. This is the valley I mentioned earlier, which I would have liked to explore for climbing possibilities, but there was no time. The way up the Devil's Ladder although not really difficult, is a hard grinding scramble up the large loose boulders of a scree shoot and the grassy saddle at the top comes as a relief. Behind, the glen is a truly magnificent picture.

Even though this is the tourist route there is no trace of a path leading from the col up to Carrantual so far as I could see, but my way lay in the other direction, eastwards along the main ridge, and very few people venture along it. In the main ridge there are eight distinct summits, four of which are over three thousand feet in height, strung out in a wavy line eastwards to the Gap of Dunloe. The map does not name any of them. I did not intend to traverse the last, and lowest, two. I had to return to my car at Gortboy and to have completed the ridge would have meant a long walk back over the moors north of the hills. I could not spare the time as the day was already getting on. The ridge, grassy at first, gets rockier and more exciting as you get further east, Caher, Carrantual and Beenkeragh looked very imposing indeed behind. The cloud base was again at about 2,500 feet and so the compass once more became necessary. At one point I got completely lost, so much so that I doubted my compass. I hastily consulted Coleman, found no mention of ironstone deposits hereabouts and ploughed on across a steep and rocky hillside until a break in the clouds revealed the Gap of Dunloe where it should not have been! However, a little reorientation soon sorted things out satisfactorily and I got back to the ridge without further mishap. Although the cloud break was brief it was enough to prove that I, not the compass, had been wrong. This had wasted a lot of time so I had regretfully to leave the ridge a little before I had intended. I made my way down to Lough Cummeennapeasta, then across the moor to the River Gad-dagh, down the valley, through the wood and the little wicket gate back to my car.

My holiday was done, and the lovely Gaelic songs of a girl harpist in the pub that evening added poignancy to my parting from that delightful country.

AVALANCHE!

by L. C. Baume

WHOEVER IT WAS said: "Man, like a pebble on a glacier, moves imperceptibly but always down," had obviously never descended the North Gully of Ben Lui in quite the way that six Ramblers did on Good Friday, 1963. Not that their way is to be recommended but "imperceptibly" would hardly be the right choice of word: precipitately, perhaps—unpremeditatedly, certainly.

We had in fact already turned back from our attempt to reach the snow-covered summit, wise counsels having finally prevailed, and we were descending perceptibly though somewhat precariously, when *it* happened.

At the very moment that I heard Dave's warning shout of "Avalanche!", as the snow hurtled silently down from above us, I felt myself projected with all the kick of an elephant's hind foot into outer space and suspended there motionless, between what had been and what was to be, while the whole mountain with its ice-covered rocks and snow-filled gullies rushed upwards and past me and the earth hastened inexorably towards me. Towards us, I should say, for there were in fact six of us, though from the moment that I was fired into temporary orbit I was totally unaware that five other linked human beings were in similar parlous positions.

I was completely alone, in absolute darkness and utter stillness. There was nothing, absolutely nothing, that I could do. In all other similar predicaments that have occurred periodically during my life my eventual survival has largely depended on my own reactions and will. But this time, I realised, I had "had it". This, I felt, was a pity, but at least it might be worth while exerting myself so as to make my journey from one world into the next as comfortable as possible. I was conscious of the fact that when the accumulated mass of minute gossamer snowflakes had overwhelmed me, it had precipitated me into meteoric flight face down and head first. It would be better, I thought—for during all this time my mental processes were wholly rational—it would be better by far if I were to reverse this hazardous aerolitic position so that my feet, rather than my head would be the first to come into contact with

any immovable object crossing my irrevocable path.

I had the impression that this dual axial manoeuvre was successfully accomplished and I felt reassured. A little later however—and this is relative, for time and space are one—I thought it would be safer still if, instead of keeping my arms, Icarus-like, outstretched, I were to wrap them round my head even at the risk of upsetting my delicate equilibrium. As I did this or at least had the impression of doing it, I felt the outside pressures increase alarmingly; I was being crushed and suffocated beneath an intolerable and unsubstantial load.

It was imperative, I remembered, to remain on the surface, to ride the crest of the wave and not drown; I must swim, swim forcefully as I had never swum before; I must rise from the depths and free myself from the oppressive weight that was crushing the very life out of me. I struck out, a sort of butterfly stroke, for all I was worth. I could no longer breathe; I must clear a space before my face, push back the enveloping snow and create a pocket of air. But this was not easy, the snow would not stay put. I must hold my breath then until I reached the surface. How long, how long?

The pressure eased a little but at the same time I felt myself accelerating rapidly; I had probably gone over the edge of a cliff, or else my trajectory had re-entered the earth's gravitational field. This was proving endless, I thought; I must be near Tyndrum by now. My eyes, my ears, my mouth, my lungs, all were full of snow; my body was ready to burst; to hold my breath any longer would be impossible. This was the end.

At this moment I felt my speed slacken suddenly. I slowed down and slithered to a stop, with neither a bump nor a tremor: a perfect three-point landing. I fought my way to the surface, found I was there already, sat up, opened my eyes on to this wonderful world and looked around me. Slowly the other snow-plastered astronauts emerged, each from his private world yet all entangled together in a network of nylon. All emerged, that is, except one for I, quite unwittingly was sitting on top of him; only his nose protruded from the snow.

So there we were at journey's end, some 700 feet lower down the mountain and none of us seriously hurt. We had been fortunate in our experience. Was it Oscar Wilde who said that

experience is simply the name we give to our mistakes? There is of course a moral to this story but it needs no stressing: it is what we have been teaching and preaching for many years. For myself, I shall always think of Ben Lui with undying gratitude.

SHAMBLES AMONGST THE ALPS

(With apologies to the late Edward Whymper, F.R.G.S.
First Honorary Member, Yorkshire Ramblers' Club, 1893)

Part I: The Dent du Requin

by F. D. Smith

IT IS USUAL to read in climbing club Journals articles detailing the events of successful expeditions into the mountains but this one could not be more different. Although I have had my fair share of happy and successful climbs it is the days that end in shambles that are the most engaging and that stick longest in the memory. It is on occasions such as these that one learns to appreciate the hidden qualities of one's friends and in this I have been particularly fortunate.

From all accounts the year 1962 was a vintage year for bivouacs, no fewer than four English parties were caught out on the same mountain, and on the same night. The mountain in question was the Dent du Requin which is known at the Requin Hut as "Le Dortoir des Anglais", and that year it added to its list our own party of Ramblers, made up of Roger Allen, David Stenbridge, John Varney and myself.

Encouraged by the success of the previous day on the Aiguille du Géant, we decided upon the 'Voie des Plaques' route of the Dent du Requin as our second day's climb. This route was chosen because it is described in the Vallot guide as "suitable for a late start". Roger was keen to try dried vegetables as a means of reducing rucksack loads; on one of our shopping excursions we found some packets of dried potatoes named "Fécule". This, together with the other items of food comprising our evening meal, was given to the guardian at the Requin Hut to prepare, as is the custom in French huts. Half an hour later a puzzled girl returned, apologised profusely for the mess she had made of our dinner and explained that she had read the directions most carefully. The potatoes had become a nauseating glutinous mass resembling billposter's paste. We improved our French vocabulary by learning that the word "féculé" means starch. The meal, however, was not spoilt but much improved when, with the compliments of the guardian, a dish of cooked new potatoes was presented.

In no time it was 4.30 a.m.; we rose with the usual reluctance and got away by six. From the hut a well used track led us to the glacier which we ascended to reach the rocks. We found that, in trying to avoid a snow and ice pitch on the rocks, we had gone too far to the right and that we must now be on one of the variations of the Mayer-Dibona route. This route proved both interesting and exacting, it comprised a number of steep chimneys, delicate traverses and narrow ledges. Allen and I were on the first rope, Varney and David Stembridge on the second. The guide book is delightfully vague when describing these variations and was of little use to us. The unknown, however, adds materially to the interest and I was lucky to lead some of the best pitches.

One of the harder pitches was a chimney of 60 ft. or so, surmounted by a series of huge overhanging blocks. A complicated rope technique was devised and the obstacle overcome. The blocks formed a sheltered bivouac spot and an excellent place for our second breakfast. We ate cheese, bread and honey and enjoyed wonderful vistas of the neighbouring peaks, Aiguille Verte, Grandes Jorasses and Aiguille du Géant illuminated by unlimited sunshine. Directly above the blocks is a short steep wall followed by a series of traverses of ledges to left and to right, then comes the crux, a sloping flake. The space behind the flake is packed with gravel, leaving not so much as a finger hold. My whole weight was supported by my crooked left arm held at waist level; somehow or other I managed to edge my way along to the safety of a rocky spike. A reasonable stance came into view so we brought up all four to this point as quickly as possible to save time and effort.

Looking up I noticed a trail of six pitons indicating trouble, but a little to the left was a chimney with a crack along its length. Although the crack was quite devoid of holds it was possible to hand jam and knee jam up it to join the ridge. Though a window in the rock we had our first view of the final tower of the mountain; it looked quite inaccessible but John Varney, who climbed it a few days later, found that it was relatively easy.

Signs of approaching bad weather were evident in the sky and the temperature was falling. The time was 5 p.m. and we

agreed that we should rope down as quickly as possible to the hut. This decision proved to be our undoing, when four people are concerned abseiling can be tediously slow. Time seemed to pass very quickly and well before we reached the breakfast bivouac it was getting dark. At this point we were on a wide ledge, but without any cover. Hastily we made plans to build a shelter wall, using every available stone, and snow as mortar. Within minutes of finishing it the sleet began to fall; we bunched together, putting on every spare piece of clothing in preparation for sleeping the storm out. After a simple meal David gave each of us a sleeping tablet. The storm grew in intensity and the weather gave us a fine display before the pills took their effect.

When we eventually awoke it was fine but cold; despite the rain and snow we were not too wet. This was to some extent due to our large polythene bags which, although ideal for keeping rain out, also keep in the condensation. We might have completed the climb but the call of a good meal and sleep was too strong. We abseiled down without difficulty and were soon warm and back on the glacier. In glorious sunshine we retraced our tracks to the hut. We were greeted by a highly amused guardian who was amazed to see that I was wearing my Y.R.C. tie, the terylene version, usable as a sling in an emergency. I was asked, in best school English, "And where is your rolled umbrella?" The starch and tie stories reached Chamonix long before we did. We returned to the valley by way of the Aiguille du Plan and Aiguille du Midi, much the wiser for our excursion and knowing each other much better; thus ended another Shambles amongst the Alps, not the first and I am sure not the last.

Part II: The Grépon

by C. R. Allen

THE ACCOUNT which I am about to set forth describes, in effect, a single day spent in Alpine travel; the day concerned was, however, an unusual one and it is my hope that other travellers may find the account amusing and perhaps instructive.

It had been our intention to reach Chamonix early enough

to attain the Couvercle Hut, but a certain lassitude delayed us and we found ourselves obliged to pass the night in the "dormitory" at Montenvers, a noisome place almost wholly devoid of the amenities which civilised beings have come to think necessary. Our party of four consisted of Mr. F. D. Smith, Mr. D. W. Stenbridge, Mr. J. Varney and myself, united by the spirit of Alpinism and by membership of an excellent and exclusive Club rooted in the greatest of England's Counties. We were joined in residence by a French party, which seemed to embody all the traditional characteristics of the race. Some sleep was, nonetheless, attained.

We rose at two in the morning and by simple phlegmatic efficiency succeeded in leaving before the Frenchmen. Lack of knowledge, however, resulted in our becoming mazed in a complexity of paths, and we were obliged to await their guidance to the path leading to Plan des Aiguilles. At the foot of the Nantillons Glacier there was light enough to see a selection of dubious looking clouds. A steady ascent of the glacier, including a convenient scaling of its well known 'Rognon' brought us to the foot of the couloir which divides the Grands Charmoz from the Grépon at 6.30 a.m. Here we left all our crampons and two of the axes and climbed the true right wall of the couloir—an enjoyable scramble except for the rubbish dislodged by the French above. At the col we briskly partook of refreshment, contemplating the superb panorama across the Mer de Glace; but some signs of gathering cloud were evident and a bitterly cold south wind was beginning to rise.

A short traverse and climb brought us to a notch beside Mr. Mummery's famous crack. It fell to me, by lot, to lead this section; after a few fitful attempts I did succeed in gaining lodgement in the crack. The wind, owing to local conformations of rock, was blowing, so to speak, from the anatomical south and this I found less than encouraging, especially since it was now armed with a light hail; while only part way up the crack it became clear that cold and fatigue would not allow me to continue. After five attempts on the crux I assumed a pose of insouciance and belayed in it. Smith then followed me and led through in an effective and forthright manner to the top. From this point we 'threaded' the ridge,

now misted, through the Cannon Hole and an awkward little chimney, to emerge again on the Nantillons side of the ridge. I performed a satisfactory penance to St. Mummery by leading the 'Râteau de Chèvres'; despite my companions' remarks I am disinclined to believe that any normal goat could have succeeded.

We continued more easily along the ridge, though the wind was unpleasant; a tight chimney in descent cost me a belt buckle, but a hasty improvisation saved me from embarrassment and the risk of intimate frost-bite. We were soon on top of the Grand Gendarme; roping down from this was tricky and involved difficulty in retrieving the rope, despite precautions. Owing to lack of forethought we were then obliged to walk along the 'Route des Bicyclettes'. Two leads then brought us, outside the rock tunnel known as the 'Crevasse', to the final crack. My progress up this coincided with the arrival of a hail-storm, and I sat beside the metal Madonna on the summit until a lull occurred. It was while Smith was climbing that I noticed that the Lady beside me had begun to sing in a thin, reedy voice . . . while Smith and I were looking for the route of descent we were both struck a smart blow on the back; even in the act of mutual remonstrance we realised that the phenomenon was electrical. A vicious crack of thunder on the Blaitière completed the warning, we roped down very quickly to the Crevasse and retired into it—clearly for the night, for it was 6 p.m.

The Crevasse consists of a rock tunnel of roughly rectangular section, variously eight to twelve feet high and never more than two and one half feet broad. Smith and Stenbridge now set to work as Esquimaux Masons and quickly built a wall of snow-ice, from the floor, to block up the windward side of the tunnel. We were all then able to pack ourselves in: Stenbridge sitting by the wall, Smith facing him, myself standing and Varney sitting below the entrance. No other arrangement was possible.

Foresight had provided us with food, some vessels and one of Mr. Bleuet's ingenious stoves: a meal of hot soup and raisins was laboriously prepared. The night passed interminably, with the wind roaring outside; we were all very cold indeed and got but little sleep. At four o'clock we made a hot drink consisting

of hot milk with honey dissolved in it—a wonderful reviver which I cannot commend too highly; at six o'clock we took a second helping, extricated Varney from the heap of snow that had surrounded him overnight and then emerged. The morning was clearing: after an unpleasant session on ice-glazed holds, with thanks for the rope left hanging, we were on the summit and in sunshine at 8 a.m. A quick rope-down brought us to the Brèche Balfour, where we basked in the inexpressible glory of the sun and ate the rest of our food.

The descent began with a series of abseils, of which the last was an overshoot into a long ice-gully which had to be re climbed to a very sharp rock bridge. Smith scored again at this point by devising a method for crossing which was distinguished both by ingenuity and by induced bodily discomfort; in this way we arrived back in sunshine on the 'C.P. Platform' at noon. Easy scrambling then brought us to the Col des Nantillons, and we descended the glacier in thick mist to retrieve our deposited equipment. At the foot of the glacier we were again gladdened by sunshine and walked wearily back to Montenvers. I meditated on the horror of discovering that, on the descent of the snow-plastered faces above, any mental attitude but positive alertness would have let me nod off to sleep; on arrival at Montenvers I was glad to surrender at last to sleep, even in that wretched place.

Of the lessons that might be learned from our tale, the most obvious is the need for speed: be it said with shame that the French party reached the glacier, in descent, before the storm. As to what might have befallen us had the storm continued to rage for another day or two, I prefer not to speculate. I must confess that, except for those contained in the foregoing account, we have no meteorological or glaciological observations to report. Our geological impressions are confined to the conclusion that the rock of Chamonix is among the most abrasive known to science.

Part III: "The Roof of Europe"

by J. A. Varney

WE WORKED HARD for two days throwing earth in on the water pipe. The earth had lain for eighteen months beside the trench

and my sore hands bore witness to its rapid rate of concretion. There was, however, a certain pleasure in this labour in the heat of the French sun and we enjoyed all the more the good food and the comfortable bed at the guide's home. It was a pleasant enough way of prolonging our holiday as, across the valley, we had the rewarding, if at times unsettling, panorama of the entire range of Mont Blanc from which the sun was melting the excessive snow of the early season. Next day we would probably take our leave as Gilles was to go away for six days with two clients, ladies, who were apparently quite tigerish, having just spent a month in the Taurus and a week in the Dolomites and were now working up for the climax of their season.

It was therefore with some trepidation that I heard Gilles' suggestion that I should consider joining his party as porter—(acting, unpaid). I agreed to do this, however, as it seemed to me to be a great privilege to have the services of an amiable guide and the company of expert lady alpinists when I expected to be homeward bound. This illustrates how gullible one can be if the trap is well baited. Gilles, being the only one who knew all the factors, knew what he was up to and had his own motives.

The next day Gilles took the ladies up the Grépon, taking the first téléferique from Chamonix, while I nursed my blistered hands and tried to accumulate a satisfactory amount of equipment, much of my own having been packed into a box which was by now in Calais. The ladies and their guide returned unscathed from their mountain and I judged from their accounts that I was not going to be a burden to the party in spite of the large rucksack I was to carry around the peaks.

We went, the next evening, to the Refuge d'Argentière whence the following day, as the weather was bad and most people were apparently happy to go down, we contented ourselves with ascending the local peak and getting a distant view of the ice sheet on the Col du Dolent which we were to cross. The pace seemed quite satisfactorily slow but next morning, as we chased up the glacier in the dark, it was obvious that Gilles had ambitions. I was grateful that the ladies did not share these ambitions and, since they made this fact known, I was able to contain my own complaints.

By dawn we were above the bergschrund which was tamer than expected and were moving up the four hundred metres of 60° ice which separated us from the col. It was here that I first began to realise what it means to be a porter: not only to be balancing on crampon points—step-cutting is considered old fashioned even by guides—loaded with the biggest rucksack one has ever carried up a mountain, responding to the leader's movements and needs but also, at every moment, to be prepared to hold two ladies whose simple trust and mutual regard enables them, without fear, to relinquish their hold on the mountain simultaneously. The older lady remained quite calm throughout but the younger, far from rallying to Gilles' encouraging cries (I think it was at this point that he nickname her Jelly Poo) was eventually reduced to tears and I was grateful when his conscience obliged him to take a more personal interest in her welfare and allowed me to find peace and freedom at the right end of the rope.

It was a sorry little party that emerged from the shadows of France to meet the sunshine of Italy but breakfast and the decision to abandon our plans to traverse Mont Dolent lent us new life and we fairly sprang down the more broken face of the Italian side of the col with the Elena Hut as our objective. Before we got to the valley, however, we chanced upon the Bivouacco Dolent which stands on the true left bank of the Glacier du Pré de Bar above the lower ice fall. This excellent little hut was vacant and contained just enough beds for our party so we decided to stay there in privacy, dry our clothes, sun bathe and exist on what food we had with us. I was particularly grateful for this as I was rather surprised to discover what I had been carrying. We didn't realise how fortunate our decision had been until next morning, when we passed the site of the former Elena Hut which had apparently been destroyed by an avalanche some years ago.

We dined well in Courmayeur and provisioned ourselves for our return to the mountains. Gilles and I combined forces to persuade the ladies to venture to the Gamba Hut to "look at" the Innominata and the Peuteret as we wanted to do something interesting whereas the ladies were feeling unsure of themselves in view of their recent performance. The guardiano of the Gamba was our ally as, firstly, he was himself so un-

pleasant and his food was such poor value for money that the necessity for moving on was easily impressed upon our clients and, secondly, he told such fearsome tales of the state of the Fresnay Glacier that it looked as if the only feasible climb was the Innominata face. The ladies agreed to have a look, so by 9.30 next morning we were installed in the Bivouacco Eccles which, unlike the Elena Hut, although reported destroyed by avalanche, stands boldly poised above the upper Glacier du Brouillard on a jumble of overhanging rocks with so little horizontal space that we had to use the roof for sunbathing.

After spending some time thus it seemed to us that we could usefully make a reconnaissance, so Gilles and I put on shirts over our bathing costumes, donned our climbing boots, roped up on an odd waist length (20 ft. is a bit short) grasped our axes and, thus strongly clad, took our leave of the ladies to ascend Pic Eccles, something over 4,000 metres. In our perambulation we discovered sundry pieces of wood, presumably remnants of the former ill-fated bivouacco, which we bore back with us for our evening rituals. As the darkness rose out of the valley we built our fire on the very narrow ledge before the door and sat down inside to enjoy a smoke and a drink. The drink was very pleasant but the smoke, of which our fire was the sole source, soon became unbearable. We opened the window of the hut which merely improved its efficacy as a flue so, being loth to lose our hard-won flames, we evacuated and stood along the very narrow ledge between the hut and the abyss. As in this position only one of us could actually see the fire, the rest soon began to take a more objective view of the situation and, heedless of protest, hurled the offending brands down the mountain and retired to their bunks.

The bivouacco is only big enough for six if five are in bed or, in our case, for four if three are in bed. In the morning Elizabeth prepared breakfast for all of us and then lay on her bed while Gilles got ready. After they went out Jelly Poo and I got ready in turn and followed on rather slowly and it was consequently some time before we caught up with them. Eventually we came across a rather irate Gilles sitting in the middle of the couloir with stones and ice whirring about him, cursing us for necessitating his waiting in a place so dangerous that it prompted him to consider that his clients should both

be firmly attached to his own rope. According to the guide book the difficulties were now over; this may have been so but the dangers were only now beginning. The sun was at work loosening rock and ice and softening the snow. Soft snow lay over bare ice and there was little of either security or comfort in our race up the face. The danger was constant but the climbing uneventful as ridge followed interminable ridge consistently steep and exposed above the deepening pit of Italy.

Eventually we reached the Brouillard arête where my companions generously offered, at last, to lighten my rucksack by sharing among themselves its edible contents. I also tossed away a few pairs of socks and sundry carabiners and slings to ensure that I would manage the remaining few metres. Refreshed we pressed on to the summit of Mont Blanc where we paused for a smoke—our last precious cigarette—before dropping down to the Vallot Hut where I made lemon tea for our party, not wishing to carry anything further than necessary, and forced upon them the remaining food. Here Gilles and I virtually abandoned our lady friends as they preferred a slower pace whereas we preferred a longer rest on the terrace of the Goûter Hut, which is remarkable for its view of the 'Roof of Europe Pilgrims' actually in process of making their pilgrimage, and a sleep before dinner at the Tête Rousse.

The ladies celebrated their ascent of, for them, a much cherished route, I had had a new sort of experience in mountaineering while Gilles, apart from giving much satisfaction, had managed not to repeat his previous climbs and at the same time had climbed routes of quality.

Next day we rose late and shambled down to the rail head. Having at last rid myself of the rucksack I trotted down the track and lay eventually in the long grass waiting for the T.M.B. to bring up my friends.

THE ICEFIELD RANGES OF THE ST. ELIAS MOUNTAINS

by T. H. Smith

IT HAD ALWAYS been one of my ambitions to join an expedition and explore uncharted territory, but where could I go with only three weeks at my disposal? I had been to Switzerland, Austria, Italy, France, Corsica and Norway and although I had enjoyed all those holidays, there was still a yearning inside me to travel further afield.

At last the great opportunity came, Hamish Macaulay, an old friend who had been studying at McGill University, suggested that I should join him for a holiday motoring up the Alaska Highway. This certainly seemed a rash idea, but the thought of having everything laid on, including a tremendous old Chrysler, seemed too good to be true.

I at once cabled that I would very much like to go with him and later suggested that a reconnaissance trip into the St. Elias mountain ranges surrounding Mount Logan, the highest mountain in Canada (19,850 ft.), might prove rewarding. I therefore wrote to the American Alpine Club⁽¹⁾, who were most helpful and amongst other things suggested that I should approach Dr. Walter Wood, President of the American Geographical Society and Governor of the Arctic Institute of North America, as he is the greatest authority on the region we intended to visit.

Hamish made a special trip to New York to meet Dr. Wood and to his amazement found that the latter was organising a fully equipped scientific expedition which was to have a high altitude base camp right in the centre of the icefield ranges of the St. Elias mountains. He also told Hamish that his team would be only too pleased to collaborate with us, especially in the case of an emergency. This was most welcome news as it meant that a small party of three or four could explore the inner reaches of these vast snowfields in comparative safety.

After studying maps and photographs of the St. Elias Range, which is situated on the Canada/Alaska border, and was only recently described as the last unexplored region in North

(1) American Alpine Club, 113 East 90th Street, New York, 28.

America, we decided to try and organise a small party. The difficulties of forming an expedition at short notice soon became apparent, for who would want to travel half way round the world to join a team such as ours, with no particular aims in view other than exploration work, the hope of making the first ascent of Pinnacle Peak and possibly one or two other unclimbed peaks and the intention to do and see as much as possible on a short holiday.

At the end of several frustrating weeks of letter writing and cabling a party of four emerged, polar equipment was ordered and food lists prepared; in fact everything seemed to be working out surprisingly well considering that the proposed members of the party were literally scattered all over the world. However our luck soon ran out as one member had to retire for business reasons, then, only three weeks before we were due to meet in Whitehorse the third member, a Norwegian, gave backword for no apparent reason. This was really serious and left me with a big decision to make, whether it would really be worth while to continue with my original plan. I didn't want to let Hamish down and as it had in any case been our intention to motor up the Highway together I decided to carry on. There was still a faint hope that Hamish might find a third member to join our team.

To save time and avoid my motoring both up and down the full length of the Alaskan Highway, I arranged to fly straight up to Whitehorse. Hamish decided to travel up from Nassau in the Bahamas via Montreal, so that he could pick up my equipment which had already been shipped over there. He planned to arrive in the Yukon at least a week before I did so that he could buy food, make last minute arrangements and possibly meet some of the members of the Arctic Institute and the American Geographical Society's Expedition.

I left home at 11.30 a.m. on Tuesday, 7th August. After a 3-hour wait in London Airport, having flown from Manchester, I set off again at 6.15 p.m., arrived in Winnipeg at 8.15 p.m., passed through Customs and, after a 2-hour wait for re-fuelling, went on to Edmonton, arriving there at 9.30 p.m. the same evening, local time (5.30 a.m. next day G.M.T.).

Soon after my arrival at the Macdonald Hotel Hamish rang up to tell me that everything was under control. He had met a

few of the scientists on the expedition, and an air drop had been arranged for the coming dawn, weather permitting. He finished by saying that the mountains were just fantastic.

I was away again at 8.00 a.m.; we flew over miles of prairie followed by vast areas of forests and lakes; we changed planes at Fort St. John and then flew over range after range of mountains. We landed in Whitehorse at 11.30 a.m. after a total of 13 hours' flying time and, as far as local time was concerned, just over 24 hours after leaving home. This seemed unbelievable and I could not help marvelling at the wonders of modern jet travel. There is in fact a difference of 8 hours between the Yukon and G.M.T. and of 10 hours when you cross into Alaska.

Hamish came rushing over to greet me and told me all about his mammoth drive of over 7,000 miles in 13 days, the last thousand of which had been along the most appalling dirt roads. This was certainly a feat of endurance, especially bearing in mind that he had either bought or collected all the expedition's food and equipment en route, including a fibre-glass sledge in Philadelphia, freeze-dried foods and specially made air-dropping bags in New York, Mishakawa thermo-ply high-altitude rubber boots in Indiana, snow-shoes, moccasins and thermo-underwear in Montreal, ropes, marker-canes, butane containers and other essential camping equipment in Ottawa, and additional clothing and food in Edmonton and Dawson Creek. On top of all this, during the nights he had spent at motels, he had divided all the food into man/day rations and packed it into polythene bags.

Hamish had arrived in the Yukon the previous week and had made contact with the leader of the scientific expedition, who very kindly offered to fly us up to their glacier high base camp from their lower base on Lake Kluane. He had then visited the Royal Canadian Mounted Police Headquarters and called at the Territorial Offices in Whitehorse where he was introduced to Monty Alford, a renowned mountaineer who is in charge of all the water reserves and natural resources in the Yukon. Alford very kindly gave Hamish all the information he needed about the area we intended to visit and paved the way for various necessary interviews: with the head of the Game and Fishing Department as the area was a Game Re-

serve; with the Secretary of Government Lands who issued him with an explorer's licence; with the Department of Mines and Technical Surveys who supplied us with maps and finally with the Commissioner of the Yukon Territory himself who handed him a most elaborate certificate with a gold seal. A final clearance from the Royal Canadian Mounted Police at Haines Junction, 120 miles north of Whitehorse, was needed before the air-drop could take place. Our lists of food and equipment were carefully scrutinised, our dropping zones and intended routes were noted, details of rescue arrangements and addresses of next-of-kin were recorded. Everything was found to be in order and we were wished "Bon Voyage". Everybody had been most helpful and showed the keenest interest in our project, especially as no attempt had hitherto been made to ascend Pinnacle Peak. We should like to take this opportunity of thanking everyone concerned for the courtesy and kindness shown to us.

The air-drop had actually taken place while I was flying up from Edmonton and Hamish told me it had been a complete success. The little Beaver aircraft which they used was based on the Yukon River at Whitehorse and was of course fitted with floats. It was quite an experience taking off down river, first skimming along on two floats then suddenly swinging on to one as a bend approached and finally leaping into the air and missing the trees by inches.

After some two hours' flying the pilot was winding his way up huge glaciated valleys looking for Pinnacle Peak, a mountain of extraordinarily beautiful proportions. He was getting a little concerned as the weather was far from being settled but Hamish calmed his nerves and with a little persuasion they continued on their way. Suddenly, straight ahead, standing majestically out of the clouds, was the unmistakable outline of the peak we had come to climb. They circled round and luckily the glacier running up to the South Col was free from cloud. With some difficulty Hamish succeeded in heaving out the five heavy kit-bags, the last of which fell just short of the col, which would have made a fine site for our own high base camp.

In view of the bad weather conditions there was no question of a reconnaissance over Mount Logan so they flew down the

South Arm of the Kaskawulsh Glacier and dropped some emergency rations at the junction of the main glacier in case we might have to make a walk-out. Then they went on up the upper arm of the Kaskawulsh Glacier to the large ice-plateau near the foot of Mount Queen Mary. It was in the centre of this huge desert of snow that the scientists on the Icefield Research Project had made their high base camp, and it was from here that we intended to start our walk into our own high base camp just over 32 miles away. Weather conditions by this time had become rather critical but they were lucky in spotting through a hole in the clouds the tiny cluster of tents huddled together in the centre of this 200 square mile basin of snow. They dived down and dropped the three remaining bags containing 8 days' food and other items essential for our walk-in. They got back to Whitehorse a few minutes before my arrival, having taken just over 4 hours to complete their mission.

After being entertained to lunch in Whitehorse by Phil Upton, the Expedition pilot, and his wife, we set off in the car up the Alaska Highway. With us was the third member of our party, a student friend who had come north with Hamish. This highway was built in just over 8 months during the 39/45 war and runs for 1,520 miles from Dawson Creek to Fairbanks. I soon mastered the finer technique of driving flat out along the most atrocious road surfaces but the hazards were nerve racking, tremendous clouds of dust enveloped huge waggons trundling along at well over 60 m.p.h.; overtaking was terrifying. It was even worse after it had been raining when the road was covered with two or three inches of mud and very slippery. The scenery was magnificent, hundreds of lakes and rivers that would fulfil a fisherman's wildest dream.

At last we arrived at the expedition's lower base camp, situated between Silver Creek and the Slims River Bridge at Mile 1054. The sun was setting and the view of the little cluster of tents on the shore of Lake Kluane was an unforgettable sight. My first impression on arrival was one of surprise for instead of being greeted by a gang of bearded scientists, we were welcomed by a jolly crowd of clean-shaven men, with their wives and children. I was taken into the mess tent, introduced to all the members of the expedition and their

families and joined them for an excellent dinner of chicken, fresh vegetables and wine, a pleasant change from the rather scanty meals provided on the various aircraft during the previous 36 hours.

After a most enjoyable evening we erected our tent and I was mightily relieved to get some sleep. I was awakened early next morning by mumbling noises just outside our tent. I whipped up the zipp of our door and flashed it down again shouting "Indians!" Hamish roared with laughter, "No need to worry," he said, "they are camping just across the road in the forest, we will pay them a visit one day."

We were up by 6 a.m. helping Phil Upton to refuel his aircraft, it was a really glorious morning. All was ready for take-off at 7 a.m. so we radioed the high base camp asking them to stand by and to our astonishment were told that it was snowing heavily, hopeless as far as flying was concerned. This was disappointing and we feared lest our air-drops might get buried. Anxiety increased as, every three hours, we contacted 'Glacier' and after two days things became serious. There was no question of our walking in up the Slims River Valley since all our essential equipment had been dumped at the scientists' high base camp. There was nothing to do but wait until the weather improved.

To pass the time I wandered over to the Indian encampment. A charming young Indian girl came slowly forward to welcome me, told me her name was Miss Tommy Smith and led me to her tent where she introduced me to her mother, younger brothers and sisters. They could not understand how I, a white man from far across the sea, came to have the same name as they. There were three families in the camp, Mr. and Mrs. Tommy Smith, Mr. and Mrs. Tommy Joe and Mr. and Mrs. Isaac Moose, but I lost count of all the children. Mrs. Moose very kindly offered to make me some attractive moose skin boots and gloves which she said I could wear when I went back to London. She carefully measured my hands and feet by drawing round them and told me to come back and collect them in a few days time. The workmanship was magnificent but the smell was appalling!

The third day came and there was still no report of the weather improving, though it was gloriously hot and sunny

in the valley. In desperation, rather than hang about base camp, we set trail up Bullion Creek in search of gold. The scenery in this creek was the finest and most spectacular we had yet come across. Armed with picks, shovels and pans we waded across a raging torrent no less than four times before we saw any signs of 'Bed Rock', a heavy black kind of clay where the gold is supposed to settle. We then passed an old, decrepit prospectors' shack and decided that this was the obvious place to start digging, so dig we did. It did not occur to us that we might have been digging someone else's claim.

We had only been at work for a few minutes when an ancient bearded figure appeared from nowhere, came over to us and told us that he hadn't seen anybody up here for years. When I told him that I had come all the way over from England for a three weeks holiday he nearly collapsed. We spent a most interesting afternoon with him learning how to pan, a laborious proceeding. The history of the Yukon was unfolded and we learnt that he had been working up this creek for over thirty years, a hard life indeed, and from outward appearances not very remunerative.

I actually found a very small nugget after panning for only twenty minutes. This was lucky because the Expedition's aircraft then flew low overhead wagging its wings to indicate that all was well for a fly-in. We ran four miles down the creek, during which I fell right into the torrent and nearly got swept away, and after a hectic drive got back to base to find the aircraft already waiting for us. After a hasty meal we plunged into the back of the plane, surrounded by our kit, had a rather exciting take-off and circled over Lake Kluane to gain as much height as possible before heading up the Slims River Valley.

Twenty minutes later we had our first glimpse of the great terminal moraines of the Kaskawulsh Glacier which drains into the Pacific by way of the Kaskawulsh and Alsek Rivers and into the Arctic by the Slims and Yukon Rivers. We swung sharply to the right and followed the huge glacier which is about 45 miles long and varies in width from two to five miles. At last the major peaks swept into view, a truly fantastic and awe-inspiring sight. The sun was setting and the long evening shadows with their spiky outlines emphasised the tremendous

difficulties we would have encountered had we been working our way on foot up the valley thousands of feet below.

Contact was made with Glacier Camp who told us that there was a low layer of cloud sweeping across our landing area. Our spirits sank to a low ebb as, so near and yet so far, we circled for half an hour and then, as it was getting late, had no alternative but to fly regretfully back to base. Next day a further unsuccessful attempt was made to fly us in, then, on top of all our other worries we learnt that, due to clutch failures, three out of the four snow-travellers were out of action. This meant that we should have to haul our own sledge manually for 30 miles in deep powder snow.

Fortunately Monday dawned fine and at the second attempt we landed successfully at the scientists' high base camp. Dozens of men seemed to appear from nowhere as the plane taxied in: this was indeed an important occasion, not only were we acting as mail carriers but we were loaded with fresh meat and vegetables, the first flight for five days. The pilot introduced us to Dick Ragle, the leader of the scientific party, and the rest of his team and we were shown down into their experimental Styrofoam insulated plywood shelter, specially designed for high polar work. It had been above ground the previous year but owing to heavy snowfalls was now 20 feet under.

A cup of tea was very welcome, we had been circling at 12,000 ft. for more than an hour waiting for the clouds to clear and it was cold. The scientists had seen Hamish making the air-drop and had retrieved the three kit-bags; we unpacked them and loaded up our sledge, sorted out the harnesses and climbing ropes, had a quick meal and were ready for off. Before leaving we presented the scientists with two bottles of whisky.

We plodded slowly across the huge accumulation of snow which is drained in a star-like pattern by five of the longest glaciers in the world outside the polar regions. They are:—

The Hubbard, 75 miles, draining south to the Pacific.

The Walsh, 60 miles, west to the Copper River in Alaska.

The Donjek, 35 miles, north into the Yukon.

The Kluane, 30 miles, also north to the Yukon.

The Kaskawulsh, 45 miles, east into the Alsek and Yukon.

We hauled the sledge about 8 miles during the heat of the day and since we were at 10,000 ft. this proved to be quite enough. Even during our comparatively short haul we quickly learnt the meaning of 'glacier fatigue', the scenery had not altered one little bit; the scale of these mountains has to be seen to be believed. We pitched the tent in the late afternoon and while we were unpacking the equipment the expedition's aircraft flew low overhead. The pre-arranged signal was displayed to say that all was well, the pilot waggled his wings and the plane disappeared into the distance.

With the whole evening before us we set to work to sort out our gear and found to our dismay that five per cent of all the tins had burst open, all the matches had exploded and the biscuits had been reduced to crumbs. Apart from that everything else seemed to have withstood the buffeting of the drop extremely well. Most of the tins were bent, but all the Butane containers, apart from one fitted into our Bleuete stove, were all right. These containers had been very carefully packed in special tubes, a fact worth remembering by anybody planning an air-drop.

After a rather mixed meal prepared from the remnants of smashed up tins, we settled down in our sleeping bags. The ice growled beneath us but Hamish and I slept soundly on our air beds; the third member of our party claimed that he spent the night holding the crevasses together so that we could sleep undisturbed. Owing to lack of sleep and the inevitable high altitude sickness which followed, he did not feel at all well next morning. Since I also did not feel too fit, we decided that it would be foolish to attempt a traverse of the huge crevassed area caused by the coalescing of the upper and lower arms of the Kaskawulsh Glacier which lay only a short distance ahead. The outcome of a lengthy discussion was that we left the bulk of our food and equipment at Camp One and struggled back to the scientists' high base camp, where we relaxed for two days. However, even after this period of rest, the condition of our companion had slightly worsened and

arrangements had to be made to fly him out. This was a great disappointment since it virtually meant the end of any serious mountaineering for us.

Hamish and I decided to accept the scientists' kind invitation to stay at their camp for a further week so that we could see what was going on and at least have an opportunity to try out some of our polar equipment. The area surrounding the high base camp offered wide scope for scientific research in a number of subjects, the main ones being glaciology, meteorology and topography. The primary objectives of the project were to encourage undergraduate and graduate students to gain practical field experience and to make a study of a glaciated area in terms of its total environment.

Glaciated high mountain ranges are by their nature unsympathetic to human invasion. In the St. Elias mountains trails are non-existent and the scale of all the elements is so vast that air transport is the only key to these remote areas if any scientific work is to be achieved. It was for this reason that a Helio Courier H 391B aeroplane was selected as it had a low landing and take-off speed up to an altitude of 12,000 ft., it was also capable of carrying a pay load of 1,500 lbs. Polaris Model B57 Snow Travellers powered by 5.75 H.P. gasoline engines were used for ferrying goods around the camp and were found to be most efficient. A useful load of 250 lbs. and a man on skis could be towed without difficulty and on one occasion a sledge of 600 lbs. and five men on skis were towed without undue strain over a hard snow surface. These vehicles could also be comfortably accommodated, already assembled, in the aircraft.

During our short stay we helped to dig pits and take borings of the snow so that the cores could be examined. We also helped to record ablation measurements and weather reports; forecasts were made every six hours and we took our turns on the radio.

All members of the expedition working at the high base camp gathered in the underground hut for breakfast and dinner and we took it in turns to cook for a whole day. On an unforgettable occasion I found myself cooking for seventeen people. One morning Hamish and I skied down to Camp One to collect the food and equipment which we had left

there. The snow was hard and crisp and we got there in less than three quarters of an hour, but as soon as the sun rose we sank thigh deep into the snow. We staggered back up the steep slopes wearing snow-shoes and pulling our heavy sledge behind us. The last hour and a half across the snow plateau was done in whiteout conditions and we were glad that we had had the foresight to mark our trail every quarter mile with orange marker flags which saved a lot of time and much anxiety. Unfortunately weather conditions during our stay of ten days at the glacier camp were far from satisfactory and it was only during the early morning or late evening hours that we saw any real sunshine. The maximum temperature recorded during August was 5° C. and the minimum -15° C.

As it was impossible for us to do any climbing we decided to do a lightning tour of Alaska during my remaining week's holiday. The problem was how to get down to Kluane as the weather was very bad. Fortunately at midday the aircraft appeared overhead and circled round; I was able to talk him down through a small hole in the clouds. We unloaded the plane and Phil Upton said it was his wedding anniversary and he wanted to get back to the low base camp for a celebration party. The weather deteriorated in the afternoon and there was no significant improvement till 7 p.m. when a minute patch of blue sky appeared on the horizon. We jumped into the plane and revved up the engine, but the aircraft was well and truly frozen into the snow. Everybody within sight rushed over and swung on the wings, rocking the plane furiously; we lurched suddenly forward and after a few yards sank deeper into soft powder snow; we taxied for about five miles but could not get off the ground. We retraced our tracks, beating down the snow and at the second attempt, after one of the longest runs I have ever had to endure, we leapt into space.

We made for a little hole in the clouds and burst through it into brilliant sunshine, only the summits of four or five peaks were visible, they must have been about 17,000 ft. The hard truth suddenly hit me that I was supposed to be doing the navigating and the hole through which we had escaped had disappeared. I had to align the pilot over the Kaskawulsh Valley into which we were to make our descent. As instructed

I kept an eye out below and down we went; the clouds cleared and there we were almost exactly on course, but now we had clouds above, clouds below and mountains on each side. Down we went again and, after a few anxious moments, we levelled off 50 feet or so above the glacier. We landed at the lower base camp in more or less pitch darkness on an unlit runway. What a celebration we had that night!

Hamish and I set off next day after lunch on a 2,000 mile trip round Alaska. We visited, amongst other places, Dawson City the scene of the historic gold rush in 1897. Although we met a number of rare old characters it could only be described as a ghost town and hardly worth a detour of 650 miles. The scenery between Dawson City and Tetlin Junction was very spectacular but the road consisted of no more than a mud track. The McKinley National Park is well worth a visit and the drive over the Denali Highway was simply wonderful. It is difficult to describe the vastness of this country where everything is on such a huge scale, for instance one of the valleys through which we passed was more than 50 miles wide. Several times bears or moose charged across the road right in front of us.

Our main reason for visiting Alaska was to photograph Mt. McKinley, one of the most imposing mountain massifs in the world, towering almost 17,000 ft. over the surrounding lowlands. Our mission, however, was in vain, the mountain was cloaked in a mantle of cloud; a disappointment after motoring almost continuously for two days and nights. To make up we spent an enjoyable evening at Camp Denali, a collection of quaint little rustic cabins on a steep mountain side overlooking Wonder Lake; a marvellous wilderness retreat to which I long to return.

The appalling weather continued next morning so we decided to return to Kluane and at least climb a small peak a few miles behind the low base camp. We hoped to get a chance to photograph the true St. Elias Range in the distance. We motored all that day and most of the next night, 836 miles, arriving back at the camp at 4.30 a.m. and dropping off to sleep the moment we crawled into our sleeping bags.

At 7.0 a.m. we were awakened to be told that Sir Edmund Hillary and his family had arrived unexpectedly and no doubt

we would like to have breakfast with them. Sir Edmund told us that he had seen a most spectacular peak just off the road about 150 miles back up the highway. We had not spotted it ourselves as we had passed it in the dark; we were not even sure whether it had ever been climbed before.

We decided to set off that afternoon and get the car as near the peak as possible, which meant motoring several miles up a river bed, but we were told that some prospectors were working up the creek and that a rough track would have been beaten out. However, after motoring only five or six miles up the creek we knocked the sump off the hydraulic gear box. I was due to fly home three days later and this mishap meant that we would not have time both to climb our peak, which was still ten miles away, and to have the car towed out. Luck, however, was with us. A decrepit old waggon appeared from nowhere literally seconds after our misfortune; it could not tow us out as its driver was in a great hurry but he gave the third member of our party a lift back to the highway where he managed to persuade a drunken fellow in a roadside saloon to pull us out at 11.30 p.m. Next morning, thanks to a kindhearted army sergeant whose hobby was welding, we were on our way back to Kluane after only two hours' delay. We had a farewell lunch with the scientists and then set off down the Alaska Highway to Dawson Creek, a total of 1,054 miles which we accomplished in just over 28 hours.

I flew home the next day after a simply wonderful holiday. Never before had I done or seen so much in such a short time. In the not too distant future it ought to be possible for a club to charter an aeroplane and visit such regions. Three weeks is long enough but four would make the expedition really worthwhile.

My own feelings about this strange country, even after so short a visit and so many frustrations when we tried to do any serious mountaineering, are perhaps best expressed by a quotation from *The Spell of the Yukon*, by Robert W. Service:

*There's a land where the mountains are nameless
and the rivers all run God knows where;
There are lives that are erring and aimless,
and deaths that just hang by a hair;*

*There are hardships that nobody reckons;
there are valleys unpeopled and still;
There's a land—oh it beckons and beckons,
and I want to go back—and I will.*

SKI COURSE, 1963. ST. MORITZ

by H. G. Watts

THE SWISS SKI SCHOOL ASSOCIATION each year, for the first three weeks of December, run what they call a 'Manager' course, the main purpose of which is to train ski instructors for the coming season. In conjunction with this instructors' course, ski schools are held which can be attended by skiers of any degree of proficiency on payment of a fee which includes a week's full board at an hotel, ski-ing lessons, and transport on the local mountain railways and ski-lifts.

These courses, which take place at a different Swiss ski centre each year, are attended by about 3,000 skiers from many countries. For the skiers the course lasts one week, the change-over taking place each Sunday; there are six classes, ranging from complete beginners to experts.

This year St. Moritz was the favoured centre. The word 'favoured' applies because the hotels, whose season usually begins the week before Christmas, can get going on full staff with every room let, at the very beginning of December. As it happened St. Moritz was almost the only place in Switzerland which at that time had any reasonable depth of snow.

We chose the week of 8th to 15th December and joined some American friends at the Hotel Kulm. The choice of hotel was wide and varied from an all-in fee of Sfrs 400 per person for a double room with bath in the luxury hotels to Sfrs 274 for a room without bath in the cheapest hotel.

The road from Chur to St. Moritz over the Julier Pass is open all the year round so we made the journey from Gstaad by Volkswagen, an invaluable car for the mountains in winter, no cooling water troubles and easily handled with snow-tyres on snowy roads. Even so with the very cold night temperatures, about $-25^{\circ}\text{C}.$, which prevailed outside the hotel during the week the acid in the battery froze and the battery went flat. The organisers of the courses also laid on escorted parties by train at reduced rates from all the principal towns in Switzerland.

The assembly on the Sunday afternoon and evening was quite the most unnerving part of the whole course; having

been shown one's room one had to collect course tickets, insure against accidents, find out how one found one's choice of class and the appropriate instructor the following morning and, most important, make sure that ski bindings and boots were in good working order.

It all sorted itself out on the Monday morning; I had put myself down for Class IV as being neither too easy nor too proficient. I was nervous as I had pulled an Achilles tendon in the deep snow of the previous year and I didn't know how it would stand up to the rough usage of a ski school. At 9 o'clock I became one of a milling polyglot crowd in front of the hotel and in due course somebody called out "Class IV" and asked whether we wanted to be taught in English, French, German or Italian. I chose German as I thought it would be good practice and found myself with one of our American friends, and about eight others including a business man from Vienna, a huge Bavarian from Munich and his wife and a handful of pretty girls from Zürich.

We took the train to Corviglia and then the ski lift to Plateau Nair where we did a little gentle practising before running down. The whole Corviglia district behind St. Moritz is magnificent ski-ing country. In these days it is of course highly developed, with télésièges and ski-lifts all over it, but the expense is so great that even with 1,000 skiers on it there is little crowding except when one tries to find a seat for lunch in one of the restaurants or when one takes the final path through the woods to the village, along which I unashamedly rode on my sticks.

We had two days on the Corviglia during which our instructor, Balthazar à Porta, from the tiny village of Fetan, near Schuls in the Lower Engadine, gradually increased our speed and the steepness of the slopes down which he led us. On the third day we piled ourselves into an omnibus and were driven 12 miles up the valley beyond Pontresina to the Diavolezza. A télésiège took us to the top of this mountain, just under 10,000 ft. from which there is a magnificent view of the Bernina range and Piz Palu. The sun shone, the air was crisp and cool, the snow was superb. On the way down we passed a group of six chamois scratching in the snow and eating the frozen grass; they took no notice of us.

We spent the fourth day doing all the runs on the Corviglia and trying to improve our style:—

"Weight on the downhill ski."

"Uphill ski and shoulder slightly forward."

"Lean outwards on a turn."

"Down, up, down when turning."

and so on.

The fifth day was bright and very cold. It took us some time to persuade Balthazar that the next, and last, day would be dull and colder so we *must* go to the Corvatsch today. The top of this fine run is reached by a new funicular which starts from just below the village of Silva Plana. From the top station there is supposed to be a view over the whole Alpine Range westwards as far as the Jungfrau and the other Oberland giants, but already the weather was beginning to change and a biting wind discouraged loitering and blinded the eyes with tears. There was no heating in the funicular and we were very glad of a cup of tea and some chocolate in the little restaurant before starting the run down. This begins with a rather steep and fearsome looking slope which is really quite straightforward. After that the run opens out into one glorious wide slope after another until one is well below the half-way station on the funicular. At this point a ski-lift takes one back to the half-way station. On this day going up on the ski-lift was a very cold operation and we welcomed the warmth of the lunch room and an invigorating "Pflümli". The lower half of the run was as good as the upper, finishing with broad glades through woods where continuous turns at controlled speed had to be made.

Saturday, the last day of our course was, as we had expected, dull with light snow falling. We spent it on the Corviglia but light conditions were so poor that ski-ing was an uncomfortable variation between seeing the ski points suddenly come up to eye-level at one moment only to drop away into an invisible void the next. The most important event of this day was the farewell tea party to Balthazar; we chose a little 'Gaststube' called the "Engadinia" where we ate 'Bündnerfleisch' and drank white wine and 'Pflümli'. Our big Bavarian made a suitable speech of thanks to Balthazar for his excellent tuition and handed him an envelope into which we

had each put Fr.10. Songs were sung and stories told.

We enjoyed every moment of this course, it is an excellent way of getting a week's good ski-ing, with instruction, at a well-known centre before the rush and bustle of the season begins. The 1964 course is planned for Crans-sur-Sierre in the Valais.

The courses are organised by Christian Rubi, Swiss Ski School Association, Wengen, Canton Bern, (telephone (036) 3.47.36.) to whom application must be made to attend. The applicant then receives a form in which must be stated which of the three weeks is preferred, the choice of hotel and of ski class to be joined. A deposit of Sfrs 100 is payable when a definite booking is made.

DOLOMITE INTRODUCTION—THE PUNTA CLARK

by D. M. Henderson

WE ARRIVED in the small village of Plan in the Val Gardena by the evening bus from Bolzano. Darkness had fallen as the bus climbed slowly up the steep wooded valley and as we reached our destination a light rain began to fall. This was depressing because we had no knowledge of the facilities in the way of bothies which the area had to offer. However we had brought our tents with us, a wise decision in view of the worsening weather conditions and the sooner they were erected the better.

We left the road in favour of a path which climbed through the trees above a fast flowing mountain stream but we could see no sign of a possible camp site; the hillside above was thickly wooded and on the other side the ground fell away steeply towards the river. We continued in silence, becoming more or less resigned to a thorough soaking when, on rounding a corner, we saw the barn. It was a typical Tyrolean barn, with ample overhanging eaves sheltering a spacious verandah for stacking a supply of wood for the winter. We knew we need look no further. As we approached a woman came out of the cow-stalls on the lower floor, and looked at us with a slightly curious but friendly expression. We said "Good evening", and pointed up to the verandah. Our intentions were quite obvious and she smiled, led us round to the other side of the barn and up a ramp to the first floor where to our amazement she switched on an electric light and showed us into a clean and spacious room. This was to be our base, our 'four star' bothy. We were soon installed and after the usual brew and some supper we were not sorry to crawl into our sleeping bags, a pleasure which was emphasised by the sound of the rain drumming on the roof.

When we awoke it was still raining steadily so we took the opportunity of going down to the village for provisions and also to have a look at Val Gardena which is noted for its wood carving. The output of carved figures from the workshops in the valley is augmented by the families of the surrounding farms who work deftly and at great speed with a wide selection of shaped chisels to produce the pinewood

figures which are then sold to the workshops for colouring. We saw very little of the local peaks and went back to the barn for a meal and bed with hopes of better things from the weather next day.

The following morning brought an improvement, with blue sky and sunshine streaming through the tall pines around us. After breakfast we packed enough gear for two or three days and were soon climbing steadily on the path through the woods towards Passo Gardena. The sun was warm and brought steam drifting from the sodden undergrowth. As we emerged above the trees we were delighted by magnificent views of the neighbouring peaks; the massive wall of the Sassolunga, the snow-capped Gruppo di Sella with its subsidiary spires, and the Pizza da Cir.

At Passo Gardena, the summit of the road between Gardena and Corvara, there is a rifugio of the 'Club Alpino Italiano', where we booked accommodation for our return and had some refreshment before pushing on towards the Grand Piz da Cir and our first objective, the Adang Camin.

The approach lay over grassy slopes carpeted with buttercups and gentian and it was here that we came across a character. He was a major in the Alpini, the Italian mountain troops, but he greeted us in French because one of our party was wearing a Club Alpin Français badge. Having established that we were English he proved to be just as much at home with the language and showed great interest in our plans. He had a binocular telescope mounted on a tripod and with the aid of this he was able to describe in detail the routes on the Piz da Cir and its southerly neighbour the Punta Clark, pointing out the interesting or difficult sections. As an introduction to Dolomite rock he recommended a route on the Punta Clark, so we decided to take his advice and leave the Adang Camin until the following day. Having spent some time training with the Royal Marines in Iceland, our friend was anxious to demonstrate his mastery of army jargon as he described the route. One pitch, a chimney best climbed right shoulder in, was translated to us as "face to Gardena, arse to Corvara!"

It was on this note that we took our leave and started up towards the first pitch, where we divided into two ropes, one

of two and one of three. The rock was firm and we progressed steadily on good holds up to the lower buttresses. At this stage the climbing was almost direct and periodically the movement of the rope started a minor avalanche of scree which lay on all the ledges, sometimes at the most improbable angle. This was rather disconcerting to the second party, they experimented with a number of variations to avoid the firing line. As we proceeded we became aware of much activity on the slopes below us; army lorries arrived from Corvara bringing detachments of Alpini who advanced towards the mountain on a wide front. Some disappeared up the gullies on either side of us while others strung themselves out on the neighbouring peaks. Our friend the major was directing operations through a loud speaker. By this time we were about half way up the climb, and feeling satisfied with our progress, we stopped for a few minutes to enjoy the sunshine and admire our surroundings. Although this was early June there was still quite a lot of snow lying in the gullies along the north face of the Gruppo di Sella, some of which had looked promising from below. Above them the Sella Plateau rose steadily towards the highest peak in the group, Piz Boè.

Ahead of us our route seemed somewhat indeterminate, a problem we found not uncommon in that part of the Tyrol. There appeared to be a possible way to the right along a rising traverse but this looked a bit 'thin' where it rounded a bulge before disappearing. Above was a shallow 'diedre' about 80 feet high in which we could see two pitons and these signs of previous traffic led us to try the direct alternative. At first our progress was encouraging but some distance below the first piton the holds became rather infrequent and the way ahead seemed less inviting. The rock here was a yellowish colour, softer and more friable, in marked contrast to the firm grey rock we had enjoyed so far. We realised later that this was a point where a considerable area of the hard crust had fallen away from the face to expose the softer rock beneath.

We discussed the prospects of further progress without much enthusiasm, feeling that the pitons must have been inserted by a party descending by abseil. At this point the major addressed us over the loud speaker. "Attention, British

climbers, you are on the wrong route. If you hear me, raise your right hand." We raised our right hands, and he continued "Descend 10 metres and traverse to the right." We duly descended and followed the traverse we had passed previously which proved to be easier than it had looked from a distance and on stepping round the bulge, with a delightfully airy situation, we arrived at the foot of the chimney. We learnt later that the leader of the other rope had been undecided at the time of the loud speaker message. He too had raised his right hand, descended 10 metres, and found the going much easier to the right.

We negotiated the chimney successfully and continued upwards on good rock. Suddenly we were startled by a series of Verey lights and the place was again the scene of great activity as the troops appeared from their various positions and abseiled down to the valley again. We were left alone to enjoy the beauty of our surroundings as we followed the easier rocks to the summit in the evening sunshine. As the shadows lengthened in the valley below we sat down for a moment to take in the panorama and so complete our introduction to a delightful climbing area.

GULLIES — FOR OR AGAINST

by W. Woodward

WE ARE AGREED that climbs of length are often the most rewarding, and the longest climbs in Britain are often found in gullies. On the delights of gully climbing we violently disagree, some are for and some are against. To our contingent of four Y.R.C. climbers who took part in the little escapades described below, I just refused to put the question.

The first of these perambulations took place in Walker's Gully on Pillar Rock. We had walked over from Wasdale, where we were camping, and now at the foot of the gully the rope was put on. Don Henderson was elected to lead and he soon made light of the first two pitches out on the right hand wall; we other three dutifully followed. We were now just below the steep upper pitches of the gully proper, congregated together and enjoying rather battered cigarettes. Suddenly from above came a warning trickle of stones ricocheting from the gully walls. No further warning was needed; we had heard the same familiar sound often in the Dolomites and we instinctively dived for cover, fortunately provided by a meagre overhang. Then silence: must be a sheep up above, let's give it a yell. Sheffield curses echoed through the gully. Was Walker a parson? We hoped not! To our amazement answering voices were heard from very high up in the cleft. More Sheffield oaths, this time in unison. In answer came the boom of crashing rocks; no stones these; this was the big stuff. Again the dash for cover, bodies pressed close together, how small this overhang feels! One boulder dropped just behind us, hitting the rope to which we were still tied; the second landed by its side. Howls, threats, curses rent the air. Again silence. Then a plaintive voice "We are abseiling down!" We replied by asking them to refrain from moving for a while. They complied and we moved out of our haven of refuge and well out to the left of the gully, here we squatted down, smoked and waited. Mutterings and bangings followed and in due time four bespattered climbers were deposited beside us. The leader announced that he could not get up the crux on the final pitch and the rock falls were the result of groping about looking for abseil points. Thankfully we went our different ways, they

still groping downwards and we wonderingly upwards. Don successfully overcame the final pitch.

Naturally we are wary of gullies but once again a little voice insisted and this time we were preparing to rope up for the Great Gully on Craig yr Ysfa. It was December and the Welsh hills were gripped in a mighty freeze-up. We approached the mouth of the gully, looked up and noted a little ice on the first pitch but above the rock looked in good condition. Again the tinkle of small stones; what now? We were well off to the right of the little avalanche so we prepared to move ahead. At this precise moment came a clatter of stones and over the edge of the gully hurtled a sheep. It turned gracefully in mid-air and landed with a thud right between us. It lay still with the neck obviously broken. Sorrowfully and thoughtfully we continued upwards. Nothing untoward occurred during the day and we enjoyed a delightful climb, finishing with the last pitch adorned with icicles on the traverse.

Our third encounter with a gully was the Waterpipe Gully of Sgurr an Fheadain on the Isle of Skye. In the Cuillin in May 1963 the sun had shone continuously for five days. Leisurely we traversed the Main Ridge, taking two days over it, bivouacking below the Bhasteir Tooth and joyfully scrambling up "Naismith's" at 6.30 in the morning carrying huge rucksacks. But again the voice was heard and the call of the gullies was answered. This time we thought, "Oh well, at least it will be dry." We roped up for two parties of two and walked into the gully proper. After initial small overhangs we got our first shock in the form of a waterfall down the 80 ft. pitch. Being a coward at heart I turned this on the right of the gully and congratulated myself on keeping dry but the next problem, a small overhang, required standing in a stream and groping for a non-existent hand-hold. I demanded a shoulder, by this time I was wet to the skin and thought guilefully that whoever gave it would also get his fair share. My demand was refused. Again we traversed out and found ourselves on what the guide books call a stack of rock; this is not what I called it. However the gully had now narrowed and leaving Raymond Harben belayed on the gully bed I started up the left hand corner. By bridging and picking out loose rocks which hurtled to the gully bed I attained a resting

position. I was surprised on looking down to see that my faithful second had picked up his belay and fled out of range; I cannot blame him. I traversed round a mossy slab above all this chaos and reached the gully summit, Raymond followed. Trousers and shirt off we lay in the hot sunshine watching the eagle soaring over Tairnelear Corrie, his eyrie not far away.

These were gullies of rock climbing. What of the snow and ice that also goes along with them? Somewhere in the distance that little voice calls "Come . . ." I know we will answer.

A DAY ON THE MATTERHORN

by R. Gowing

THE END of the holiday was drawing near. After glorious days on the Rothorn, the Obergabelhorn and the Weisshorn and an inglorious though well-timed retreat from the Dom, Roger Allen and I considered the possibilities for our final climb. The obvious choice seemed to be the Matterhorn, and the desirable route the Zmutt. But there had been heavy snowfall five days before and the reputation of the Tiefenmatten Slabs for danger under bad conditions was not encouraging. The alternative traverse of the Swiss and Italian ridges would make a good trip but difficult to fit into our remaining two days. The final choice appeared to be to "do" the Matterhorn for its own sake by the Hörnli, a pretty dreadful route by all accounts, but a route so full of historic associations, leading to the summit of such a superb peak, could hardly result in a wasted day.

These discussions were interrupted by Hamish Nicol who, rising from a large and well-earned breakfast (he had arrived at Biner's at midnight after a day cutting steps up the Klein Triftjegrat) expressed a desire to join us. We were delighted at the prospect of climbing with a man of such a distinguished record. Nicol was one of those who, with Bourdillon and others, in the early fifties, re-established the British among the leading climbers in the Alps, abandoning the old prejudices against piton climbing as exemplified by his first British ascent, with Bourdillon, of the East Face of the Grand Capucin.

We bought our food and set off to walk up to the Hörnli; the track was well graded and little frequented, most people preferring the easy way by cable car. The walk was pleasant, with lots of flowers and extensive views, that of the Gorner Glacier being most impressive as it snakes down its deep gorge from the heights of Monte Rosa, Lyskamm and Breithorn.

The Schwarzsee area, above the terminus of the cable car, was densely populated. I had to wait a while before the ripples caused by paddlers subsided, so that I could capture the Obergabelhorn reflected in the waters of the lake. Past the Schwarzsee the track climbs steeply over a shoulder and there

we stopped for lunch, in a little valley carpeted with gentians. It would have been pleasant to linger in such an idyllic spot but the sight of other parties overtaking us put our minds back on the job, which was to reach the hut in time to secure bunk space. The path climbed over the moraines of the Furgg Gletscher to the foot of the Hörnli itself, a small peak which marks the end of the ridge, or Herlischneide, projecting from the north east foot of the Matterhorn. We followed the path beside the rock wall of the Herlischneide, past masses of attractive Mont Cenis bellflower, then up on to the edge, which gave us a pleasant ridge walk to the foot of the last steep ascent to the hut. We were glad when, at 4 o'clock, after toiling up the few hundred feet of zigzag track, we at last reached the Hörnli Hut.

It seemed that we were among the first to arrive, so we promptly secured bunks near the window. This turned out to be a mistake, since the suspension of the mattress was such that Roger was on a steep slope and I on an arête, so that I rolled alternately on a long-suffering Roger and a less tolerant Frenchman. The acting warden was most efficient, before we had been there half an hour he had extracted our hut fees and was preparing our meal. He was filling in the job pending the arrival of a successor to Matthaus Kronig, who had died of a heart attack the previous week. After feeding we were about to reconnoitre the two alternative routes for the morrow when the arrival of Hamish ended any thought of alternatives. We followed the path a few yards to the foot of the Matterhorn, where we could see the route from the lower glacier, up a rock step on to the upper Matterhorn glacier, which extends horizontally below the north face towards the Zmutt Ridge. We learnt next morning that physical contact with the route being reconnoitred is desirable, the step is bigger than it looks from a distance and a proved route with cut steps would have been a great help.

Owing to the peculiar topography of the bunks we were not sorry when, at 1.30 a.m., the alarm went. While Roger struggled with the stove, I woke Hamish; soon we were eating breakfast, taking care not to disturb the sleepers on the floor and under the table. Luckily the table itself was free of bodies and we were able to enjoy a good meal before setting off at

ten to three. We went down the path to the lower Matterhorn glacier, put on crampons and followed tracks across uncrevassed glacier to the foot of the step, where easy rocks and a short ice slope give access to the upper Matterhorn glacier. Moving singly we climbed up the rocks which were loose and rather icy, then, below overhanging ice cliffs, Hamish cut steps up towards the upper glacier. Meanwhile daylight had arrived, so I took off my sack in order to put away my torch, forgetting the axe tucked into the straps. Luckily it only fell to the edge of the rocks, but Roger had to descend the steps and belay me down to the axe which, much to my relief, I successfully retrieved.

After this contretemps we continued up the ice slope to the upper shelf of the Matterhorn glacier. This provided an easy walk below the north face towards the great snow arête which, showing up well in the usual pictures of the Matterhorn, descends from the Zmutt Teeth. We crossed the bergschrund where it was blocked and started an ascending traverse, cramponing on good snow, in the direction of the snow arête. This proved to be a mistake in route finding, for the snow soon turned to hard ice. We now witnessed a demonstration of balanced, effective and seemingly tireless step-cutting, interrupted only by the second and third men moving up when the leader ran out of rope. From time to time we were enveloped in ice particles which swept the face in torrents and must have made step-cutting awkward, it was bad enough for us standing comfortably belayed to our ice pegs. We soon fell into a numbed routine as we intermittently followed the leader up the slope but we got there in the end; after 2½ hours' solid step-cutting Hamish finally heaved himself on to the Zmutt Ridge, followed by two thankful Ramblers.

We sat down on the rocks for a rest and second breakfast. Away to the left we could see a pair, who had started after us, engaging the north face. On our right the western precipices plunged down to the Tiefenmatten glacier, writhing below the ice-clad slopes of the Dent d'Hérens. We rearranged the rope for continuous rock climbing and moved up the snow crest to the Teeth. These were much bigger than they appear in the classic profile views, but gave little difficulty. Some we took direct and others we turned, moving mostly together; the final

ed.
he
he
he
ch
ed
ht
lid
er
est
ht
ns
to
ar
le
ye
o-

ly
e,
n
oy
s.
se
y
e
e
n
s
g
o

e
t
e
e
-
e
-
e

*DENT D'HERENS FROM ZMUTT RIDGE**R. Gowing*

gap is quite deep, but it turned out to be easier than it looked.

From the gap the ridge rears up quite steeply, while the great Nose of Zmutt rises sheer to the left shutting off the north face. It was on this section that we found some of the most delightful climbing. While the difficulty was rarely such that we had to move singly, it was steep enough to need constant care in climbing, so that we savoured the full delight of continuous co-ordinated movement, the touch of good solid rock, as our airy staircase lengthened beneath us and the upper crags drew steadily nearer. The route lay mostly on the crest so that from the Italian ridge drawing towards us on our right as we climbed we had an uninterrupted view of the mountains of the Western Alps, from the perfection of the Weisshorn to the distant majesty of Mont Blanc. Ahead we could hear Hamish panting away, this seemed to be merely the audible expression of his energy as he pressed on, while it was all we could do to keep up. Perhaps there was some deliberate physiological reason for the panting.

The ridge which had given us such splendid climbing finally petered out in a nick against the wall of the Zmutt Nose, which here overhangs slightly. We passed through the nick on to a terrace on the west side, where we sat in the sun to enjoy lunch before embarking on the dreaded Tiefenmatten Slabs. We were now almost overlooking the Dent d'Hérens, whose great eastern ridge rose in a succession of towers to the snowy summit, while on our right the Dent Blanche seemed to lie back, reserving its more savage aspects. On the Italian ridge we could see parties descending; this reminded us to press on so we moved off, traversing across the face for a hundred yards and then up over rock that was easy but rather loose, lacking much in the way of positive holds, belays or even cracks into which pitons could be driven.

After we had climbed some way it became obvious that we had not traversed far enough. A few tricky moves reminiscent of Avon Gorge took us back to easy ground, which we followed up to a traverse line going back left. In places there were patches of water ice, but these were relatively insignificant and the face was in fact in most excellent condition. The traverse had the odd awkward step, but it was mostly straightforward; we finally crossed a narrow ice gully to land on the

crest, above the Zmutt Nose. It was obvious now that the serious part of the climb was over. With the summit within reach we climbed up the ridge, keeping mainly to the crest but sometimes wandering on to the north face, which is easy-angled in its upper part. Once again the delight of continuous movement on quite interesting rock, until a whoop from Hamish told us we were there, and at 2 p.m. we stepped on to the Italian summit of the Matterhorn. There was not a soul about; we had the summit to ourselves and photographed each other in triumphant postures.

Of the view I remember little. I did not have the frightening impression of being perched on top of a slender spire that I had somehow expected when looking at the Matterhorn from below. A certain amount of cloud robbed the celebrated view plunging into the Val Tournanche of some of its impressiveness; one tended to look further down the valley towards the foothills and plains of Italy. For the rest, a jumble of clouds and familiar peaks. As we strolled to the Swiss summit we remarked how popular the North Face must be these days; looking down the even slope of snow-plastered rock we could see quite a dozen people on it. It was only when we started to descend that it dawned on us—above the Shoulder the Hörnli route ascends the North Face.

We set off down, following well worn steps in the hard snow, and soon came to the top of the fixed ropes. There were some delays, as other parties were still descending. Slowly, one by one we moved down the ropes. The rock looked nowhere particularly difficult, but it did not look any easier than that on the Zmutt and I can well imagine what a boon the ropes would be under bad conditions. As we queued our way down we had time to look round at the neighbouring peaks which held such pleasant memories. It was very much in keeping that on this stretch we should see our Brocken spectres; we felt this really was Whymper's Matterhorn.

We left the fixed ropes and veered on to the shoulder, a pleasant ridge of good rock running more or less horizontally a little way out from the main mass of the mountain. We then turned off to the zigzag path down the edge of the east face. The descent was a succession of scrambles down shallow gullies and rakes, and traverses back towards the ridge. Where

the rock was sound it was worn quite smooth, while most of the rest was unpleasantly loose. After what already seemed a long descent we moved singly down some slabs, the Upper Moseley Platte, and arrived at the Solvay. The hut looked quite roomy and comfortable but we were glad not to have to use it.

We climbed down the lower Moseley Platte and continued the long descent. The ridge stretched away, not particularly steep but rather broken, to the Belvedere which seemed a long, long way away and not to get any nearer. To the right stretched the east face, barren and easy angled but punctuated by the occasional stone sent down by parties above, crashing, whizzing and disappearing into the depths below. We carried on, a repetition of the same theme, down a gully for a while, along a scree-covered ledge, perhaps round a buttress of tottering rocks, towards the ridge, then down again. At one point the route lay along the actual ridge for a few yards, this was pleasant, with a welcome change of view towards the Dent Blanche and Gabelhorn.

At last a gully, reminiscent of that at the foot of Bristly Ridge, brought us to a path that led round the foot of the ridge and on to the snow of the Matterhorn Glacier. A few paces across this and we were sitting unroping and at six o'clock we were celebrating with a beer outside the Belvedere. The last cable car from Schwarzsee had gone and as we started the long walk down to Zermatt it began to rain and a fierce thunderstorm developed, so we arrived soaked through. It was good to get into Biner's hot shower and appropriately enough we dined at the Whymper Stube of the Monte Rosa Hotel, then crawled into our sleeping bags to snatch a few hours' sleep before setting off on the long drive home.

SKYE: THE RIDGE

by R. Harben

WE, that is to say, Bill Woodward, Don Henderson, Keith Barker and I, decided to spend the week prior to Whitsuntide 1962 in an attempt on the Greater Traverse of the Cuillin. It was not our intention to try and complete it in 24 hours but to do the Great Traverse one day, sleep out in the hills and the next day to cover the Blaven group of peaks.

Barker and Henderson arrived on Skye early on the Saturday morning and at once set out for Harta Corrie and the Bloody Stone to deposit a food cache, for this was the place where we had thought we would spend the night during the traverse. Woodward and I arrived that evening and on Sunday the four of us climbed the An Stac stone shoot in thick damp mist to place another food cache at the base of the Inaccessible Pinnacle. Monday dawned cold and mist shrouded the summits; climbing on Sron na Ciche was the order of the day. By five o'clock all traces of cloud and mist had disappeared leaving a beautiful evening with the Cuillin standing starkly against the blue background. Over dinner the question of whether we should leave to try the traverse was tossed to and fro and in the end we followed the example of others doing major climbs and phoned the meteorological office for a weather report. The forecasters of Forres promised us fine weather for the morrow, with showers later in the day. There followed hasty packing of bivouac and climbing equipment, food and cooking utensils were shared amongst us and at 9 p.m. we left the comforts of Cuillin Cottage and Mrs. Campbell's cooking en route for Gars Bheinn.

The going over the moorland with its many ups and downs seemed endless; darkness was slowly encircling the peaks as we started up the steep scree and slabs on the flanks of Sgurr nan Eag, too early as we soon realised. However, we carried on upwards with the ridge looking forever close, reached it at last, crossed Sgurr a'Choire Bhig and arrived just below the summit of Gars Bheinn at 1.30 a.m. Here we decided to spend the rest of the night; even at this late hour there was still some light and, on the eastern horizon, a faint red glow.

We spent a bitterly cold night lying on the hard ground. Though we were in sleeping bags and covered by polythene sheets the cold was everywhere, it was a relief when dawn broke and it was time to get up. After cooking breakfast we left the bivouac site at 6.45 a.m. for the summit of Gars Bheinn. From here we could look down on Loch Scavaig and the sea lapping round Soay at our feet, beyond lay the islands of Eigg, Rhum and Canna shimmering under a cloudless sky.

We retraced our steps of the previous night over Sgurr a' Choire Bhig and on to Sgurr nan Eag where we could look across Coire a'Ghrunnda to Sgurr Alasdair. This was followed by some scrambling before we were brought up short by steep rock. Out came the ropes and up we climbed to find ourselves standing above the Thearlaich Dubh Gap, the first of the four principal obstacles of the Ridge. We were faced with a 30 ft. abseil on to a boulder platform; from here the rock fell steeply for several hundred feet on either side into the corries. The facing wall, which was 80 ft. high, was split for half its height by a smooth looking crack and above were slabs. We roped down into the gap and Woodward led up the other side; we now discovered what was to be our most time consuming and arduous task, hauling the rucksacks, which seemed to become heavier as the day wore on, up the rock pitches.

The going became easier and soon we were dumping our rucksacks at the head of the Great Stone Shoot to follow the narrow ridge to the highest point in the Cuillin, Sgurr Alasdair. From its small summit we could see the main ridge from end to end and beyond, Blaven. The time was now 10.30 a.m.; thin wispy clouds had begun to gather but these were quickly dissipated as the sun rose higher in the sky. The water which we had been carrying since the previous day now proved its worth as we quenched our thirst.

Passing Sgurr Thearlaich we descended the crest until we were facing Sgurr Mhic Coinnich with its impressive King's Chimney reaching to the summit. We scrambled up 80 ft. to the foot of the right-angled corner, 60 ft. high and topped by a great overhang. Out came the ropes again; Woodward quickly led up the corner and when below the overhang traversed out on to the right wall and round the projecting rock. My turn soon came to climb and I was delighted to find small but

ample hand and foot holds though the exposure was considerable.

We passed over the summit of Sgurr Mhic Coinnich and down its long back to the Bealach Coire Lagan where we were faced with the steep buttress of An Stac. Having climbed this peak in heavy mist only a few days ago we decided that the easiest way of approach to its summit was from the foot of the Inaccessible Pinnacle, so we traversed round the buttress on the Coire Lagan side and soon reached the foot of the east ridge of the Pinnacle, no doubt spurred on by the thought of the food we had cached there. We ascended An Stac by the short west ridge and then retraced our steps for a well earned rest and a meal. The time was now 12.45 p.m. which meant that we had been going for 6 hours.

We had laid in 8 pints of water, tins of beans, sausages, corned beef, rice and fruit. With the gas stove and cooking utensils our meal was ready in no time, washed down by a welcome cup of tea. Due to the hot sun our thirst was insatiable but we had to ration ourselves to one pint of water each and save the rest for later in the day, there was no doubt that we would need it badly if the fine weather held.

From the many possible combinations of ascending and descending the Inaccessible Pinnacle we chose to tackle it from west to east, hoping that this would prove to be the quickest way. We climbed up the short side and down the long, with its precipitous drops on either side. This excursion took one hour, we thought the time might have been reduced if we had taken one of the other combinations for dealing with this obstacle. It was now 2.45 p.m.; from Sgurr Dearg we followed the long easy ridge round on to Sgurr na Banachdich. There were one or two people about, the first we had seen all day. From the summit we could look back to Gars Bheinn far in the distance and forward we could see Sgurr nan Gillean, also looking a long way away.

We had now come to what we regarded as our most difficult part of the Ridge as none of us had previously covered the traverse between Sgurr na Banachdich and Bidein Druim nan Ramh. We set off down the shattered blocks of Sgurr na Banachdich to the bealach, up the steep crest of Sgurr Thormaid and over the top until we could see the long curving ridge of

Sgurr a'Ghreadaidh scything into the azure sky. We climbed the rough gabbro until we stood on the south top. From here we could see the knife-edged ridge stretching before us; with precipitous drops on either side we made our way, somewhat like tightrope walkers, to the north summit. There was not a breath of wind in the air, the sun was unrelenting and with our heavy packs the going was very hot. Our water supplies were quickly exhausted, here and there we found snow patches in the gullies with which we were able to quench our thirst.

The ridge broadened out and we dropped into the narrow gap, An Dorus (The Door). Before us was a steep wall which seemed to have no easy way up; going down into the corries on either side did not make us any happier as we could not see any way of getting back to the ridge. We returned to the col, inspected the wall more closely and then found a route bearing right and leading easily out of this difficult looking situation. Soon we were on Sgurr a'Mhadaidh and could look down on Coire Uisg to the dark waters of Coruisk and beyond to Loch Scavaig. We traversed the four tops of this peak, the climbing over the last two dispelling some of the tiredness in our legs. On to Bidein Druim nan Ramh and again more climbing, the friendly gabbro of the morning was no more and the sharp rock caught our raw finger tips.

Over An Caisteal and Sgurr Bhairnich and the long expanse of ridge leading to Bruach na Frithe lay before us. With leaden feet we plodded mechanically upwards to the summit where we rested and could take in the wonderful panorama that is Skye; across the Inner Sound we could see the hills of the mainland. Soon after leaving Bruach na Frithe we were at the foot of the Bhasteir Tooth roping up to climb Naismith's Route. We had reached the large ledge halfway up when we suddenly realised it was quite dark; not surprising as a look at our watches showed us that it was 10.30 p.m. but the speed with which the light had faded had caught us unawares. Several abortive attempts were made to climb the final pitch but with very little energy so we decided to go down and bivouac by the spring in Fionn Coire. Here we drank the cool water and ate a little of the food we had left before retiring to spend another cold, but more comfortable, night than the previous one.

By 7 a.m. we were once more at the foot of the Bhasteir Tooth under a clear blue sky. The crack which had taken on severe qualities the night before was soon behind and we came up against the ramparts of Am Bhasteir. A 10 ft. overhang succumbed to combined tactics and we were on our way down from the summit to the col below the west ridge of Sgurr nan Gillean. Here we finished our remaining food before setting off up this pinnacle strewn ridge. In and out we wended our way upwards, past the well-worn gendarme, to reach the summit of the most shapely peak in the Cuillins. We now set our course for the Bloody Stone in Harta Corrie, where we had our second food cache. We followed the tourist route for a while, skirted Sgurr Beag and could soon see our goal far below. A way was found down the steep-sided valley and in a short time we were lazing by the river preparing a gargantuan feast under the cloudless sky.

At this stage of the proceedings I was to have left the party to collect a car at Cuillin Cottage and be at the Sligachan Hotel in time to meet the rest of the party after they had completed the Greater Traverse, but as the sun was so hot we all agreed that there would be no pleasure in humping the heavy rucksacks over the Blaven Group and that we should all return together to Cuillin Cottage. We arrived back at the Cottage early in the evening to a welcome bath and an excellent dinner before retiring to comfortable beds to sleep off the effects of the unforgettable last few days.

CAVE RESCUE INTERNATIONAL MEETING, BELGIUM 1963

by H. G. Watts

THIS MEETING which was held over the Easter week-end 1963, was organised by the Fédération Spéléologique de Belgique, in collaboration with the Belgian Red Cross. Its object was to demonstrate the Belgian cave rescue organisation and methods, and to promote discussion on the subject between speleologists from various countries.

The demonstrations and discussions took place in Brussels and at Han-sur-Lesse; they were attended by representatives of speleological clubs in France, Switzerland, Luxembourg, Lebanon and the United Kingdom. The British clubs represented were the Chelsea Pot-holing Club, the Mendip Caving Club and the Y.R.C., the latter by J. Lovett and H. G. Watts. All delegates were the guests of the Belgian Red Cross and of Spéléo-Secours, the cave rescue section of the Fédération Spéléologique de Belgique.

BRUSSELS. Saturday, 13th April, 1963

The delegates assembled after lunch at the Headquarters of the Belgian Red Cross, 98 Chaussée de Vleurgat, Brussels. The organisation and work of Spéléo-Secours was described by Monsieur A. Slagmolen, Head of the rescue group, and was illustrated by a short film and slides showing the use of the folding stretcher. The delegates were then taken to the vehicle park where some 30 members of Spéléo-Secours were drawn up in front of their five vehicles. These were:—

- Radio van.
- Self-contained soup kitchen.
- Equipment van.
- Large ambulance.
- Small ambulance.

The group was for the most part composed of young men and women in their twenties, who wore a uniform consisting of blue-grey boiler suit with the red cross on the arm, "Spéléo-Secours" shoulder flashes and black berets. They looked very smart and were evidently well disciplined, though it was emphasised that they were entirely voluntary and unpaid. When

on a rescue they wear black helmets, each with a two digit number in large white figures, and the leader's instructions are given to numbers instead of names.

When the guests arrived the team split into small groups, each responsible for one of the vehicles, and were on parade to answer questions and show their equipment. We were also shown the Red Cross dispatching room and radio centre, both of which are used in connection with Spéléo-Secours when necessary. The vehicles then left for Han-sur-Lesse, where a camp had been established, and the guests followed after a buffet supper.

The Brussels group of Spéléo-Secours consists of about 40 volunteers, drawn from among the local caving enthusiasts; they are on call day and night. There are also local groups averaging ten persons in each of the provincial towns: Liège, Charleroi, Verviers and Rochefort; there is a special group of cave divers. Practice meets take place in caves every two months and instructional evenings in Brussels once per month.

In the event of an accident, a member of the victim's party must ring the Brussels Red Cross, No. 02.44.70.10. The officer on duty takes down the information, which should be given according to a set form available in the local police and fire stations, hotels and farm-houses in the cave districts. He passes it on to a responsible member of Spéléo-Secours, who notifies the group nearest to the scene of the accident and calls out the required number for a Brussels team if the accident is too serious to be dealt with locally. Meanwhile the ambulance is got ready at the Red Cross garage and the first members of the team see that any extra equipment is loaded if wanted, for example to deal with flood or landslide. Other local groups are called up if and when relief rescue teams are needed.

Generally speaking the ambulance gets away within an hour of the alarm and arrives at the scene of the accident, anywhere in Belgium, not more than 3 hours after the alarm. The local team usually gets to the scene within an hour of the alarm.

GROTTE DE HAN. Sunday, 14th April, 1963

Most of the delegates and all members of the Spéléo-Secours were accommodated close to the cave entrance in a camp consisting of about 12 tents, which had been provided by the

Belgian Youth Hostel Organisation. Each tent measured about 12 by 16 feet and held 8 people; camp beds and blankets were provided. There were also tents in which were mounted photographs and equipment demonstrating the development and activities of Spéléo-Secours, an ambulance tent and a lorry fitted with air-pump, fan, electric generator and tools.

There was a full programme for the day, the principal items of which were:—

10 a.m. to 2 p.m. Demonstration of rescue operations in the Grotte de Han and the River Lesse.

2 p.m. to 4 p.m. Lunch in the Pavillon des Grottes adjoining the cave.

4.15 to 5.15 p.m. Formal discussion under the Chairmanship of Monsieur A. de Martynoff, President of the Fédération Spéléologique de Belgique.

5.30 p.m. to 8 p.m. Conducted tour through the Grottes de Han, including newly discovered section recently opened to the public.

8 p.m. to Midnight. Supper, followed by lectures and informal discussion.

RESCUE DEMONSTRATION

(1) The victim, a young woman, was supposed to have fallen in a narrow passage and to be unconscious. She was strapped firmly into a folding stretcher, wrapped in a blanket and was handed through the passage over the knees of the rescue team who were wedged opposite to each other some 5 ft. above floor level. A small orange coloured tent had been erected on the first piece of level ground from the scene of the accident, the victim was placed in this pending the arrival of first aid or the doctor.

(2) Two male volunteers were strapped in stretchers and handled up and down boulder slopes in a large chamber.

(3) Two men, strapped in the stretchers, were lowered vertically 60 ft. down an overhang to a receiving party on a boulder slope below, they were carried to dinghies on the underground river and manoeuvred to the exit by frogmen.

For the vertical drop a guide rope was first thrown to the receiving party and a double life-line was used to lower the stretcher, which was prevented from swinging by side ropes

attached one to each side of the head end and held by members of the lowering party. The actual lowering was done by one man taking the weight on the rope passing over his shoulder and across his back, the rope then running round a large stalagmite. No pulley block was used and there seemed to be no other provision against a runaway of the rope. It was noticed that the rescue party followed the victims down by abseiling, a method often used in Continental pot-holes and considered by many to be more practical than a ladder descent.

(4) A rack and winch were used to show how a large rock could be moved on a boulder slope by a wire rope round the rock and held by a loop round another rock.

(5) A rock weighing six tons was lifted a few inches by a hydraulic jack supplied through a flexible tube from a pump some distance away. This showed how a trapped limb could be released.

(6) A dummy, equipped with mask and compressed air cylinder, was carried under water by 3 frogmen from one side of the River Lesse to the other, a distance of 70 ft. to illustrate rescue through a siphon.

(7) A live victim on a folding stretcher was lowered down a rope stretched obliquely from a point on the hill about 200 ft. above river level to the ground on the other side of the river, the total length being about 250 yards.

THE DISCUSSION

Monsieur de Martynoff called for candid criticism and suggestions from the foreign visitors and asked the Y.R.C. to open the discussion. John Lovett commented on the thinness of the ropes used as life-lines, asked what measures were taken to keep the victim warm and doubted the value of the tent. A lively and interesting exchange of views followed, the main points of which are given below.

Ropes. These appeared thin and of a peculiar hosiery type weave. The reply was that they were 8 mm. nylon as used in the Alps; the French agreed that they were satisfactory.

Hands. It had been noticed that in all cases except that of a small woman, arms and hands were left outside the stretcher: this might lead to injury or at least scraping of the hands; an

injured arm in a sling or plaster should certainly be inside. The Belgians felt that arms left outside would enable the victim to help the rescuers, if he were conscious, by easing himself along. In most cases the stretcher was too narrow for the arms to be enclosed.

Tent. Doubt was expressed about the value of the tent. This led to an interesting number of points, the Belgians being very much in favour, the French equally strongly against. The R.A.F. rescue orange colour gave a cheerful and comforting feeling to the victim, he was not exposed to the damp and gloomy atmosphere of the cave. The tent provided warmth and shelter.

Against this it was felt that the establishment of such a base was undesirable and might detract from the main object which was to get the victim out as quickly as possible. Condensation inside the tent could be tiresome and uncomfortable; the tent was one more thing to get into the cave and occupied the efforts of one man who might well bring in something more useful. The tent was in any case too small for anyone to be able to attend to the victim inside it. If it were in a hollow a dangerous concentration of carbon dioxide might develop.

Warmth. A five-litre thermos of hot water was taken into the cave but no provision was made for heating water on the spot by spirit lamp or primus. There was no arrangement for supplying dry clothes, except the blanket accompanying the stretcher. Self-heating cans of soup were unknown.

Lovett described the practice followed by the British Cave Rescue Organisation of sending in with the first rescue men a sealed rubber inner tube section containing dry woollen underclothes and a sleeping bag, and another in which were cans of self-heating soup.

Stretcher. The folding stretcher was criticised as being too narrow and giving inadequate protection to head and feet. It was stiffened and protected by wooden laths sown into the fabric, but the head was only protected by putting on the helmet and covering this with the fabric hood of the stretcher. This did not prevent the head from moving and might be dangerous in a case of injury to the skull or neck.

Lovett described the British stretcher stiffened by flexible steel bands, curved at head and feet for protection. It was

thought essential to enclose the arms, though the Belgians insisted that freedom of the arms made it possible for the victim to be more easily worked through narrow places.

LECTURES

The first lecture, by Dr. Castin, of the Spéléo-Club de Dijon, described cave rescue in France, which is based on very much the same lines as British C.R.O. practice. Many accidents were the result of ignorance and imprudence by novices and the lecturer emphasised strongly that the first duty of a Club was to give newcomers a basic knowledge of cave practice and a progressive practical training under the watchful supervision of those with experience. A strict discipline must be enforced and young people must be discouraged from individual adventures below ground.

In reply to a question, Dr. Castin was in favour of plastering a fractured limb in the cave before the victim was moved. In this connection he made the point that in France and to some extent also in the British Isles, caves and pot-holes are bigger, longer and more inaccessible than in Belgium. Thus rescue is often a long drawn out and complex operation. On the other hand many Belgian caves are narrow, with long difficult stretches.

The second lecture was given by Dr. Masy, of Liège, who described a survival experiment in which three volunteers had spent 5 days in a cave at a temperature of 8°C (46°F) with no food, no water and no spare clothing. They were in telephone contact with the surface and carried out simple physical checks such as testing muscular strength. After the first day they did not suffer much from hunger and they found the water collected drop by drop from the roof in a helmet so unpleasant that they did not drink it. The humid atmosphere prevented dehydration of the body. Muscular strength decreased slowly each day but when the time came for them to go out on the fifth day they had no difficulty in doing so unaided though the way out was long and difficult.

Two of the men were wearing leather boots and woollen stockings, the other rubber soled canvas shoes; the footwear was not removed during the trial. The men wearing boots suffered swelling and pain in the feet for several days after-

wards, a condition known during the 1914/18 war as "trench feet". The man wearing canvas shoes suffered no ill effects.

The conclusion from this trial was that a party isolated in a cave can subsist, even at a rather low temperature, without food, drink or warmth, for several days provided they do not panic. They must from time to time remove boots and massage feet.

There had been a fatal accident in Belgium the previous January when a party of five was cut off by flood in Trou Bernard, Mont-sur-Meuse. The two experienced cavers in the party tried to force a way out through flood water at 1°C and died of exposure. They would have survived if they had waited for rescue; the other three were got out uninjured in the early hours of the following morning.

LES GROTTES DE HAN

The Grottes de Han have been formed over the millenia by the passage underground of the River Lesse, a river no smaller than the River Tees at Barnard Castle. The cave is inside a hill of height about 500 ft. above the village of Han-sur-Lesse and of about 5 miles in circumference. The Lesse disappears into a swallet on the far side of the hill and emerges from a big cave in strata of limestone inclined at 30° to the horizontal, 400 yards from the village.

The main cave can be followed, and is now open to the public, from the river exit for a distance of about 1½ miles to a point on the far side of the hill about 300 yards from the swallet. The whole of this route has been levelled and lighted, though an interconnecting link containing magnificent formations was only discovered in the autumn of 1961. Hitherto nobody has succeeded in following the whole underground course of the river, but the Fédération are confident that only 10 per cent. of the system has so far been explored and much work remains to be done.

The developed part of the cave consists of alternating narrow passages and large chambers, nearly all of which contain fine formations. Access to the cave is by boat for the first 400 yards to a landing stage in a very large chamber, much of which is filled with boulder scree but which must have a height of 350 ft. and a diameter of at least 800 ft. The exit

from this chamber is by way of a very narrow fissure (widened for the public) where the demonstration was made of passing the stretcher across the knees of the rescue team wedged in the fissure. It was disillusioning to find, on the far side of this fissure, another enormous chamber where three terraces had been levelled and equipped as a café where some 500 people can be served with hot chocolate, coffee, coca-cola and cakes. One would not have been surprised if the Hallé Orchestra had been playing the Venusberg motif from Tannhäuser on one of the terraces.

The cave is ideal for a rescue demonstration since the arrangements for the public make it possible for a large number of people to see what is going on. The only feature missing is an actual pot-hole, but a vertical drop of some 70 ft. from a boulder scree to the river makes most pot-hole operations possible.

CONCLUSIONS

The meeting was well organised, well attended and most instructive, both to the visitors from abroad and to the Belgian Spéléo-Secours. There is no doubt that it is a good thing for Club prestige for the Y.R.C. to be represented at such international meetings from time to time.

The organisation of Spéléo-Secours was impressive, the uniform and quasi-military discipline of this voluntary body, admirable; it made recognition easy and ensured that there was a proper chain of command and that every member knew his job. The method of call-up and of getting to the scene of an accident seemed quick and efficient, but would of course need modification in other countries to suit local conditions.

The number of cavers in Belgium is still measured in hundreds, whereas in the British Isles they now number many thousands. Nevertheless it is evident that caving and pot-holing are becoming increasingly popular in Belgium and it is good to know that there exists so efficient, keen and active a rescue organisation. Spéléo-Secours had, at the time of the meeting, been called out to 15 rescue operations since the beginning of 1959, whereas in Britain there is an average of one call per week-end during the active season.

Spéléo-Secours would very much appreciate receiving copies

of all accident reports issued by the British Cave Rescue Organisation, and any published literature giving descriptions of equipment and methods used. Such communications should be sent to Monsieur C. Slagmolen, 88 rue du Tilleul, Brussels, 3.

Meets by foreign clubs with the object of exploring the unknown regions of the Grottes de Han must be arranged with the owners of the cave, Société Anonyme des Grottes de Han et de Rochefort, Han-sur-Lesse, Belgium. The President of this Société is Monsieur van Hove.

Arrangements to go elsewhere in Belgium can be made with the Fédération Spéléologique de Belgique, 23 avenue des Azalées, Brussels, 3, whose President is Monsieur A. de Martynoff.

Information about Belgian caves can be obtained from the Federation's Librarian, Guy de Block, 54 rue de la Limite, Brussels, 3.

It is a recognised courtesy that any group carrying out an exploration gives to the proprietors of the cave an account of its discoveries.

NOTES ON KILNSEY CRAG

by D. M. Moorhouse

DURING the last ten years climbing on the limestone crags of Yorkshire and Derbyshire has advanced by leaps and bounds, mainly as a result of the acceptance of the piton as a *bona fide* means of progress. No longer is it necessary to hide one's pegs under an anorak.

The best of the limestone crags offer climbing of an almost Dolomitic standard and Kilnsey Crag is by far the most famous of these. Its main overhang, impressive from the road and even more so to anyone suspended from its roof, fell to the onslaught of R. Moseley in 1957. Time has not lessened its difficulties and it is still regarded as one of the most difficult artificial routes in the country. These difficulties are such that, unless one is blessed with supreme powers of speed, the likelihood of a forced bivouac at the top of the first pitch is inevitable. The 'hard' man, the insane and those practising for future Alpine routes, may well choose to sit it out on a two foot six inch ledge; others will prefer to resort to trickery, leave their kit and make a graceful abseil to the security of the Local, whence they can resume their attack on the following day, using Prusiks and fixed ropes.

From the top of the first pitch one must climb 10 feet before beginning to traverse 60 feet or more under the start of the main overhang, some 120 to 130 feet above the ground. A series of rotten wedges oppose the force of gravity and have so far made progress possible, though anyone suspended from them is well on the way to a thorough understanding of "cowards die many times before their deaths". This feeling is continuous: the leader, having crossed this hazardous pitch, must rig up a form of trapeze-like swing, suspend it from a few rusty old pegs and then, from this doubtful perch, take in rope as his second crosses the pitch of rotting wedges. Then comes the moment for the change-over: a moment during which the possibility of acrobatics becoming aerobatics is all too obvious. This feat accomplished, the leader must push on towards the lip of the overhang where there should be three bolts in place. His imagination runs awry and all the terrors of artificial climbing fill his mind: will the bolts be there?

Has time loosened them? Will the rope jam? The rope will start to drag in a manner likely to pluck climber and the last four pegs from their anything but secure holds.

Once over the lip of the overhang the leader can again look forward to another lease of life, for the angle soon relents and, after a bit of loose rock, he can at last stand belayed on *Terra Firma* and bring his second man to join him at the top. Relief will flood his being and he can now make tracks down to the Local to replace the vast amount of liquid lost during the ascent.

ON THE HILLS

1962

Tallon and Anderson, with two companions, visited the Encantados region of the Pyrenees; this had been the subject of an article in the *Rucksack Club Journal* after a visit in the spring of 1958 by a member of that Club and H. L. Stembridge. They found it as attractive as reported though the spring would have suited them better than August for climbing, the snow gullies could then have been climbed to the ridges with more satisfaction than the negotiation of dangerously loose rock under summer conditions. The ridges themselves were delightful, reminiscent of Skye; also a fine rock route to the summit of Pic de la Râtère. Four camp sites were occupied in the high valleys: in the Colomés; on the western side of the Bècibèri Ridge; at Montaro, above the Estan Negro and, finally, near the Encantados Peak itself. Peaks climbed were: Colomés, Ratère, Bècibèri South, Senalada, Punta Alta, Basiéro and Sabaredo. The traverse of the very fine Aiguilles de Tramesane was defeated at the second abseil due to shortage of rope. The camp in the beautiful mountain setting at the foot of this ridge was so enchanting that they were loth to tear themselves away from the pleasures of bathing or just relaxing.

Richard Gowing was at Saas Fee with the Oxford University Mountaineering Club. He climbed the Fletschhorn by the ordinary route, the Lagginhorn by the south ridge, was baulked of the Lenzspitze by bad weather and got soaked on the way back from the Ulrichshorn. From Zermatt he and Roger Allen climbed the Rothorn, traversed the Wellenkuppe and Obergabelhorn but again bad weather deprived them of the Täsch-Dom traverse. After the Weisshorn by the ordinary route they were joined by Dr. Hamish Nicol who led them up the Matterhorn by the Zmutt Ridge in 11 hours from the Hörnli, including 2½ hours' step-cutting in hard ice.

Allen, F. D. Smith, Varney and David Stembridge were in the Mont Blanc massif. After a successful ascent of the Aiguille du Géant, they got benighted below the Dent du Requin, returned by the Aiguilles du Plan and du Midi and made a memorable traverse of the Grépon, getting involved in an

electrical disturbance on the summit and again spending a night out in the 'Crevasse' on the way down.

T. H. Smith spent 3 weeks in the Yukon and Alaska. Bad weather prevented him from achieving his object, Pinnacle Peak, in the St. Elias Range, but he was able to spend some time at a high altitude glacier research base camp of the American Geographical Society; he also did some panning for gold.

Frank and Harry Stembridge went to Corfu in October. They found the island delightfully unspoilt, with pleasant low hills to walk over, and friendly villagers.

Chapman and a friend tramped the Cairngorms in January, walking from Aviemore over the pass of Ryvoan and Lairig an Laoigh to Glen Avon. From Faindouran Lodge they went down Glen Derry to the Lindbeg Bothy and crossed the Lairig Ghru to the Sinclair Bothy in a blizzard with the visibility so bad that they had to rope up.

Harben, Woodward, Henderson and Barker spent the pre-Whitsun week in Skye and completed the Cuillin Ridge Walk. Not out to break records, they started with a night out on Gars Beinn and finished on Sgurr nan Gillean after a second bivouac in Fionn Coire.

1963

The President, with three Past-Presidents, was skiing at Wengen. They found the new Männlichen lift a great benefit and had plenty of snow for the glorious runs down to Grindelwald.

T. H. Smith skied at Zermatt, he successfully dodged typhoid germs; Henderson was at Geilo and Watts at Gstaad where the snow throughout February was 6 ft. deep and the 'moguls' terrifying.

Hilton, Leese, Tregoning, Marshall, Cullingworth and two guests, as an alternative to going to Ireland, spent Whit week in Wester Ross camping near Loch Lurgan. Hills climbed included Ben More Coigach, Cul Mor, Stac Polly, An Teal-lach, Ben More Assynt and Suilven.

Richard Gowing, David Smith and Roger Allen camped at La Bérade in the Dauphiné. They climbed the Aiguille Dibona by the Boell Route, with an A.1 variation by mistake for the

crux. From the Temple Ecrins Hut they climbed the Pic Coolidge, followed by the big excursion of the holiday, an attempt on the classic traverse of the Barre des Ecrins by the south face and the north west ridge. They reached the summit of the Pic Lory, 4,086 m., at 6 p.m., too late and too misty to go on to the Barre, 4,101 m.; they found the sharp north west ridge difficult and were overtaken by darkness in the middle of the Glacier Blanc. After a comfortable bivouac they were prevented by a snowstorm from crossing the Col des Ecrins and returned by the Col de la Temple. The stay in the Dauphiné was rounded off by crossing the Col de la Girose, ascending the Rateau by the south ridge and abseiling on to the Meije Glacier. They finished the holiday by climbing the Finsteraarhorn and, on a glorious day, traversed the Gross Fiescherhorn to the Jungfrauoch.

Henderson, in the Dolomites, climbed the Punta Clark, being directed along his route through a loud speaker in the valley, operated by an English-speaking major in the Alpini who was in charge of some military manoeuvres.

Crowther spent June in Co. Kerry, he explored the mountains of Macgillicuddy's Reeks and did some climbs with members of the Tralee Mountaineering Club. He found this fine mountain area very little known, most attractive and rather mysterious.

The winter of 1963/64 was remarkable for lack of snow, not only in the Alps but in most of western Europe. Even so Frank Stembridge was ski-ing at Davos, the President at Champéry, Harben at St. Anton and Züers, Barker at St. Anton, T. H. Smith at Grindelwald, Watts at St. Moritz and Gstaad, where the snow arrived in time for Easter.

Harben, Henderson, Woodward and Barker built a ski tow at Ringinglow, near Sheffield. The power was supplied by a 1940 Fordson tractor and an endless rope passed round a lorry wheel fastened to one of the jacked up rear wheels. The tractor was 30 feet from the top pulley, which consisted of a motor car wheel fixed in a frame. This was attached by a rope and pulley blocks to an iron stake driven into the ground. A similar arrangement at the lower end made it possible for the tow rope to be tensioned. The tow was 700 feet long with a vertical rise of 125 feet and a capacity of about 300 persons

per hour. It was used successfully on 22nd February, though part of it ran across grass. A few weeks later after a six inch fall of snow it was in use for three days.

Chapman and a friend were again in the Cairngorms in February, they walked into the higher reaches of Garbh Choire where they found enough snow to build themselves an igloo in which they spent two nights. The first day they climbed out of the corrie up a snow gully and on over Angel's Peak, Cairn Toul and Braeriach. Next day they walked at high level over to Glen Feshie and stayed at the bothy of Ruigh-aiteachain.

CHIPPINGS

FRENCH OR GERMAN? Abseil or Rappel, Bergschrund or Rimaye? Writers of articles in mountaineering journals seem to use the word appropriate to the district in which they have crossed the "mountain gap" (Webster) or "roped down" (J. H. B. Bell). The unfortunate Editor is faced with the problem—to standardise or to leave things safely as they stand? In the absence of tidy English words on which to standardise, if such be his wish, shall he borrow from the Teuton or the Gaul? In the current number of the *Y.R.C.J.* the choice has been for German, only because the German words seem to be in more general use in English. Comments would be welcomed.

H.G.W.

HOW LONG DO BATS LIVE? Bulletin No. 13 of the *Equipe Spéléo de Bruxelles* quotes several papers on this subject. In Holland a bat, species *Myotis Mystacinus*, has been recovered 18½ years after it was ringed. The record was reported by Norbert Casteret for a bat of species *Rhinolophus Ferum Equinum*, recaptured after 23½ years. Bulletin No. 17 describes the different types of bats found in Belgian caves and gives, with sketches, some of the characteristics whereby they can be identified. Copies of these Bulletins are in the Y.R.C. Library.

H.G.W.

WHY NOT JOIN THE SKI CLUB OF GREAT BRITAIN? The President of the S.C.G.B., in the 1963 Yearbook, is disturbed that membership remains static at 15,000 while British skiers visiting the Alps each year now number nearly 300,000. He concludes that at the present time the Club has not got enough to offer to secure a steady build-up in members. He makes suggestions whereby the Club might be enabled to make available to *all* its members better or cheaper facilities for ski-ing, but in reading these suggestions one cannot get away from the feeling that too much emphasis is still laid on racing, a branch of the Club's activities which costs a lot of money and takes up much time. The formation, in March 1964, of the National Ski Federation of Great Britain, the primary object of which is stated to be "to discharge the responsibilities previously

undertaken by the Ski Club of Great Britain in respect of national and international competitive ski-ing", may mean that the Ski Club will now be able to devote more money and especially more of its representatives' time at the ski centres to arranging and leading "off the piste" excursions and tours. The Club has already set up a Travel Advisory Bureau and runs a free course of pre-ski instruction for new members. If these activities were more fully organised, and were more widely known, the Club would have a much greater appeal to those 285,000 skiers in Great Britain who are not members, and its future would be assured as what Sir Arnold Lunn calls "a Club of genuine amateur holiday skiers".

H.G.W.

ALPINE FLORA. The Swiss Alpine Club has recently circulated among its members a little book, *La Grande Pitié de Notre Flore Alpine*, by Auguste Piccard and Emmanuel Stickelburger, pointing out how many of the rare and lovely flowering plants of the alpine regions are in danger of extinction. The cause is not so much the uprooting of the plants by collectors or for sale, but the wholesale gathering of the flowers, with the resulting loss of seeds to propagate new plants. A plant, like any other living creature, has only a limited life and must in time be replaced. The book mentions places in Switzerland where certain plants, which fifty years ago were common, have now become very rare or have completely disappeared owing to picking of the flowers year after year by children and increasing numbers of tourists.

H.G.W.

"MUD, MUD, GLORIOUS MUD." "What is mud?" asks Dr. Eugene Fubini, deputy director of research at the Pentagon. *New Scientist*, No. 392, 21st May, 1964, page 469, offers some conclusions from this side of the Atlantic. In strict scientific terms, mud may be described as dirt with dropsy, a half-way between *terra firma* and *mare nostrum*, used for the construction of swamps, quagmires and morasses and as an indicator of activity on building sites. But how many different kinds of mud are there?

There is Original Mud, our beginning and our end, the goo

that gave the first organisms a toe-hold to climb up out of the primaeval soup. There is Mud the Obliterator, splashing, creeping and getting walked into the house; is this the one with which Y.R.C. wives are so familiar, or is it rather Mud the Beautifier, the only type to which a woman will passively submit? Or perhaps Mud the Playmate: provided that only his clothes are spotless and his shoes brand new, any toddler left out of sight in high summer after seven weeks of drought can be guaranteed to return inside five minutes plastered with new-made mud.

Compared with these forms, the common Military Mud, in which tanks get bogged down and infantrymen wallow, and in which Dr. Fubini is doubtless most interested, is but a simple thing.

H.G.W.

1892 AND ALL THAT

SUNG by Harry Spilsbury at the Y.R.C. 70th Anniversary Dinner, 17th November, 1962.

Tune: "My Old Shako"

Words: John Hirst, Harry Stembridge.

The Yorkshire Ramblers saw the light in 1892.
For seventy years it's brought delight to those who taste its
brew.
We've climbed the crags; in filthy rags we've plumbed the pots
below.
And year by year we've scared the deer to bag the bleak
'Munro'.
And year by year we've scared the deer to bag the bleak
'Munro'.

Chorus:

Heigh Ho! Nobody seems to know
Why some delight to scale a height while others crawl
below.
But we get thrills from climbing hills, and it was always
so
Ten, twenty, forty, sixty, seventy years ago!

On Cuillin Ridge and Lakeland Fell, on Chamonix Aiguille,
It's true to tell we go like—well, with great agility.
Down Lost John's Hole and Marble Arch, in Reyfad and G.G.
On hands and knees we crawl and squeeze, the ruddy Y.R.C.
Through boulder jams we crawl and squeeze, the ruddy Y.R.C.

Chorus:

Heigh Ho! In sunshine, mud and snow
Some would race and set the pace, and some go very slow.
And some would pick the smallest nick for finger-tip or
toe.
Ten, twenty, forty, sixty, seventy years ago!



CENTIPEDE PITCH, LOST JOHNS'

W. J. Anderson

At end of day, as pints are supped, we talk of men we knew,
Of Roberts, Smythe and Crosby Fox, Slingsby and Frankland
too.

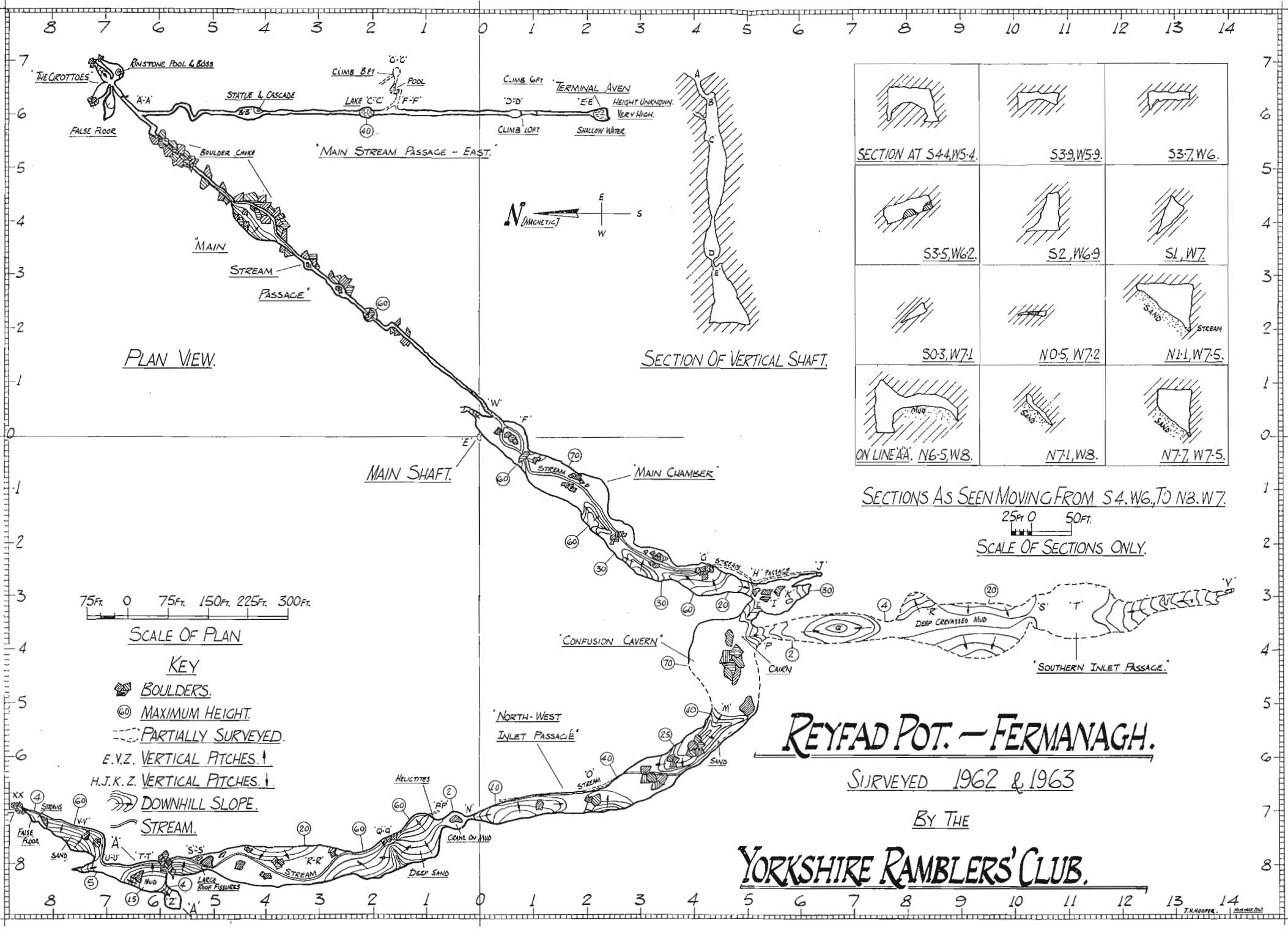
Jack Hilton still goes like a bomb, young Stembridge takes the
chair,

And though Cliff snores, and Stanley too, it's good to know
they're there.

Chorus:

Heigh Ho! We've loved to watch it grow
From humblest of beginnings to the grandest club we
know.

So here's to all the veterans who helped to make it so
Ten, twenty, forty, sixty, seventy years ago!



PLAN VIEW.

SECTION OF VERTICAL SHAFT.

SECTION AT S44,W5.4.	S39,W5.9.	S37,W6.
S35,W6.2.	S2,W6.9	S1,W7.
S03,W7.1	N05,W7.2	N11,W7.5.
ON LINE AA. N6-5,W8.	N71,W8.	N77,W7-5.

SECTIONS AS SEEN MOVING FROM S4.W6. TO N8.W7.

25 FT 0 50 FT.
SCALE OF SECTIONS ONLY.

75 FT 0 75 FT 150 FT 225 FT 300 FT.
SCALE OF PLAN

KEY

- BOULDERS.
- MAXIMUM HEIGHT.
- PARTIALLY SURVEYED.
- E.V.Z. VERTICAL PITCHES. ↓
- H.J.K.Z. VERTICAL PITCHES. ↓
- DOWNHILL SLOPE.
- STREAM.
- FALSE FLOOR.
- SAND.
- LARGE ROOF FISSURES.
- DEEP SAND.
- COAM ON MUD.
- HELICTITES.
- RIP.
- CLIMB 8 FT.
- CLIMB 6 FT.
- CLIMB 10 FT.
- SHALLOW WATER.
- HEIGHT UNKNOWN VERY HIGH.

REYFADH POT. - FERMANAGH.
 SURVEYED 1962 & 1963
 BY THE
YORKSHIRE RAMBLERS' CLUB.

CAVE EXPLORATION
THE REYFAD AREA, Co. Fermanagh
 by J. R. Middleton

REYFAD POT

The Whitsuntide exploration of Reyfad Pot in June 1963 proved most successful, more than 3,000 ft. of new passages were explored and surveyed. A full account of previous exploration has already appeared in this Journal⁽¹⁾, the present account only deals therefore with the discoveries of 1963. On the accompanying plan single letters refer to points on the plan illustrating the previous article, double letters to points in the newly discovered passages.

The 1962 expedition left four possible points of departure:

- (a) Upstream from the Main Chamber, beyond 'W'.
- (b) Up the North West Inlet Passage beyond 'N'.
- (c) Possible side passages of the Southern Inlet Passage, between 'P' and 'V'.
- (d) Downstream from the Main Chamber, beyond the boulder jam at 'J'.

The Southern Inlet Passage had only been very briefly explored in 1962, but there was not enough time in 1963 for item (c) to be carried out. The boulder jam at 'J', which was found impenetrable in 1962, could possibly be forced with the right equipment, which the Club unfortunately did not have at its disposal, so item (d) could not be followed up either. In order to explore items (a) and (b) it was necessary, in the short time available, to get two parties of four down more than 300 ft. of descent, this in itself being no mean feat owing to the awkwardness of the pitch. All that could in fact be done on the first day was to ladder the pitch, lower the equipment and rig up the telephone.

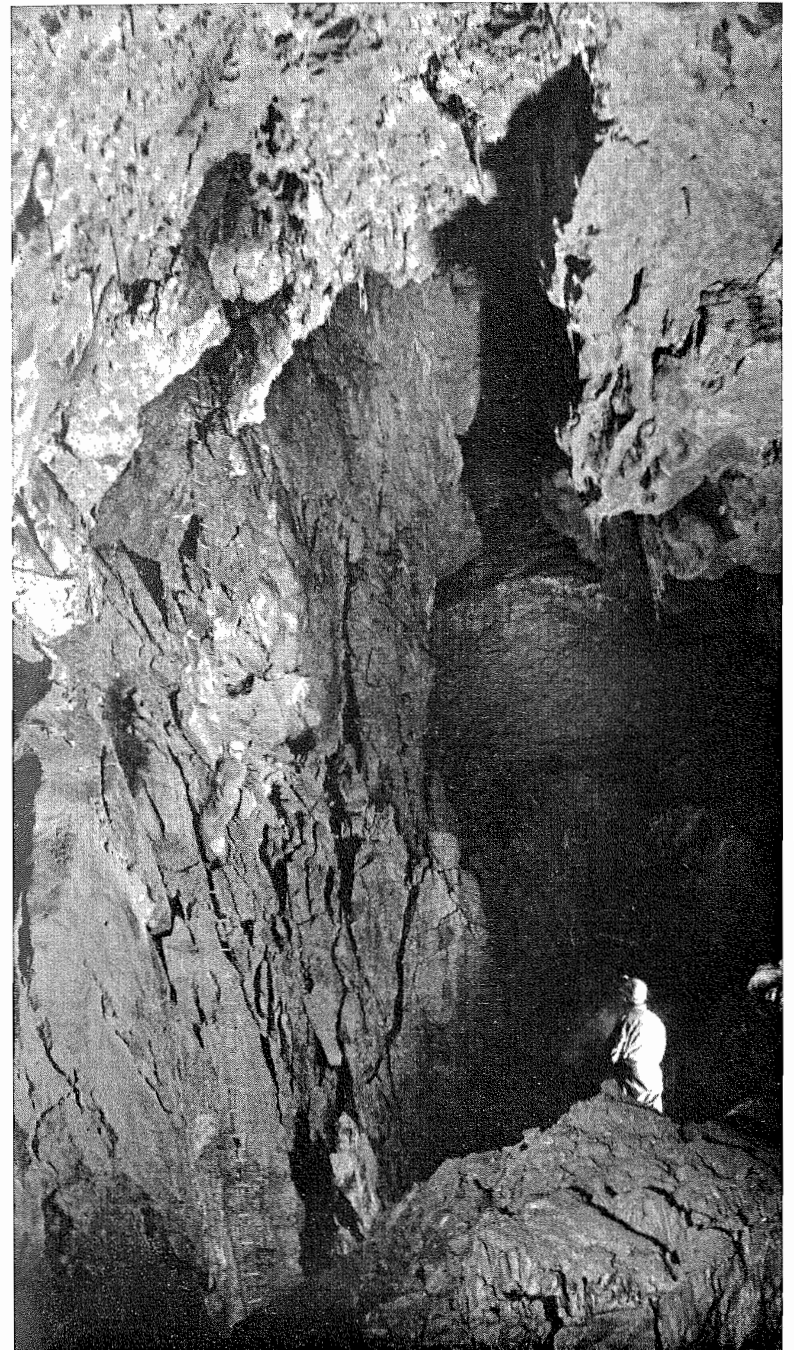
On the second day a party consisting of T. W. Salmon, R. Gowing, D. Moorhouse and J. R. Middleton set out from 'W' to explore up the Main Stream Passage. This had been the subject of a quick exploration for about 300 ft. in 1962. A descent of about 6 feet to the stream in the north west corner

⁽¹⁾ *Y.R.C.J.*, Vol. IX, No. 31, page 205.

of the Main Chamber leads into a high and well worn stream passage with occasionally a fracture in the left hand wall. This passage varies between 3 and 8 feet in width and continues over a fairly even bed and round slight bends for 200 ft., at which point the boulder choke is first reached. This starts with just the odd boulder jammed across the passage but after about 100 feet, and for the next 300 feet the way was above, below and round a chaotic mass of large and frequently loose boulders. To ensure an easy return it was essential to leave candles or markers in this section. In several places it was possible to move over to the left out of the boulders and into what must be a continuation of the Main Chamber, now for the most part blocked with boulders and compact mud. Wherever such openings were met the roof was richly adorned with glistening straws. Several of these openings were left unexplored, the object being to follow the stream passage.

When the boulders thinned out the passage, varying in width from 3 to 6 feet and in height from 3 to 8 feet, continued, gently meandering and containing several small groups of roof formations. The roof began to rise and at about 100 feet from the end of the Boulder Choke the stream turned abruptly to the right, 'AA'. A dry passage, larger than the stream passage, led straight ahead, and a quick reconnaissance of this was made. After a few yards a 12 foot climb up loose rocks and slippery mud led into what the party concluded must be four of the most beautifully decorated grottoes in the British Isles. Each chamber contained practically every formation it was possible to imagine, stalactites, stalagmites, helictites, cave coral, rimstone pools and cascades. The passage was not pushed to its limits for fear of damaging the formations, but it is quite possible that the chambers go further.

From 'AA' where the stream turns abruptly right, the passage, though remaining high, narrowed immediately and continued up several steps and round acute bends until a very high passage, Main Stream Passage East, was reached, 2 to 3 feet wide with the stream filling most of the floor. Continuing over and under an occasional wedged boulder for a further 80 feet it opened into Statue Chamber 'BB', a high triangular chamber, directly across which they saw a most magnificent stalagmite and cascade, almost luminous in their whiteness.

*MAIN CHAMBER, REYFAD**B. E. Nicholson*

The same type of passage went on for another 190 ft. to a lake 'CC', of unknown depth but where a 20 ft. wide pool could be crossed with head and shoulders above water by following ledges along the right hand side and jumping the last few feet.

After a short stretch of wading knee deep, Main Stream Passage East went on as before the lake, though slightly wider, along an easy course for 250 ft. to a small chamber 'DD'. From here a vertical 10 ft. climb on breakable chert up a waterfall, quickly followed by another climb of 6 ft. led in to an entirely different type of passage—tight, twisty and with sharp projections; this finished with a very large aven, 'EE', measuring some 35 ft. square and well over 100 ft. in height, even the party's strong electric lamp beams could not reach the roof. Down the sheer walls of this aven the Reyfad stream descended with impressive force, making further exploration in this direction impossible, although an entry might be forced from Pollnallybrach.

On the return journey the party explored a small stream which entered from the right, 'FF', shortly before the lake 'CC'. The stream, after a 10 ft. climb, was followed on hands and knees for 30 feet to a long pool 2 feet deep with 2 inches of air space above it. After about 3 feet with nose against roof, the roof gradually rose to a 5 ft. high passage leading to a small chamber 'GG'. The passage headed east at first but after an 8 ft. climb it turned north west. After a few more feet there was another climb, up loose rocks but at this point the lateness of the hour made imperative a return to the Main Chamber. On arriving at the base of the main shaft and finding that the second party had not yet returned, two members started to ascend while the other two went into Confusion Cavern and poked about among the boulders. They found several drops going down 20 or 25 feet and some short crawls which after 20 or 30 feet were choked with the fine Reyfad sand.

In the meantime a second party consisting of B. Nicholson, J. Hooper, D. Woodman and J. Hatfield had crossed Confusion Cavern and gone into the North West Inlet Passage. Here they had made the startling discovery that this passage from 'M' to 'N', went in a north westerly direction and not south-

wards as shown on the 1962 survey. Reluctant to believe that a mistake had been made they spent quite a long time at the southern end of Confusion Cavern, but all they found was a tight tunnel ascending to a chamber about 12 feet long, 5 feet wide and 10 feet high with no possible outlet.

Proceeding up the North West Inlet Passage, the measurements made and described by the 1962 party were checked and, where necessary, revised. This party had been stopped where the fine clay mud appeared to reach the roof, at point 'N'. A closer examination at this point revealed a low but fairly comfortable crawl over smooth mud, extending into the unknown. The 1963 party followed this crawl for 35 feet, noticing some fine helictites on the right hand wall. At 'PP' they looked into an impressive sloping chamber with a floor of sand and mud; a small stream flowed along the bottom of the right hand wall. Seventy feet across this chamber a bank of mud, reaching the roof, stretched to some boulders bridging the stream, 'QQ'. From here was a great meandering clay canyon, with the stream occasionally bridged by large boulders, continuing for some 180 feet, at which point, 'RR', the roof came down to 20 feet. The passage was the same width and showed the same characteristics for a further 200 feet, along this section were some fine stalactites and helictites and in several places calcified mud cups with cave pearls.

At 'SS' the passage narrowed and became low, progress being almost on hands and knees. A very low bedding plane led off to the left while on the right a narrow steep slope led down to the stream; at this point there were again many quite remarkable helictites. Beyond the crawl the passage again widened to form another chamber 'TT' with two alternative routes from it. To the left up a small slope there was a 20 foot pitch, 'Z', this was not descended but a good view of the bottom could be had and no possible way out was seen. The main passage continued straight forward for 80 ft. and then, at 'UU', turned abruptly to the right. From here for the next 180 ft. to the end of the cave at 'XX' the mud was of a much darker colour and contained fragments of grass and heather together with the odd worm cast, indicating that this point was very near the surface. The North West Inlet Passage finished in a very impressive way, the final chamber, 'VV',

with the stream entering through a very solid boulder choke, was well provided with most beautiful formations. Several narrow fissures in the walls at this point were climbed in the hope of finding an easy exit, but without result, much to the disappointment of those members reluctant to climb the 310 feet back to the surface.

As this will probably be the last attack on Reyfad, at least for some years to come, it is not inopportune to mention that this latest exploration is the culmination of five visits by the Club. The exciting possibilities of a big pothole were realised in 1939 when the first entry was made and successive descents in 1948, 1960, 1962 and 1963 have amply justified the early hopes. Without doubt Reyfad is an extremely severe pothole which must be approached with great caution and, in the words of its discoverer, "must be treated as a major Alpine expedition". There is much rotten rock and an accident to a party below the narrow slot at approximately 200 ft. would be disastrous.

It was entirely fitting that Ernest Roberts discovered Reyfad in 1939 and during the ensuing quarter of a century it has been a continuous challenge to the Club. It had long been a hope that Reyfad, Pollanaffrin and Noon's Hole would connect into a major system but it now seems that this hope will not be realised. Nevertheless Reyfad alone is a magnificent system and will leave a tremendous impression upon all those who have made the descent. Its exploration must surely rank as one of the finest exploits of the Club.

POLLNATULLYBRACH

When a rough plan of the upstream section of Reyfad Pot had been drawn, it was plotted on the surface to see if a way could be found down to the top of the Terminal Aven. Within 40 yards of where the aven should be, a stream about the size of the Reyfad one sinks in some boulders in a small rift about 30 ft. long and 4 ft. wide with jammed boulders all the way along about 5 ft. down. The middle looked the best place to start removing the boulders and soon it was possible to squeeze through and down a 20 ft. pitch at the bottom of which is a small chamber about the same size as the rift above.

At the end opposite to where the water showers down the

two walls join, all but a hole six feet up, about one foot high and six inches wide, where we could look through into a medium sized chamber and hear falling water, but without explosives it was impossible to get through. Following the course of the water we came at once to a 90° bearing to the right in the passage. The roof came down to within 4 inches of the water surface; Salmon and Middleton entered this low but wide crawl which after a further 12 ft. again turns to the right. At this point a wall of chert about an inch thick was found to be damming the water. As it was impossible to get over it, it was kicked down; this had the immediate effect of reducing the water level by a good six inches. Beyond, the roof once more came down to within a few inches of the water which was about 18 inches deep.

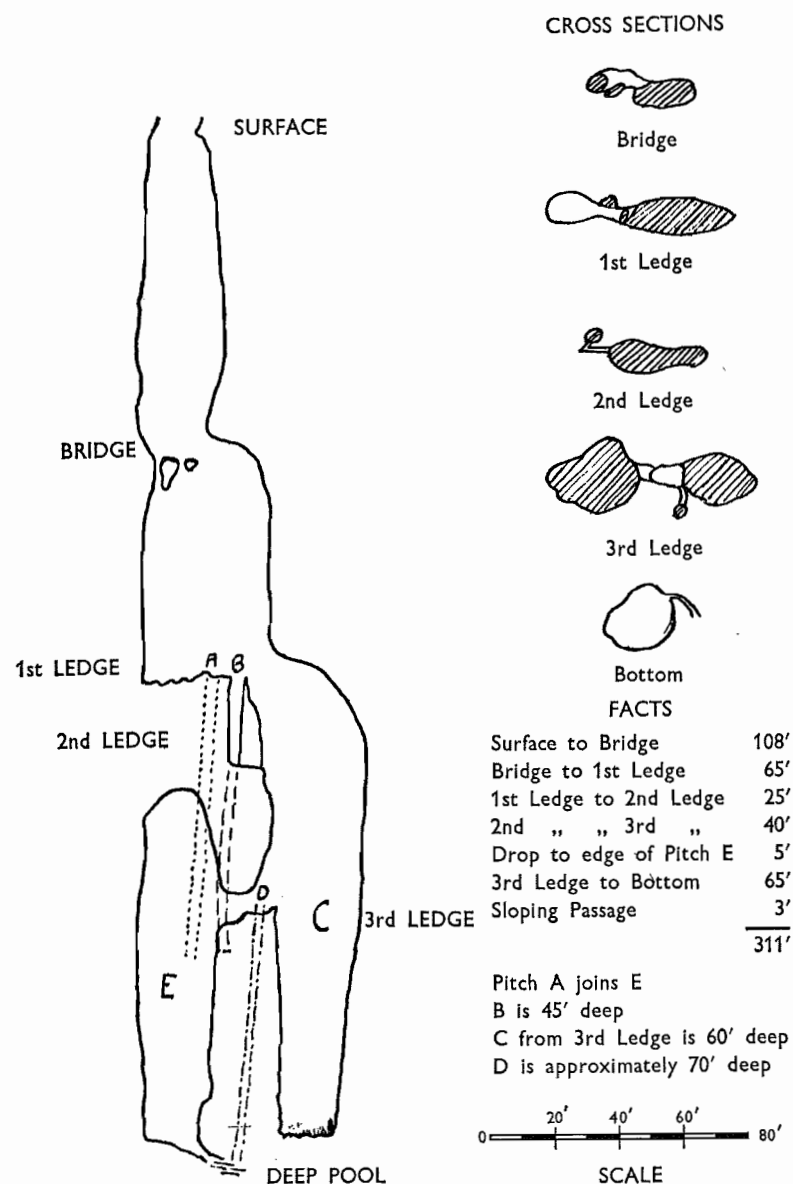
After a further 6 ft. the passage turned left and the water became shallower but the roof came down lower. A crawl of 10 feet and the passage was again blocked by a chert wall which was battered down with a rock. After a few more feet of crawling on hands and knees and a drop of 3 ft. the water vanished into an impenetrable crack in a small chamber. It did, however, sound as if it dropped down a further fall after a few feet.

NOON'S HOLE

On all previous Y.R.C. visits since the war to Noon's infamous hole the stream proved to be the major obstacle to deep penetration of the hole. In 1963 there were nearly ten days of hot, dry weather prior to our arrival and the water presented no difficulty on any pitch.

The attacking party consisted of eight men, of whom three were to descend. Twelve rope ladders were joined together and lowered after being firmly belayed to two of the trees which grow in forest-like profusion round the top of the pot. The Bridge was the first stop; 108 ft. of free-hanging pot-holer's delight from the surface. From here there is a choice of three holes, all of which join up 12 ft. lower down. One takes all the water and so is definitely out, the second is too tight but the third is large and almost dry. From the Bridge to the first ledge is another easy descent of 60 ft., the ladder hanging about a foot from the wall.

NOON'S HOLE



This boulder strewn ledge is quite large, 20 ft. long by 10 ft. at its widest, with the stream sprinkling down at one end. From here three pitches go down, marked A, B and C on the plan. Pitch A is tucked away in a corner and at the top is about 3 ft. by 2 ft.; it seems to get narrower but comes out, as we found later, halfway down Pitch E. The other two, B and C, are almost one at the top, being separated by only a thin flake of rock. B is circular, about 4 ft. in diameter and 45 ft. deep; not till we had descended this pitch did we realise that the correct way down was C. One man, Moorhouse, was left on this ledge; T. Salmon and J. Middleton went on down, reaching the second ledge after a further 25 ft. This is really the bottom of a narrow fissure connecting B and C together.

The next 40 ft. to the third ledge is rather awkward as the ladder hangs at an angle. A short passage leads off at this ledge but pitch C still continues straight down for 60 ft. to a boulder-covered floor. From the third ledge a 6 ft. climb leads to a further pitch, D. The short passage from the ledge leads to the edge of yet another drop and on this pitch the water pours down from the roof, this must be a very nasty place in bad weather. Pitch E was an easy descent of 65 ft.; the bottom is roughly circular and covered with small rocks through which the water seems to sink. The stream, however, reappears running down a small passage to the left of the ladder. This leads downhill to an evil looking pool which quickly reaches a depth where swimming is the only method forward; stones thrown down pitch D splashed into this water. The pool was not forced to its absolute limit but the roof could be seen to be nearing the water level and it looked most improbable that the passage went any further. This point is almost level with the resurgence at Arch Cave.

LA SPELEOLOGIE EN FRANCE AU COURS DE L'ANNEE 1963

by Robert de Joly

EVEN IF 1963 was not rich in discoveries there was all the same work being done underground. An attempt by Michel Siffre to establish a record for a prolonged stay underground received much publicity. He stayed for 64 days in a cold pot-hole and came out in a wretched condition. G. Worman, an Englishman, did much better in Stump Cross, where he spent more than 100 days.

While on the subject of the British, mention must be made of their achieving, under the leadership of Ken Pearce, the greatest depth ever attained in speleology. They reached the 1,135 metre (3,721 ft.) level in Gouffre Berger, Vercors. It was not easy as there was water!

In the Pyrenees a team under the direction of Norbert Casteret again attacked Coume Ouarnède, but not without trouble, a thunderstorm blocked the leading group for three days. It took them 8 days to reach a depth of 300 metres (985 ft.) and to return to the surface. They did a coloration with fluorescein which reappeared in the Goueil li her⁽¹⁾ in the same massif. Casteret and I explored the Goueil years ago, but could not pass the siphon, it has since been found dry and further penetration has been made.

The Perigueux Speleological Club once again staged an assault on the Quebe de Cotch in the Pyrenees. Though hampered by thunderstorms they managed to reach a depth of 440 metres (1,443 ft.).

The cave La Clamouse (Herault), which has rich formations, is being prepared for opening to the public. It was discovered by the Montpellier Club in 1944; it is more than 3 Km. long but only a section of it is being opened.

The Carpentras (Vaucluse) Club, which has been working for several years in the Aven de la Rabasse, in the gorge of the River Nesque, explored in 1935 by myself, has carried out a most interesting and successful coloration. Fluorescein put into the Nesque reappeared 34 days later at a point 22 Km.

(1) "Goueil li her" is Basque for "Eye of Hell".

away at the famous Fontaine de Vaucluse. We had predicted this hydrological relationship.

There have been several serious accidents during the year. In June a party from Lyon were cut off in the Goule de Fossoubie (Ardèche) by a violent thunderstorm, two members were drowned. Near Sarlat (Dordogne) a party of 7 explorers were making their way along a gallery in the Grotte de Tarnies when a fall of rock and debris crushed two of them. One was killed, the other badly hurt. Speleology is not without its risks!

Caves open to the public:—

In the Aven Orgnac, in Lower Ardèche, a cave of international renown, a lift is being installed.

In Aven Armand, another of the same class, a funicular is being erected.

(Translated from the French by the Editor).

NEW DISCOVERIES

Birkdale Common—Border Pot. This pot-hole is situated on the Westmorland/North Riding border about 400 yards south of the B6270 Kirby Stephen to Keld road, among a number of sinks; Ordnance Survey Sheet 90, reference 809038. It was discovered by two members of the Teesdale Club in 1957 but was not entered until October 1963 when two members of the Cleveland Mountaineering Club bottomed the pot. Entrance is by a small hole in the side of the sink, on to a 35 ft. pitch, wet but does not need laddering, which leads on to a boulder slope. At the top of this slope twin eyelets on the left hand wall lead to a 25 ft. dry pitch; the pillar between the eyelets can be used as a belay. This leads directly on to a third pitch of 70 ft., free, which has a very narrow and awkward start. Belay for the third pitch is a thin flake on the right hand wall. No further progress is possible.

W. A. Linford.

Derbyshire—Castleton—Oxlow Cavern. In March 1964 a party of 6, G. Kitchen, D. Laud, E. Mason, R. Foster, K. Foster and J. R. Middleton, using scaling ladders, found a new system opening out from the passage between East Chamber and West Chamber. A 1,000 ft. hands and knees crawl leads to four avens and two large chambers, followed by a portcullis duck and a sump, a total distance of about 2,500 ft. Several other passages, one of 700 ft. and another of at least 200 ft. were entered and indicated further possibilities. The cavern was explored in 1922 by B. Holden, A. Humphreys and H. Humphreys (*Y.R.C.J.*, Vol. V, No. 16, page 135); recent measurements show several important differences from those made at that time. A side passage leading off to the right just before the beginning of the 1,000 ft. crawl (named Pilgrims' Way), down a body-tight tube, led to an aven below East Chamber and to a boulder chamber with a choked pitch at the bottom. Stones dropped down this seemed to fall some 100 ft., and water could be heard. Oxlow Cavern is just off the Rake on which are situated both Peak and Speedwell Caverns.* If the three could be joined up it would indeed be a fantastic system.

J. R. Middleton.

Breconshire—Glyn Tawe—Dan-yr-Ogof. In April 1964 T. Salmon, D. Moorhouse and J. R. Middleton worked their way along a passage starting well up the sand slope on the left hand side of Boulder Chamber. This passage turns left, goes steeply uphill and then levels out into a 30 ft. crawl leading to a small chamber and after a further 30 ft. to another, both of which contained brilliant calcite cascades. No marks of previous exploration were seen though it could not be said with precision that nobody had been there before. From the entrance to the second chamber a rather tight passage led upwards to the right; this was definitely new ground as several straws growing from roof to floor had to be broken. The passage contains many crystal clear helictites; it was followed along the top of a rift about 15 ft. deep after which it continued over boulders and mud to a choke. At the edge of the rift a blue stalagmite was found.

J. R. Middleton.

* *British Caving*, 1962 edition, Chapter V, page 163.

Fountains Fell. The *Yorkshire Post* reports the discovery of what may turn out to be a major pot-hole by the Craven Pot-hole Club. The exact location is not being disclosed until the pot, dangerous in places, has been fully surveyed.

CAVE ABSTRACTS

by The Editor

ITALY

Michel Siffre. Bulletin No. 13 of l'Equipe Spéléo de Bruxelles defends the much publicised and criticised survival experiment of the Institut Français de Spéléologie when Michel Siffre spent 64 days in the Gouffre de Scarasson, Briga Alta, Italy, the deepest underground fossil glacier in the world. The objects of this highly successful experiment were to examine:

- (1) the problems of human acclimatisation and protection in conditions: humidity 100%, temperature below 0°C.
- (2) physiological changes in sensory thresholds, reaction time and neuro-muscular excitability.
- (3) psychological changes under conditions of stress, and defence against such changes.
- (4) scientific problems relating to the stratified glacier.
- (5) the geology and meteorology of the cave.
- (6) underground glaciology; origin, destination, age, temperature of formation, structure, texture and movement of the glacier; moraines, pollens and cosmic dust.

Sardinia. Bulletin No. 15 of the same club describes Sardinia as a speleological paradise, more than 500 caves of which only 100 have been explored. The most important known caves are:—

Grotta di Nettuno, near d'Alghero. Fine formations and a large lake.

Grotta del Bue Marino, near Cala Gonone. More than 4 Km. long.

Grotta de Su Bentu. Longest in Italy, more than 6 Km.

Voragine di Golgo. Vertical pot hole, 270 metres.

FRANCE

Grotte du Lion, Ardèche. In March 1963 two pot-holers from St. Martin d'Ardèche were exploring a cave, the entrance to which had recently been exposed by blasting operations on a new road. They came upon some fine drawings of oxen, ibex and deer which, on examination were attributed to the Solutrean culture, about 25,000 years ago. The cave was immediately sealed by the authorities pending a thorough examination.

"Life in a Cave". This is the title of a paper published in *New Scientist*, No. 346, 4th July, 1963 and written by Professor Albert Vandel, Director of the Underground Laboratory of the Centre National de Recherche Scientifique at Moulis, in the Pyrenees. This station was mentioned by Robert de Joly in *Y.R.C.J.*, No. 31, page 213. The succession of animal life in most British caves came to an abrupt stop at the onset of the maximum glaciation about 100,000 years ago, but the evolutionary sequence has continued uninterrupted in France. It is thus possible to study all aspects of cave life and the way in which cavernicoles have evolved away from their surface relatives in the absence of sunlight and with entirely different sources of food. The laboratory includes a natural grotto below ground for experimental work, and a surface laboratory for biological, physical, chemical and geological investigation. The research is concerned with three interrelated subjects:—

- (1) The rearing of cavernicoles under natural conditions.
- (2) The measurement of their bodily activity and metabolism
- (3) Their food sources.

It has been found that metabolism is very much slowed down, in the case of certain crustacea the respiration rate is one fifteenth of the rate of the surface relatives. Maturity is reached later and the cavernicoles live longer. Clay is the main, if not the only, source of food, bacteria in the clay provide both the nutritive substances and the vitamins. It seems in fact that there is a biological cycle within the bowels of the Earth which is independent of sunlight and derives its energy from the chemistry of the rocks. Might this kind of life be found to exist on the Moon?

BELGIUM

Grottes de Hotton. This cave was discovered accidentally during quarrying operations in 1958, and was found to contain many magnificent formations. Fearing that visitors would interfere with his business, the owner of the quarry sealed the cave and allowed nobody to enter, though only a fraction of it had been explored. However, Belgian speleologists, after a prolonged survey on the surface, concluded that a depression in the ground some 650 metres from the quarry entrance must correspond to one of the known chambers in the system. Permission to dig was obtained from the owner of the land on which the sink was situated and excavation at the bottom of the sink was continued for two years in spite of many difficulties and much scepticism. Finally, at a depth of 12 metres and after piercing a thick layer of solidified clay, a breakthrough was made into the upper system of the Grotte de Hotton. There are 1,500 metres of known passages and it is estimated that there is at least twice this length still to be discovered. Norbert Casteret's comment on the success of the Belgian club was a "speleological exploit without precedent".

REVIEWS

IN MOUNTAIN LAKELAND: by A. H. Griffin (Guardian Press. 216 pp. 49 photographs. 21/-).

This charming book should be read by every lover of the Lake District, old or young, experienced or novice, but more especially by those who walk the fells or climb the crags.

There can be no better introduction than Jack Longland's opening sentence in the Foreword: "This is a good, a timely and above all a friendly book".

There is much in the book that will be new, even to those who know Lakeland well, while for the novice there are valuable hints and friendly advice, be he walker, climber or skier, which he might not so easily find elsewhere.

There is a brief mention, on page 185, of Low Hall Garth in connection with the illicit distilling activities of Lanty Slee, about whom Harry Griffin wrote in *Y.R.C.J.*, Vol. VII, No. 26, page 300, shortly after the opening of the Cottage.

A special feature of the book is its shape; slightly broader than most and so bound that the pages open easily and stay open where wanted.

The excellent photographs show the Fells, Crags and Tarns in all their moods and in all seasons; an appendix contains additional notes on these illustrations.

For the reader who has the misfortune not to know Lakeland intimately, a map and an index would have been a help.

H.G.W.

THE BRITISH SKI YEARBOOK

No. 43, 1962.

Patrick Lort-Phillips describes a winter crossing on ski of the mountains of Swedish Lapland from Tjamotis to Abisko, 185 miles, during the first half of April. The party carried their food, cooking utensils and camping equipment on 'one-man pulkas', small sledges attached to the skier by a leather belt round the hips, with rattan cane shafts giving easy control both up and down hill. No praise was high enough for these little sledges.

Commander Stocken, stationed at Gibraltar, explored the possibilities of ski touring in April in the Sierra Nevada. Based on a Spanish Ministry of Education hostel he climbed Veleta, 3392 m., Sabinal, 2962 m. on ski and Mulhacen, 3492 m. only the last 1000 ft. on foot. His best expedition was to Fraile de Veleta, 3201 m. In a reasonable season there is snow from December to April, but the district is rather wind-prone and a skier is of course very much on his own.

W. Kirstein, following up an advertisement in *Les Alpes*, spent Easter week touring in the Gemmi region with Otto Stoller, the owner

or the Schwarenbach Hotel, above Kandersteg. This hotel, which was their base, lies at 6,500 ft., midway between Stock and the head of the Gemmi Pass. He had glorious weather and is full of appreciation of the week of high level ski tours which Herr Stoller had selected for him.

Sir Arnold Lunn, in a review of John Kimche's book, *Spying for Peace* (Weidenfeld & Nicholson, 21/-), gives an interesting account of Swiss 'neutrality' during the 1939/45 war and of the controversy between Pilet-Golaz, the President of the Confederation, who favoured Germany, and General Guisan, the Commander in Chief of the Swiss Army who, in June 1940, summoned all commanders to the historic meadow of Rütli and ordered them to preach to their troops the duty of uncompromising resistance to German Invasion.

No. 44, 1963.

This issue celebrates the Diamond Jubilee of the Ski Club of Great Britain, and starts with a brief history of the Club by Sir Arnold Lunn. There is a nostalgic section on Edwardian Ski-ing, when the narrow spore of bold schusses and the beauty of linked 'S' turns was the pattern imprinted by skiers on the radiant snowfields in the days before the dull exhausted surface of the modern piste.

Tribute is paid to "The Father of Modern Ski-ing", Vivian Caulfield who, in *How to Ski*, first published in 1910, had already accurately investigated much of what we regard as having been discovered in the last decade. This was also a time when the British were making important contributions to the development of ski-mountaineering and Sir Arnold recalls how his writings in *The Field* on this subject irritated that distinguished winter mountaineer, the Rev. W. A. B. Coolidge, 'who had a weakness for ill-tempered controversy and could do anything with a hatchet except bury it'. (Cf. *Y.R.C.J.*, Vol. VIII, No. 28, pp. 173—179.)

A section describes the British contribution to competitive ski-ing, the foundation of clubs such as the Downhill Only and the Kandahar, the enthusiasm of British ski racers between the wars and the struggle to get international recognition for Downhill and Slalom racing rules, finally approved by the F.I.S. in 1930.

The President, Brigadier Gueterbock, after stating the ten objects of the S.C.G.B., expresses anxiety about finance, and the rising cost of racing. He points out that in the winter of 1962/63 some 250,000 British skiers visited the Alps, yet the membership of the Club remains static at about 15,000. He outlines a plan for increasing membership.

Roland Huntford, a fortnight after leaving Chamonix, 'that grim citadel of organised Alpinism', found himself, in mid-March, at Valadalen, in the Swedish province of Jämtland, 'the pine-fragrant north'. His ski tour, all on natural snow of every variety, was 'seven worlds away from the mechanised clank of the Alpine resorts'. In the huts conversation was easy, acquaintance pleasant and after lights out there

was silence; consideration for one's neighbour being more developed than in Alpine huts.

Still based on Gibraltar, Commander Stocken explored the High Atlas in February. From the Weltner Hut, 3,200 m., he climbed four peaks of over 4,000 m., two of them on ski, the most enjoyable being the Tadaft, 4,010 m. He found life spartan, mountaineering hazards less than those in the Alps, but once again, felt very much on his own.

Ivan Waller, with 37 years of personal experience, traces the development of ski technique over the 60 years of the Club's history. He lists 15 factors which during this time have brought their influence to bear. He sums up by saying that the young take naturally to the modern technique of the Parallel Christiana, and all that goes with it, while the old, who ought to know better, continue to lean back, leave their weight on the inside ski, edge much too hard and try to turn too sharply. 'At least it's fun to have to go on learning till you die.'

John Curle has explored ski-ing possibilities in Greece. Nearest to Athens is Mount Parnes, more reliable is the 8,000 ft. Mount Ziria in the Northern Peloponnese where, if there is enough snow, 5,000 ft. of running finishes above the village of Ano Trikala and one can round off the day with a swim in the Aegean on the way back to Athens. He also skied on Parnassus, at Vermeion in Macedonia and on the mountains of the Pindus range.

The equipment section contains a useful safety bindings assessment table and some valuable hints on how to adjust the better known makes.

Ski Notes and Queries for December 1963 includes a note by C. C. Bosanquet about a traverse on ski of the North York Moors from Ravenscar to Osmotherley, following the route of the Lyke Wake Walk.

H.G.W.

LA MONTAGNE DANS LA PEINTURE: by Ulrich Christoffel. (Published by the Swiss Alpine Club).

A sumptuous publication to mark the centenary of the Swiss Alpine Club. Dr. Christoffel discusses the painting of mountains, either as direct subjects or as backgrounds for other scenes and incidents, from the murals of Pompeii and Rome, the mosaics of Ravenna, and the illuminated manuscripts of the Middle Ages to Oskar Kokoschka. It is surprising to find how many of the greatest names in art occur as depictees of mountains: Giotto, Fra Angelico, Filippo Lippi, Piero della Francesca, Raphael, Pisanello, Mantegna, Van Eyck, Leonardo da Vinci, Dürer, Grünewald, Titian, Veronese, Tintoretto—and so the roll continues. It is interesting too to see how differently the mountains appear as man's attitude to nature in general and mountains in particular has changed over the centuries. There are fifty-six splendid plates as illustrations, and thirty-two of these are in colour. The Swiss Alpine Club is to be congratulated and thanked for its centenary gift to mountaineers.

A.B.C.

INSTRUCTIONS IN ROCK CLIMBING: by Anthony Greenbank. 1963 Museum Press, 15/-.

It is stated in the preface that this is a book "for the young rock-climber, from his—or her—first days as second on the rope, to when he eventually begins to lead complete routes on high crags". It is a good book for this purpose. It deals clearly and sensibly with most things that a beginner might wish to know—with clothing and equipment, route finding, ropes and knots, belays, guide books, abseiling, the sequence of climbing, the main types of rock feature encountered and techniques of overcoming them, and the psychological factors in leading. It puts a sensible emphasis on safety in climbing methods, and throughout the text Mr. Greenbank treats rock-climbing not as an end in itself but in its proper perspective as an element, an essential and most enjoyable element, in the wider field of mountaineering.

A.B.C.

CLIMBS ON YORKSHIRE LIMESTONE: by Michael A. Mitchell. Dalesman Publishing Co. 1963. 3/6.

Free and artificial climbs on Kilnsey Crag, Dib Scar, Bull Scar, Gordale Scar, Giggleswick Scar, Malham Cove, Attermire Scar, Great Close Scar, Crummackdale, Trow Gill, Moughton Scar, Norber and Trollers Gill. References to loose rock are frequent. The time given for the Central Wall of Malham Cove, 270 feet, is "possibly several days" (the first pitch took 22 hours on the first ascent): no route is given "as the route is clearly marked by previous ascents" and depends entirely on Rawlplugs and golas. Technically the hardest route listed is the overhanging North Buttress on Kilnsey: in the first pitch of 90 feet there are 23 screws and brackets. The last section is a guide to the gritstone climbs on Pen-y-ghent. On the limestone routes standards are high and exposure generally severe.

A.B.C.

CAVING AND POTHOLING: by David Robinson and Anthony Greenbank. Constable 1964. 30/-.

This is the most practical book on caving and potholing that has yet appeared. It is the first book to describe systematically standard practices underground and to deal with techniques in detail. In so far as techniques can be learned from reading without experience this book will certainly give a beginner a very clear idea of what will be expected of him, what he should wear, what equipment he should use and what kind of tackle he will need.

There are chapters on discovery, mapping, photography, rescue, all severely practical. There are also brief descriptions of formations, underground life and a very brief guide to the main caving areas. A very commendable book.

A.B.C.

RUCKSACK CLUB JOURNAL 1963. Vol. XIV, No. 4. Issue 56.

Ralph Jones describes the 1962 Alpine Club and S.M.C. expedition to the Pamirs with Sir John Hunt as leader, which was marred by the deaths of Noyce and Smith. Like other accounts this one comments on the Russian attitude of competition in mountaineering. "A full week" by Len Stubbs is a modest title for a week which began with the three summits—Snowdon, Scafell, Ben Nevis—took in an impressive number of Scottish tops and finished with the Lancet Edge on Aonach Beag. Tom Waghorn is equally modest as yo-yo man to Brown, Whillans and Moseley on Clogwyn, Red Wall on Craig Rhaidr, White Ghyll, Aonach Dubh, Kilnsey and Gordale, the last mentioned including "aping" across the gorge on two étriers. At a less exalted level B. R. Goodfellow describes the West Ridge on Piz Badret, S.W. Ridge on Piz Morteratsch and N.N.E. Ridge on Disgrazia, and B. Bowker outlines his first Alpine season. Finally, on the occasion of the Diamond Jubilee in 1962, E. Moss surveys the Club's last ten years, a period which includes Joe Walmsley's expeditions to Masherbrum, 1957, and Nuptse, 1961, the Tan Hill/Cat and Fiddle walks of 1952 and 1953 (120 miles and 20,000 feet of ascent) and the Scottish Four-thousand walks of 1954 and 1955; an impressive record.

A.B.C.

SCOTTISH MOUNTAINEERING CLUB JOURNAL, No. 154, Vol. XXVII.

This number begins with an eloquent plea for the preservation of Scotland's natural beauty and national asset by W. H. Murray. A nostalgic article by John Nimlin follows on the small Glasgow climbing clubs of the 1930's, the Creagh Dhu, Lomond, Ptarmigan, on howffs by Craigallion Loch, with no money, no sleep and very little tackle. D. J. Bennet writes on the Cascade Mountains of Washington and Oregon; Adam Watson on a Cairngorm Langlauf and Malcolm Slessor provides a note on the British-Soviet Pamirs expedition of 1962. The number concludes with R. Grieve's "A great day" on Arran, from Pirnmill to Glen Rosa, climbing on Rosa Pinnacle, and back; plus of course the invaluable list of new climbs and analysis of accidents.

A.B.C.

GRITSTONE CLUB JOURNAL, 1963.

It is a great pleasure to see again a *Gritstone Club Journal* after a lapse of 13 years. No one could accuse them of over-publishing and the gap is certainly not due to lack of activity. E. Griffiths provides notes on the early history of the Club, on its founder, Cecil Wood, and the legendary 6.32 a.m. train on Sundays from Bradford calling at all stations to Morecambe; tackle for the first pothole, Rift Pot, in 1922 included 100 feet of green blind cord and a recruit at this meet

was a schoolboy named Reg Hainsworth. There are two articles by C. R. Ambler on ski-ing techniques which are very much to the point both for beginners and for more experienced skiers. There are guides also by Ambler to Gritstone climbs at Horse Hold Scout, and Heptonstall Quarry, both near Hebden Bridge. J. R. Sutcliffe describes the Caves at Ribbleshead and provides a guide to climbs at Ash Head Rocks, Colsterdale. There are notes on Ellerbeck Hole and High Rigg Cave, Birkwith and a tantalising article by Falkingham on what makes a walk a nice walk. Also a nice contrast between two club parties who did the Fiamma in the Bregaglia in 1939 and 1962, the first party without artificial aids of any kind. Altogether a splendid comeback.

A.B.C.

FELL AND ROCK CLIMBING CLUB JOURNAL, No. 57. Vol. XX, No. 1.

Extracts from Sir John Hunt's diary of the 1962 British Soviet Pamirs Expedition which made 4 major ascents, including the highest point in the U.S.S.R., a new route on a 20,000 ft. peak and a first ascent of one of 19,000 ft. He raises interesting points, e.g., the Russians move as a single group and do not use the method of summit and support groups—hence no food or gear left behind for use on return or retreat. Corsica 1962, by Nancy Murray: the party consisted of Harry Stembridge, Dick Cook, the writer and her husband and obviously had an enjoyable time. N. J. Soper recounts the three eras of development on Clogwyn du'r Arddu: pre-1939, the Brown era (particularly 1951-2), and post-Brown in which he himself has been prominent; there are some fine photographs with this article. Anthony Greenbank describes the Sud Grat route on Salbitschigen which he rates harder than the Spigolo Nord on the Badile and technically as hard as the Cassin route on the N.E. Face of the Badile, more exposed than either but not as serious for rockfalls, storms, etc. Other articles are: J. P. O'F. Lynan on the Bara Shigri, 1961, with a party that included one Wayfarer and one from the Rucksack Club; a tribute from Lord Chorley of Kendal to Lord Birkett's lifelong defence of Lakeland's beauty and traditions; Robert Lewis's letter from Grahamsland; and Nancy Smith's account of the all-female (barring the Sherpas) Jagdula Expedition in the Kanjiroba Himal.

A.B.C.

CRAVEN POTHOLE CLUB JOURNAL. Vol. 3, No. 3. 1963.

A. Mitchell raises the currently very serious problem of potholing and public relations, quoting the editorial from the last *C.P.C. Journal*: "It would be a grave error to assume that all is well in the caving world . . . there are a number of subjects which require our earnest consideration. Perhaps at the head of the list it would be correct to place our relationships with landowners and farmers". The *C.P.C.*

places its confidence in personal contact, rather than any association of caving clubs. There are accounts of Gaping Gill 1963 by P. Leakey, when 136 people made 255 descents during a very wet week "and some serious potholing was also done"; Gaping Gill 25 years ago, by A. S. Birkett; and a plea for Jib Tunnel as the easiest way down by A. Mitchell. D. M. Judson contributes articles on the Oxford/Derbyshire Speleological Expedition to N.W. Spain (30 miles S.E. of Oviedo), which got down five shafts, the deepest 600 ft. and returned convinced that large systems do exist in the area; on Ludwell Fairy Holes, Weardale, giving notes on crawls and boulder chambers beyond the Grave Chamber; and on an unsuccessful attempt to blast through the final choke in the Stream End Caverns in Mossdale Caverns. R. G. Coe suggests another way into Mere Gill and describes Spectacle Pot (with plan). S. A. Craven writes of "spelunking in the U.S.A.", in Alabama, Indiana and Georgia where show caves have parks for 5,000 cars. N. Platts reports on the Club's Irish meet at Manorhamilton in Fermanagh and there is one mountaineering article by N. E. Haighton on the Bernese Oberland.

A.B.C.

MIDLAND ASSOCIATION OF MOUNTAINEERS. JOURNAL 1963.

At home there is D. P. Penfold's description of the Lyke Wake Walk, taken from Ravenscar to Osmotherley, and Neil A. Ferrett's painful Welsh three-thousands in new boots. Abroad, a nicely mixed bag. In Spain Richard Southall writes of the Picos de Europe in the triangle Santander-Leon-Oviedo. In the Alps there is R. L. B. Colledge on the Ryan-Lochmatter route on the Aiguille du Plan and the Cassin route on the N.E. face of the Badile in wet conditions; also Roger Wallis on the Lyskamm by Christian Kluckner's original line in the first ascent of 1890. In the Dolomites Walter Reizes-Reid covers the Club's Alpine meet at Cortina in 1962 with an impressive list of ascents. D. P. Davis contributes personal recollections of the 1961 Nuptse expedition in which he reached the summit with the 50 year old Sherpa Tashi. And the only lady to contribute is Anna Osmaston with "Safari on Mount Elgon" in Uganda.

A.B.C.

ALPINE CLUB JOURNAL. Vol. LXVIII. No. 306. May 1963.

The Second Indian Expedition to Mount Everest, 1962, was turned back by bad weather just short of the South Summit. One man spent six nights on the South Col, five without oxygen, and one party were two nights at 27,650 feet without oxygen. The article is by Harry Dang. Michael Ward discusses the desperate descent from Makalu in 1961 and some medical aspects of high altitude climbing. Ian Clough writes on the Solleder route on the N.W. Wall of the Civetta, Jan

Mostowski on the Tatra and Clough again on his ascent of the Eigerwand in 1962 with Bonington. G. O. Dyhrenfurth gives hints for Himalayan aspirants with notes and bibliographies on unclimbed 7,000 metre and attractive 6,000 metre peaks in the Himalayas and Karakoram. There is a further fascinating analysis by Hugh Merrick and L. R. Wager of the position and origin of the highest Chinese photograph taken on Everest. Robert Pettigrew provides the second part of his account of the Derbyshire Himalayan Expedition, 1961 to the Kulu area of Ladakh, and Denise Evans an account of the Jagdula Expedition 1962 to the Kanjiroba Himal in West Nepal. The Pakistan-British Forces Karakoram Expedition to Khinyang Chhish in 1962 was abandoned when Major Mills and M. R. F. Jones were killed by an avalanche; the account of it is by Dr. P. J. Horniblow. There is a welcome new Longland name—John Longland on the Westgrat, Alphubel. Outside the Alps and Himalaya there is A. C. Carter on a winter expedition to the Spanish Sierra Nevada, Philip Temple on the Carstenz Mountains, the snow peaks of West New Guinea, and Sir John Hunt contributes the first of two articles on the British-Soviet Pamirs Expedition, 1962. Fosco Maraini has written up an account by Riccardo Cassin of the South Face of Mount McKinley, which is of interest both for its hard mountaineering and technically because aeroplanes have to take the place of Sherpas, Bhutias, etc., and all carries from the glacier have to be done by the climbers.

A.B.C.

ALPINE CLUB JOURNAL. Vol. LXVIII. No. 307. November 1963.

C. J. S. Bonington recounts the successful ascent of the Central Tower of Paine. Following this come two accounts of small Himalayan parties. J. D. M. Roberts with four Sherpas and a Sherpa liaison officer had an enjoyable but unsuccessful attempt on the unclimbed Dhaula Himal and P. R. Steele with his wife, another girl, two Sherpas and six Tamang coolies visited the same area, to climb and map Hiunchuli Patan. The next two articles touch on the history of Alpine climbing, Arnold Lunn writing on the Swiss pioneers from the late eighteenth century to 1850, and Herbert Carr on Swiss prints and illustrations in accounts of ascents of Mont Blanc to 1853. R. H. F. Hunter writes on the Reading University Andean Expedition, 1962, which made 25 ascents in the Cordillera Real in Bolivia, all over 17,000 feet, including the 6,000 metre Chiaroco. Peter Crew describes a series of grade V and VI routes done with Alan Wright—Cassin route on the Cima Ovest, Tissi route on the Torre Venezia, West Ridge of the Torre Trieste, the Solleder route on the North Face of the Civetta, the South face of the Busazza, the Philipp-Flam route, and from Chamonix, the Bonatti Pillar, with two bivouacs in mist, wind and hailstorms. Eric Shipton provides further travels in Patagonia and Tierra del Fuego. As a contrast to the small expeditions above

there is J. O. M. Roberts' account of the mammoth American Mount Everest Expedition, with its twenty members, 37 high altitude Sherpas and 900 porters: the Sherpas are described as a "highly competent bunch of toughs", and 19 of them carried to over 27,000 feet. I. G. McNaught-Davis completes the account of the British Soviet Pamirs Expedition 1962, including the ascent of the Peak of Communism (24,600 ft.) in 15 days up and down from a base camp at 9,000 ft. and over 20 miles away—a classical high speed Russian ascent. Trevor Braham comes back to the small expedition, a solo trip with an armed escort and six sepoy to Swat and Indus Kohistan in what was the N.W. Frontier Province. But A. G. Smythe and Barrie Biven attempting the Moose's Tooth discovered that Alaska was not the place for a party of two, and almost came to grief in a river which was rising one inch every ten minutes at a time when they had been four days without food. Finally, contributed by T. S. Blakeney there is a list of applicants for membership of the Club who were not elected, the list running up to the end of the First World War "with such remarks as are given in the original documents". Among the names is R. J. Farrer of Ingleborough, Clapham, and of another candidate it is said. "if this man comes up again a few years hence his list will require careful scrutiny as he appears to have been walking up fairly big mountains alone".

A.B.C.

KINDRED CLUB JOURNALS

The Librarian gratefully acknowledges the receipt of the journals of the following Clubs, and regrets that limitation of space will not allow him to include reviews of them:—

Appalachia, 1962, 1963; Appalachia Bulletins, 1962, 1963; Bristol University Speleological Society Proceedings, 1962-63; Birmingham University Mountaineering Club Journal 1962, 1963; Cambridge Mountaineering 1963; Cuba Lattabana, No. 5; Deutschen Alpenvereins, Jugend am Berg, 1962, 1963; Equipe spéléo de Bruxelles, Bulletin d'information, 1963; Fédération Spéléologique de Belgique, Bulletin d'information, No. 1, 1963; Friends of the Lake District, Report and Newsletter, July 1963; Himalayan Journal, 1961; Lancashire Caving and Climbing Club Journal 1963; Manchester University Mountaineering Club Journal, 1958-61; Mountain Club of South Africa Journal, 1962; National Speleological Society Bulletins, 1962, 1963; National Speleological Society, Newsletter, 1962, 1963; Oxford Mountaineering, 1963; Swiss Alpine Club, Bulletins, 1962, 1963; Reviews, 1962, 1963; Societé spéléologique de France, Annales 1958; Societé Spéléologique de France, Spelunca, 1962, 1963; South Wales Caving Club Newsletter, 1962, 1963; Speleo Club Bologne, Sotto terra, 1963; Spéléo Club de la Seine, L'Aven, 1962, 1963.

IN MEMORIAM

Since the publication of the last *Journal* the following members have died: F. H. Slingsby, Bentley Beetham, A. F. Falkingham.

F. HUGH SLINGSBY

By the death of Hugh Slingsby at his home in Sussex on February 20th, 1963, the Club lost one of its most loyal and devoted members. He came from one of Britain's great mountaineering families, being a nephew and godson of William Cecil Slingsby who was President of the Y.R.C. from 1893 to 1903.

Hugh Slingsby was born in 1894, he was a scholar of Winchester and of New College, Oxford. During the 1914/18 war he served in France with the South Staffordshire Regiment; he was wounded several times and was awarded the Military Cross.

After taking his degree he passed high into the Civil Service and spent most of his career as Assistant Keeper of Public Records, a position from which he retired in 1959. He was also a Barrister of the Inner Temple, although he did not practise.

Hugh joined the Club in 1924; he was an enthusiastic pot-holer and a regular attendant at the Gaping Gill meets in the late twenties and early thirties. Although his work carried him to the south of England and he remained there after his retirement, he was a most regular supporter of the Scottish Whitsuntide meets, at which he proved to be a very strong walker, putting in long distances with complete imperiousness to all weather conditions. He rarely missed the Annual Dinner and to come to the Hill Inn meet he often used to set off on foot from Grassington and other unlikely places.

He was elected to the Alpine Club in 1932 and regularly attended all the London meetings. In spite of being somewhat handicapped by his war wounds he climbed in the Alps, Norway and the Pyrenees, and with Frank Smythe in Corsica. He often travelled up for weekend meets in Yorkshire even after he had retired and it was evident that these days spent on his native moors gave him immense pleasure and were a source of refreshment.

Only a year before he died Hugh climbed to the top of Table Mountain; he had been prevented from making this ascent years ago by the heat, and, in spite of the effort required, it made him very happy to do it on his last visit.

The older members of the Club will sadly miss Hugh's cheerful presence, his quiet humour and his helpful knowledge of many unusual places.

F.S.B.
J.H.

BENTLEY BEETHAM

Bentley Beetham was a Life Member of the Club. He spent the greater part of his life as boy and later master at Barnard Castle School; with so much wild country near at hand it is not surprising

HUGH SLINGSBY



SIDNEY TODD AND
HUGH SLINGSBY
ON THE TOP OF
TABLE MOUNTAIN,
CAPE TOWN, S.A.,
1962

that he took up the study and photography of birds. Birds naturally led him into having a most intimate knowledge of the whole of Upper Teesdale and of the possibilities in the district for skating, skiing and rock climbing which were his favourite pursuits for more than 40 years.

From 1919 onwards Beetham was climbing regularly in the Alps for a number of years and his partnership with Somervell was probably one of the most powerful guideless combinations of that time, including the outstanding achievement of 35 Alpine climbs in six weeks. He also climbed in Norway, the Tatra and the High Atlas, which he knew as well as any British climber. It was therefore natural that he should be chosen as a member of General Bruce's 1924 Everest Expedition. By ill luck a severe attack of sciatica prevented him from taking part in any high altitude climbing, though he got as far as Camp 3.

On British climbs, he was with Frankland when, in 1921, they made the second ascent of Scafell Central Buttress by combined tactics on the Flake Crack.⁽¹⁾ He joined the Y.R.C. in 1925. In spite of being handicapped by an injury to his ankle, sustained on the Grandes Jorasses, he remained to the end of his life a very strong goer in the mountains; his superb icemanship is mentioned in Ernest Roberts' memoirs when, in 1927, he led up a vertical ice wall on the traverse from Piz Glüschaint to Piz Sella—"one of those feats which mark a man out from his fellows".

Many of the now well-known climbs on Shepherd's Crag and Coombe Gill were discovered and excavated by Beetham and many mountain lovers owe their introduction to the hills to his school camps. An example of his amazing toughness was a fall on Raven Crag some twenty years ago in which he fractured his skull in six places; nobody but he could have survived and made such a wonderful and complete recovery.

Bentley was a shy and retiring man but, once you got to know him, a delightful companion on the hills, with a fund of information on natural history and his mountaineering experiences. He died on April 5th, 1963, and his ashes were scattered on Shepherd's Crag.

J.C.A.
J.H.

(1) *Y.R.C.J.*, Vol. V, No. 15, page 9.

CLUB MEETS

1961/62. There were fifteen Club Meets during the year, the average attendance was 22, this includes guests but not the After-Dinner Meet.

The 48th Annual Dinner was at the Majestic Hotel, Harrogate and the Meet next day was at Burnsall. A splinter Meet took two of the Club's guests, Chris Bonington and Don Whillans, to Brimham Rocks, where they performed amazing feats on gritstone. The Club Year started in early December with hopes of a week-end's ski-ing based on the Mortal Man Inn at Troutbeck, but steady rain washed the snow away and soaked the party that reached the summit of High Street over Hagg Hill, the Roman Road and Ill Bell. An excellent turkey dinner, a roaring fire and rum punch revived spirits and stimulated hearth-side chat among the 21 Members present.

The January Meet at the Hill Inn was held in splendid weather and the attendance approached 60. Members sat in the sunshine on the fells admiring the view, the Three Peaks Walk was done and a pot-hole party got wet in Sunset Hole for the pleasure of emerging on to the sunlit moor. On the Saturday evening George Spenceley described his wanderings in Lapland and showed some superb films. Promise of snow which did not materialise caused 7 members to bring skis to Low Hall Garth in February and to search Grisedale for suitable slopes. Fourteen climbed gullies on Great End in perfect snow and ice conditions and in spring weather, including an interesting and steep 40 ft. ice pitch. On Sunday the secondary aim of the Club, "to gather and promote knowledge concerning Natural History, Archaeology, Folklore and kindred subjects", was fulfilled by an inspection of the Roman Fort at Hardknott. Ten members went to Llanberis for the March meet and enjoyed the hospitality of the Climbers' Club Hut in perfect weather. Everybody was on the Horseshoe on Saturday—glorious views with the snow-capped peaks unmarred by mist or cloud. On Sunday there was climbing on Milestone Buttress and walking on the Carnedds and Moel Siabod.

The President, five out of six living Past Presidents, 39 members and guests rambled over Blubberhouses Moor and assembled for tea at the Hopper Lane Hotel on a fine Sunday in April to recall and celebrate "the first time that members met as a body away from Leeds"⁽¹⁾ at the same place in 1892, seventy years ago.

A reported bothy by Loch Muick tempted 8 members and a guest to Scotland at Easter; most of them were glad they had brought camping equipment. Avalanche displays and sagging cornices discouraged gully routes but there was a frenzy of Munro bagging round the horseshoe of Upper Glen Muick. Exploration of Glen Collater, ski-ing on the Devil's Elbow, ridge walks beside Glen Shee and traverses long and high in the Cairngorms showed how the best could be made of excellent weather but frustrating climbing conditions.

⁽¹⁾ *Y.R.C.J.*, Vol. I, No. 1, page 7.

Again in celebration of the Club's 70th year, and 66 years to the very week-end after Calvert made the first Yorkshire Ramblers' descent of Gaping Gill by the Lateral Shaft on 9th May, 1896, the President and 17 men repeated the operation. (The first descent of all, by the Main Shaft, had been made by Martel on 1st August, 1895). Certain changes over the 66 years made everything seem somewhat easier. There were the comforts of the Lowstern Hut, though the President and a Past President were among the few who manfully trudged up to G.G. and camped in the time-honoured spot. A 750 ft. nylon lifeline went a-missing but one was borrowed thanks to the kindness of the Bradford Pot-Hole Club, in residence at the Flying Horseshoe. Two Landrovers took the tackle to the pot instead of man-handling, or at best a horse and sledge to pull it across the moor. The stream was dammed, ladders and pulley blocks fixed and two men put down in record time, to be met in the Main Chamber by a party from Bar Pot.

Whitsuntide: and the Club back in strength at Killesher. The President and 16 men again attacked Reyfad Pot and did enough surveying of previous years' discoveries to prove that the work could not be completed in the short time available and that another trip would be necessary. A party went into Pollasumera but found that flooding had silted up the access to the further reaches of the system discovered by the Club in 1959.⁽²⁾ The "Long Walk" at Mid-summer was over the Seven Peaks from Dent to Cray. The route included Great Cough, Whernside, Ingleborough, Pen-y-Ghent, Fountains Fell, Great Whernside and Buckden Pike; it covered 35 miles with feeding points at the Hill Inn, Dale Head and Kettlewell. Of the 19 members and guests who walked, 8 completed the course and most of the others reached Kettlewell. Stalwart work was done by six members who cooked and provided food, drink and, where needed, transport. The average time, including stops for meals, was 15½ hours.

The President and one member sat down to supper and a glorious sunset at the Brotherswater Hotel, Patterdale at the end of July in anticipation of a fine Saturday. Nine more people turned up later to face the wettest, coldest July day in living memory. Half way up Great Dodd the party got engulfed in cloud, driving rain and bitterly cold winds. Soaked to the skin and frozen they made their peak and beat a hasty retreat via Sticks Pass to the valley. Various crags and cliffs were "looked at" in slightly less wet conditions on Sunday, but there was really "no place like home". Only three members and four guests took part in the Bank Holiday Meet at Low Hall Garth, it rained and a little climbing was done on Bowfell Buttress and White Gill. A Past President, the Secretary and 11 potholers had hoped to spend the August meet making a descent of Juniper Gulf, but their hopes were dashed even before they got to Settle by the volume of water they saw flowing down the hillsides. Sell Gill seemed a sporting

⁽²⁾ *Y.R.C.J.*, Vol. IX, No. 30, page 65.

alternative and bets were made that nobody would get more than 60 ft. down the big pitch. So 150 ft. of ladder was lowered through the stream and soon 150 ft. of lifeline had twice been lowered and several bets lost. After this the through route went merrily, just to prove that exposure suits are sufficient to raise the morale of any Club.

At the joint meet in September with the Wayfarers and Rucksack Clubs at the Robertson Lamb Hut determined efforts were made to accommodate most of the 35 Y.R.C. men in R.L.H. and Raw Head. Even so the popularity of this meet still meant an overflow into Low Hall Garth where they are believed to have feasted on steaks cooked in Burgundy before getting together at the Old Dungeon Gill with those replete from Harry Spilsbury's traditionally excellent fare. There was again climbing on Bowfell Buttress, which was greasy, and on White Gill, where the party had an interesting time rescuing a French damsel in distress from a cliff where she could go neither up nor down. It was too wet and windy for the usual assaults on Gimmer but climbing parties went to Scout Crag and Raven and walkers walked —over the Crinkles to Wrynose and Wetherlam, and back by a Jungle Swamp route alongside Blea Tarn; over the Stake into Langstrathdale; up to Stickle Tarn and along the ridge to Chapel Stile.

The October meet at the Lowstern Hut was held jointly with the male section of the Fell and Rock Climbing Club. In view of the frustrations of the week end it was perhaps as well that of the 36 attending only 5 represented the Guest Club. The original plan had been to do the through route in Lancaster Pot, but owing to some junior club having caused trouble in Easegill the whole of Casterton Fell had been closed, even to the Y.R.C. Gaping Gill via Bar Pot and Flood Entrance was chosen as an alternative; permission was granted with the warning that the Craven Pot-hole Club would be in Bar Pot on the Sunday. Mainly owing to the exceptionally large number attending the meet and to lack of earlier discussions, there was some confusion and delay and a certain lack of leadership. To crown this the third man to squeeze through the narrow fissure of Flood Entrance on the Saturday was trapped by a fall of roof. Happily he was released uninjured after an hour of much effort and good team work in which both leadership and service were evident. On Sunday a dignified return to the surface had to be made from Bar Pot and a somewhat changed Flood Entrance when the C.P.C. turned up incensed, and with some right on their side. There were lessons to be learnt from this meet.

1962/63. Fifteen Club Meets were held and the average attendance was just over 23.

The 49th Annual Dinner was at the Hotel Majestic, Harrogate, and was the occasion for officially celebrating the Club's 70th birthday. Of the eleven representatives of Kindred Clubs attending, nine were Presidents, one a Past President and one a Vice-President. A birthday cake bearing 70 candles, decorated with ropes, ladders and

ice-axes was borne in in state. The Principal Guest, Jack Longland, gave much food for thought in an exceptionally fine speech in which he dealt widely with the care, forethought and prudence so necessary in our approach to the hills, both above and below ground. A blizzard and biting east wind sprang up during the night, in spite of which parties battled up Pen-y-Ghent, Fountains and other Fells, and sat down 55 strong to the after-dinner Tea at the Craven Heifer in Stainforth.

For the first meet of the Club's 71st year the President, with 24 members and guests enjoyed Christmas fare at the White Lion, Cray. There was walking to Semmerwater and Bainbridge, wintry skies to be admired from the summit of Buckden Pike, while the President led a party down Walden Beck and some ardent pot-holers were up to their necks in water in Dow Cave. The Hill Inn Meet, attended by 59 members and guests, was in the middle of the Great Frost. Ablutions were impossible, the only liquid available at the Inn being for internal consumption only. This did not detract at all from the Saturday evening's entertainment which included a photographic competition as well as the usual acrobatics. At the end of the evening a large party set off for Mere Gill and in an all-night expedition reached the head of the bottom pitch before thaw water caused them to withdraw. Parties walked the surrounding hills and skiers enjoyed the hospitality and enterprise of the Gritstone Club who had installed a rope tow above Horton. The Great Frost was still on for the mid-February meet at L.H.G. when the Cottage Warden carried water for the President and 21 men in buckets from the stream, the plumbing of the cottage having long since frozen up. Ideas of a grand siege of Great End Gully were dispelled by soft snow on top of ice making it very dangerous. Some climbed Hanging Knott Gully while others, after a gay glissade down to Angle Tarn, made the frost-encrusted summit of Esk Pike. Glorious Alpine conditions prevailed on Sunday and encouraged yodelling; a ski party found the descent from Prison Band a disconcerting variation between unbreakable crust and soft new snow.

The following Saturday was the "Ladies' Evening" at the St. George Hotel in Harrogate. This had by now come to be regarded as an Annual Event and a high light in the Club's affairs. Some ninety members were there to show their Ladies that the weird and wonderful contortions that they perform in caves and on climbs can be put to equally good use in the "Twist", the "Madison" and other such measures. Local colour was provided by electron ladders, rubber dinghies and a gay display of continental coloured posters. The Oldest Member presented a bouquet to the President's wife and each lady received a floral decoration.

The President and twelve men were at the Blue Bell Inn at Alston in March and walked in wind and showers along the Black Burn to Cross Fell over ground which remaining frost made firm and pleasant under foot. Back along the Pennine Way towards Garrigill with pride so rain-soaked that a telephone call to the Blue Boar produced trans-

port for the last 4 miles. True to the second part of Rule 2 an inspection was made of the Roman Wall between Crag Lough and Housesteads on Sunday. The Pot Hole Practice Meet originally meant for one day developed into a whole weekend at Lowstern. Cross Pot was quickly laddered, bottomed and unladdered in rain and sleet on Saturday. Sunday was fair and the Treasurer gave a welcome talk on caving procedure, safety methods, personal equipment, knots and the rigging of pitches. The older element then looked on while less experienced members rigged Pillar Pot for ladder climbing practice on a 140 ft. pitch and a small pot nearby for work with pulley-block and lifeline.

Easter at Crianlarich was a fine sporting meet with a certain amount of unforeseen adventure. From Thursday until Monday morning 18 members and guests had their waking and sleeping hours filled with high winds, snow, sleet and hail. On Friday morning 8 men left to climb Ben Lui. The President and one member chose the N.W. ridge and reached the summit. The other six attempted the more ambitious Northern Gully, but after roping up in pairs they were forced to make the decision to retreat. The snow then avalanched, they were overwhelmed and all three ropes were swept down the gully for six or seven hundred feet. They took the right action and emerged unscathed except for one strained back and several lost ice-axes. On Saturday a party cutting steps up the north side of the N.W. Ridge of Ben Lui were treated to the imposing spectacle of a whirlwind drawing snow from the crest in a great white inverted cone. Sunday was wet and overcast but Monday dawned and continued a glorious picture of snow-clad peaks against a cloudless sky. In spite of the fickleness of the weather Ben Lui, Ben Cruachan, Clach Leathead, Beinn a'Chleibh, Ben Oss, Beinn Dubhcraig and Stob Gabhar all felt the tread of Y.R.C. boots. The High Level Camping Meet on the Haystacks in May, among some of the finest scenery in the Lake District, saw some routes of the utmost severity climbed in Birkness Combe and there was walking over the Haystacks, High Crag, High Stile and Red Pike, but the meet was mostly an epic battle to maintain tents in a habitable condition in the face of wind and rain. Only a proportion of the 20 contesting Ramblers could claim victory.

At Whitsuntide the President and 17 members camped by the Cladagh River at Killesher and carried out a most successful further exploration and survey of Reyfad Pot. One party broke through the boulder choke upstream and added 600 yards of new passage, an impressively high aven and a side passage containing exquisite grottoes with every colour and variety of formation. Another party explored the North West Passage and found that the previous survey was almost 180° out; instead of running, as thought, S.S.E., it really goes almost due north. This passage was pushed a further 500 yards to a boulder choke thought to be near the surface. The whole pot, with the new discoveries, was carefully surveyed. A descent of Noon's Hole showed nothing new; expeditions were also made to Pollnagollum,

Pigeon Pots, Marble Arch and Rattle Hole. The week was memorable for six o'clock starts, first class cuisine with wines and all, a most comfortable camp, lovely weather and a lot accomplished by a strong team.

The Long Walk on Midsummer Day in the Lake District was from Scafell in the west to Harter Fell in the east, a distance of about 28 miles with 14,350 feet of ascent. The route, which started at Whahouse Bridge, included Scafell Pike and Great End, Rossett Pike, Pike o' Stickle, High White Stones, Dunmail Raise, Hart Crag, Dove Crag, Kilnshaw Chimney, High Street and Ill Bell. There were victualling points at Dunmail Raise and the Kirkstone Pass Inn. Six men completed the whole course starting at 4.20 a.m. and finishing in two parties at 8.50 and 9.45 p.m. Fifteen members and guests met at the Climbers' Club Hut at Helyg in July and climbed on the Amphitheatre Buttress of Craig-yr-Isfa, on Tryfan and on Cwm Silyn where a new 250 ft. route up Great Slab was pioneered and named "The Sentinel". The mid-August meet was a return to Derbyshire with 25 members and guests at the Barnsley Mountaineering Club's cottage. Some climbed on Gardon's Edge and Yellowstones, others walked on Kinder Scout and Bleaklow and a party got to the top of the last pitch in Giant's Hole, which they described as "Not a very pleasant hole, wet, cold, dark and rather tight".

New ground, as far as the Club is concerned, was broken in September when 13 members stayed in a fine bothy at Back Hill of the Bush, in the Glen Trool/Merrick area of Kircudbrightshire. After climbing Merrick in thick cloud on Saturday, there was walking on the Rhinns of Kells on a cold, fine and clear Sunday with good views in every direction. Four members descending Cairnsmoor of Fleet saw a herd of wild goats, who watched their progress with close interest. The R.L.H. Joint Meet brought the usual strong muster of 30 Y.R.C. men and the inevitable overflow into Raw Head and L.H.G., the latter contingent being press-ganged by the Hut Secretary into giving the cottage a face-lift. Impossible to detail all the activities, though one irrepressible party was seen armed with lamps and helmets making for Hodge Close Main Drain and the slate quarries. The last meet of the Club year was at Lowstern, the virtues of the new stove were appreciated and a party reached the head of the final pitch in Juniper Gulf. One man in an exposure suit faced a large volume of water for 120 ft. down this pitch but came up wetter and wiser.

CLUB PROCEEDINGS

1962—The week-end meets were; January 20th—22nd, Hill Inn, Chapel-le-Dale; February 16th—18th, Low Hall Garth; March 16th—18th, Ynys Ettws, Climbers' Club Hut; April 8th, Hopper Lane Hotel, Blubberhouses (70th Anniversary of the first Y.R.C. meet, 1892); Easter, April 20th—24th, Loch Muick; May 11th—13th, Lowstern Hut/Gaping Gill; Whitsun, June 8th—16th, Florencecourt, Co. Fermanagh; June 29th—July 1st, The Long Walk, the Seven Peaks from Dent to Cray; July 20th—22nd, The Brotherswater Hotel, Patterdale; August 3rd—6th, Low Hall Garth; August 24th—26th, Lowstern Hut; September 28th—30th, Robertson Lamb Hut, Joint Meet with Wayfarers and Rucksack Clubs; October 19th—21st, Lowstern Hut, Joint Meet with Fell and Rock Climbing Club; December 7th—9th, White Lion Hotel, Cray. The average attendance at meets was 22 and the Club Membership, 188.

The 70th Annual General Meeting was held at the Hotel Majestic, Harrogate, on November 17th, 1962. The following officers of the Club were elected for 1962/63: President: R. E. CHADWICK; Vice-Presidents: M. F. WILSON, E. C. DOWNHAM; Hon Treasurer: S. MARSDEN; Hon. Secretary: E. C. DOWNHAM; Hon. Asst. Secretary: T. W. SALMON; Hon. Editor: H. G. WATTS; Hon. Asst. Editor and Librarian: A. B. CRAVEN; Hon. Hut Secretary: Low Hall Garth and Lowstern: F. D. SMITH; Hon. Hut Wardens: Low Hall Garth, J. D. DRISCOLL, Lowstern, J. LOVETT; Committee: B. E. NICHOLSON, R. GOWING, G. B. SPENCELEY, A. R. CHAPMAN, E. M. TREGONING, F. WILKINSON.

The 49th Annual Dinner, which followed the Meeting, was also at the Hotel Majestic. Jack Longland was the Principal Guest, with the retiring President, F. W. Stenbridge, in the Chair. There was a distinguished gathering to represent Kindred Clubs at this, the Y.R.C.'s 70th Anniversary: P. Lloyd, Vice-President, Alpine Club; R. Bain, President, Cairngorm Club; I. G. Charleston, President, Scottish Mountaineering Club; A. B. Hargreaves, President, Climbers' Club; J. H. Hirst, President, Rucksack Club; P. Howard, President, Wayfarers' Club; R. Cook, President, Fell and Rock Climbing Club; W. O. Duncan, Past President, Midland Association of Mountaineers; R. Hainsworth, President, Gritstone Club; A. S. Birkett, President, Craven Pot Hole Club; A. Shepherd, President, Bradford Pot Hole Club. The attendance at the Dinner was 145, including 95 members, 12 official and 38 private guests. The meet on Sunday was at Stainforth.

Lectures held during the year included one on January 19th, 1962, by Dennis Davies on the first successful ascent of Nuptse, and on January 27th, at the Hill Inn, by George Spenceley on his ski tour in Lapland.

1963—Week-end meets were: January 25th—27th, Hill Inn, Chapel-le-Dale; February 15th—17th, Low Hall Garth; March 8th—10th, Blue Bell Inn, Alston; March 30th—31st, Lowstern Hut; Easter, April 11th—16th, Crianlarich; May 10th—12th, High Level Camping, The Haystacks; Whitsun, June 1st—9th, Florence Court, Co. Fermanagh; June 21st—23rd, The Long Walk, Scafell to Harter Fell; July 12th—14th, Helyg, Climbers' Club Hut; August 16th—18th, The Barnsley Mountaineering Club Hut, Derbyshire; September 6th—8th, Back Hill of the Bush: Merrick, Kirkcudbrightshire; September 27th—29th, Robertson Lamb Hut, Joint Meet with Wayfarers and Rucksack Clubs; October 18th—20th, Lowstern Hut; December 6th—8th, Milburn Arms Hotel, Rosedale. Average attendance at meets was 23 and the membership of the Club, 190, including 4 Honorary, 21 Life, 2 Junior and 163 Ordinary Members. The deaths were recorded in 1963 of F. H. Slingsby and Bentley Beetham.

The 71st Annual General Meeting was held at the Hotel Majestic, Harrogate, on November 16th, 1963. The following officers elected for the year 1963/64: President: R. E. CHADWICK; Vice-Presidents: E. C. DOWNHAM, B. E. NICHOLSON; Hon. Treasurer: S. MARSDEN; Hon. Secretary: E. C. DOWNHAM; Hon. Asst. Secretary: T. W. SALMON; 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. LOVETT; Committee: G. B. SPENCELEY, A. R. CHAPMAN, E. M. TREGONING, R. GOWING, J. R. MIDDLETON, W. WOODWARD.

The 50th Annual Dinner followed the Meeting and was also at the Hotel Majestic. The Principal Guest was John A. Jackson and the President, R. E. Chadwick, was in the Chair. Kindred Clubs were represented by T. Howard Somervell, President, Alpine Club; J. N. Mather, Rucksack Club; A. J. Taylor, Wayfarers' Club; E. Wood-Johnson, Vice-President, Fell and Rock Climbing Club; H. Dawson, Gritstone Club; L. B. Cook, Craven Pot Hole Club; E. A. Shepherd, Yorkshire Mountaineering Club. The attendance was 145, including 9 official guests and 32 guests of members. The after-dinner meet was at Harden, Austwick; John Jackson after tea projected "Mountains and Music".

On September 24th, by joint arrangement with the Yorkshire Mountaineering Club, Lionel Terray gave a public lecture entitled "The Alps to Annapurna—and after".

NEW MEMBERS SINCE JOURNAL No. 31

1962

- Barker, Keith M. 120 Forres Road, Crookes, Sheffield, 10.
 Cook, Richard "Watendlath", Ferney Green, Bowness-on-Windermere, Westmorland.
 Crowther, William C. I. 8 Gainford Drive, Garforth, Leeds.
 Dyson, David W. "Troaves", Blakelea, Marsden, Huddersfield.
 Harben, Raymond 53 Clipstone Road, Sheffield, 9.
 Hatfield, James 168 Uttoxeter Road, Mickleover, Derbyshire.
 Henderson, Donald M. 91 Ringstead Crescent, Sheffield, 10.
 Ince, George R. 25 Estcourt Avenue, Leeds, 6.
 Mackay, Donald R. H. "Pine Trees", 111 Glebe Road, Cambridge.
 Mahoney, Douglas "Almscliff House", Huby, near Leeds.
 Ratcliffe, Jack "Kellett Cottage", Sandside, Milnthorpe, Westmorland.
 Ronson, David G. 57 Dafforne Road, London, S.W.17.
 Smith, David R. "Hope Cote", Staveley, Knaresborough.
 Tilly, Charles S. "Park House", Greatham, West Hartlepool, Co. Durham.
 Woodward, William 17 West Bawtry Road, Near Rotherham.

1963

- Marr, Andrew McL. 25 Marton Avenue, Ladgate Lane, Middlesbrough.
 Moorhouse, Denny M. Ogwen Cottage Climbing School, Capel Curig, Bethesda, North Wales.
 Renton, Christopher G. 95 Low Ash Drive, Shipley.
 Richards, John "Brooklands", Newby, Clapham, via Lancaster.
 Stansfield, David I. "Langley House", Littleton, Liversedge.

1964

- Kinder, Michael J. 35 Burley Wood Lane, Leeds, 4.
 Nonhebel, Brian M. 64 Bledhow Wood Avenue, Leeds, 8.
 Swindells, Peter C. 36 Heaton Grove, Bradford.

RESIGNATIONS

1962

- R. A. Jackson. J. G. Knight.

1963

- J. D. Simpson.

DEATHS

1963

- F. H. Slingsby. B. Beetham.

1964

- A. F. Falkingham.