THE YORKSHIRE RAMBLERS' CLUB JOURNAL 1970

Edited by HAROLD G. WATTS and A. B. CRAVEN

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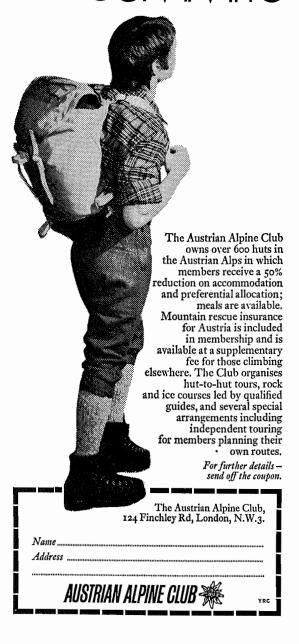
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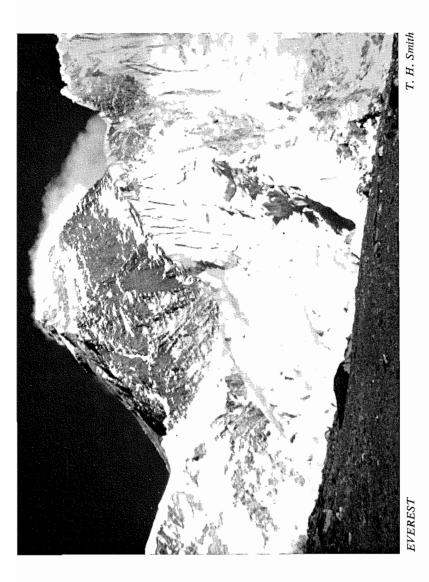
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Contents The Watkins Mountains Expedition G. B. SpenceLey 291 Underground in the Lebanon, 1968 and 1969 J. R. MIDDLETON 315 Edinburgh is a Capital City D. J. FARRANT 336							
Underground in the Lebanon, 1968 and 1969 J. R. MIDDLETON 315							
·							
Edinburgh is a Capital City. D. I. Earnaut. 226							
Edinburgh is a Capital City D. J. FARRANT 336							
High Adventure TIMOTHY SMITH 342							
Return to Corchia, 1969 G. EDWARDS 352							
Mountain Rescue and Search in the Lake District R. Cook 356							
Fellsman, 1969 J. H. HOOPER 361							
Midnattssolens Land R. G. Humphreys 367							
1969 Speleological Expedition to Umbria D. M. Judson 371							
Chippings							
Cave Abstracts 378							
Reviews							
In Memoriam							
Club Meets: 1967-68, 1968-69							
Club Proceedings 402							
New Members, Resignations and Deaths 405							
Illustrations							
Everest T. H. SMITH Frontispiece							
C. P. Constant 202							
C. P. Carrier 200							
C. P. Samurana 212							
Nuptse							
Ama_Dablam T. H. SMITH 344							
II Will Marchael Davids							
Camp Site, Inchnadamph, Whit Meet, 1969 B. E. Nicholson 360							
C. J. J. D. and G. C. J. Change and C. J							
Tit 36 1 6' 1 110' L							
High Moss, Duddon, October, 1969 B. E. Nicholson 377 H. G. Watts B. E. Nicholson 392							
Donovan Shaw, H. P. Spilsbury D. P. Penfold 393							

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The greater part of this journal was prepared and edited by Harold G. Watts before his sudden and much-regretted death in February, 1970.

Maps and Plans

Knud Rasmussens Land		• • • •	 	 	 	295
Lebanon: Sketch Map			 	 	 	316
Faouar Dara			 	 	 318-	-320
Magharet el Kassarat			 	 	 	323
Balouh ain Battara			 	 	 	325
East Kesrouane			 	 	 	327
Plans and Sections of	Poth	oles	 	 	 329-	-330
Laklouk-Rouiss			 	 	 	332

THE

Yorkshire Ramblers' Club Journal

VOL. X	1970	No. 35
102.21	1570	110. 33

THE WATKINS MOUNTAINS EXPEDITION, 1969

by G. B. Spenceley

EAST GREENLAND: if you except the Antarctic, it is the longest and loneliest coastline in the world, and the most mountainous. Measure it out across the page of an atlas and it will stretch from London to the middle of the Sahara Desert. On its entire length live only 3,000 people, Eskimos, or Greenlanders as they prefer to be called, and a handful of Danish administrators and technicians. Little more is exposed than the coast-line for, beyond the narrow strip of fjords and mountains defended by an endless procession of icebergs and pack ice, the land continues under an ever thickening ice cap, 10,000 feet deep in places. A century and a half after the Danes had administered West Greenland, the East Coast still remained an unknown, unexplored waste, its stern shores seen only on rare occasions by adventurous arctic whalers.

One of the first of these was William Scoresby, junior, who in 1822 discovered the most extensive fjord system in the world, which now bears his name. Later in the century a handful of Danes rounded Cape Farewell in 'Umiaks' and pushed north. One of these, Gustav Holm, reached Angmagssalik in 1884 to find 416 Eskimos still living a Stone Age existence. Utterly separated from their kinsmen, they were the pitiful remainder of a once populated coast, whose further decline was saved only by the establishment, some ten years later, of Denmark's first East Coast settlement.

It was to this section of the coast that the young and remarkable 'Gino' Watkins came on the first British Arctic Air Route Expedition of 1930-31. He set up his base a little to the west of Angmagssalik. Watkins is relevant in our story, not for his boat and sledge journeys, but for one significant flight. Flying

from Kangerdlugsuak Fjord some 260 miles up the coast from their base, Watkins and D'aeth saw, far to the north, a new range of mountains towering above all their neighbours. So completely did they dominate the horizon that even from that distance the height and importance were immediately obvious. Thus were discovered not only the highest mountains in Greenland but in the whole of the Arctic. They were to be later named the Watkins Mountains.

A further British Arctic Air Route Expedition in 1932 surveyed more of the coast, but still the outstanding problem of East Greenland was the 350 mile hinterland between Scoresby Sund and Mount Forel. The problem was one of access, for here, where the Arctic Current funnels the pack ice into the narrows of the Denmark Strait, the coast is only unreliably and briefly navigable. Even if a landing could be made there were steep and heavily crevassed glaciers to negotiate in the few weeks before the threat of closing ice would make return essential. It was these difficulties which caused Martin Lindsay —one of Watkins' old team—to consider an approach from the west even though this would involve a 500 mile crossing of the Inland Ice with as great a distance again to cover before reaching the safety of Angmagssalik. It would be the greatest sledge journey, unsupported by depots or hunting, ever made. Only Amundsen's South Pole dash of 1,390 miles was a greater dog-sledging distance.

Lindsay's British Trans-Greenland Expedition, inspired by vast new mountain ranges, set out from Jakobshaven in May 1934. After a 500 mile, five-week crossing of the Ice Cap they saw their landfall of mountain tops to the east. Nearest to them were the Gronau Mountains, first discovered from the air and not again to be seen, except from the air, until our expedition was approaching the head of Gaasefjord thirty-five years later. Far to the south were the greater peaks of the Watkins Mountains. In the weeks that followed as they sledged south, inland of the coastal fringe, they succeeded in levelling their theodolite at the most mighty of these, a peak which is today named Gunnbjorns Fjeld, 12,200 feet high, thus lifting from the unknown and placing for ever upon the map, the Arctic's highest mountain.

The challenge of this peak soon lured the French and the



Italians, but both failed to make a landing in these nefarious narrows. Nowhere on the whole Greenland coast does the sea ice more strenuously defend the secrets of the land. It is called the Blosseville Coast after Jules de Blosseville who, in 1833, was the first to penetrate the Strait and the first also to pay the price. He, and all his crew, were lost. It remained unknown until the beginning of the new century when Amdrup, exploiting the narrow channel of open water, that in a good year may extend off shore, traversed the whole coast in an open boat. Amdrup's companion on that journey was Ejnar Mikkelsen, gaining his first experience of polar travel and discovering what was to be lifelong love of Greenland. Not the highest, but the most magnificent of the Watkins Mountains now bears his name, and it was Ejnar Mikkelsen who was our honoured Danish patron.

Where the French and the Italians were defeated the British were more favoured. Wager and Courtauld, appropriately also from the old 1930-31 team, organised an expedition with the Watkins Mountains as their objective. For the summer of 1937 they chartered the "Quest" and sailed north from Angmagssalik. Their aim was to make a landing at Wiedemann's Fjord which would give them the shortest and most direct approach to the northern end of the range. But far short of this point the almost inevitable barrier of ice halted their further progress. One cannot linger long in the few weeks of the short Arctic summer and they had to be satisfied with a landing close to Cape Iminger. They were still far south of their chosen objective but not all was lost. Unusually assisted by good fortune and fair weather, a small man-hauling party sledged a remarkably rapid route up the Sorgenfie and Christian IV Glaciers to the southern section of the range, from which they succeeded in climbing the great snow peak of Gunnbjorns Fjeld. There was time for little else.

The Arctic's highest peak had been won but the enormous extent of basalt mountains to the north, less a little in height, but greater by far in magnificence, still remained unexplored and unclimbed. In the years that followed others sought to gain this mountain goal but were held back always by ice or bad weather. Today, thirty-three years after the one successful dash to Gunnsbjorns Fjeld these mountains and glaciers are

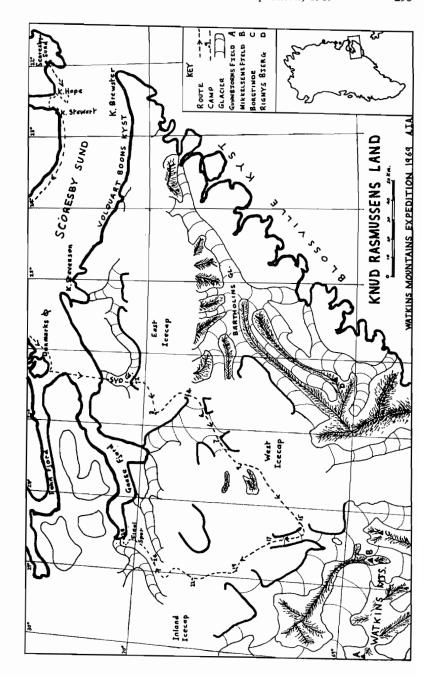
still untrodden and may with truth be described as Greenland's last great problem. Indeed if access is the criterion, rather than ascent, the Watkins Mountains remain the outstanding mountain problem of the Northern Hemisphere.

In 1968, Alastair Allan, a young and dedicated explorer, already with much expedition experience, turned his attention north to Greenland. A study of the field soon presented to him the problem of the Watkins Mountains and his imagination was fired by their challenge. Inspired by Amdrup, one solution was considered: to take an open boat either south from Scoresby Sund or north from Aputek—a Danish wireless station north of Angmagssalik. With the luck of open water such a scheme could bring the explorer within the shortest sledging journey of the mountains. But open water will always be problematical, and, in a bad season, with east winds pressing the pack against the shore, instant defeat would be a certainty. To stake all one's chances on the fortune of the wind seemed ill considered and furthermore transport would have to rely upon the restricted sailings of the Danish Government vessels which serve the coast, thus imposing the limitations of a short season.

But a chance scrap of information brought another solution, which would not only lengthen the season and provide a new and intriguing route, but would involve the crossing of unexplored land right from the start, itself a worth-while objective.

At Reykjavik, Iceland lives Bjorn Polsen, a bold and enterprising pilot. It was learned that for years, with light aircraft, he had been operating an occasional ambulance flight to Scoresby Sund, landing on a few yards of dried out river bed. If he could be persuaded to fly out the expedition and stores, just as soon as the spring thaw permitted, we could be in the field three weeks before the first icebreaker could force her way through. From Scoresby Sund a crossing of the fjord ice and a back pack to the plateau would land us on the edge of the Inland Ice with only 120 miles to sledge to the mountains—all the way through unknown land.

But of course there were problems and uncertainties, the most vital of which would be the state of the fjord ice, which already in June would be in rapid thaw. And then too, there

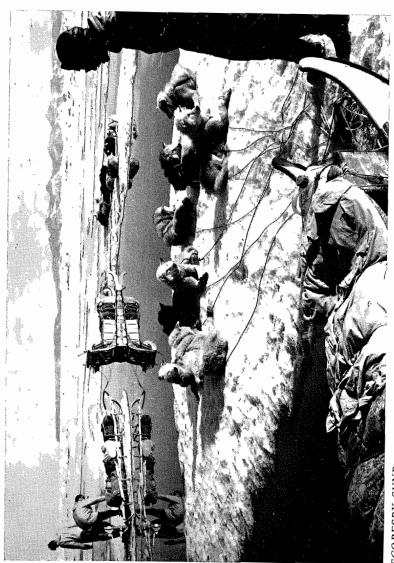


were the difficulties of the ascent to the plateau up one of the highest and most unrelenting cliffs in the world, a fault line 150 miles in length, mounting in basalt buttresses almost vertical in angle to a height of 6,000 feet. Such glaciers as do break the line and force their way down to the sea, do so only in contorted icefalls of fearful steepness that would brook no attack. Aerial photographs were studied in detail which suggested that at only two places in this, the south wall of the world's longest fjord, did a route seem possible, at Kap Stevenson half way along its length and at Gaasefjord at its head.

The problems and uncertainties were to remain, but with all considered, an overland approach from Scoresby Sund, which at least had the novelty and virtue of being hitherto untried, seemed to offer the best chance of success and the plan was put into operation.

The decision was made to make it an Anglo-Danish Expedition; the Danish Alpine Club was invited to contribute two members and soon a team was gathered with Alastair Allan as the leader. There was Jack Carswell, the oldest of the party but the most skilled and experienced mountaineer; Dr. Michel Barrault, a lecturer in electronics who was to be in charge of the wireless; the two redoubtable Danes, Vagn Christensen and Harry Vedoe, both with much Greenland experience, and myself as deputy leader. Polsen agreed to fly us out and, with more optimism than now seemed justified we set ourselves the task of raising funds. The Royal Geographical Society gave their support, the Mount Everest Foundation their money; donations were received from sources private and public, both here and in Denmark. We were grateful for the patronage of Lord Hunt and Einar Mikkelsen and deeply honoured by the financial assistance of H.R.H. Prince Philip and Prince Henrick and Princess Margrethe of Denmark. Finally, to ease our logistics, the Royal Danish Air Force agreed to give us an air drop. Interest in the expedition, far beyond our expectation, had been aroused and we suddenly felt slightly important people burdened with a frightening load of responsibility.

Alastair Allan left by sea for Reykjavik on the 13th June, soon to be joined by Jack Carswell and myself. We were seen off from Glasgow Airport by the Scottish representative of a



SCORESBY S

whisky firm, and were photographed appropriately clutching between us a case of their product. Michel Barrault and the Danes arrived some days later.

It was intended to fly almost immediately to Greenland, but already our carefully thought-out plans were jeopardised by the adverse weather, with which throughout the summer we were to be cursed. For some days snow still covered the landing ground and when this had cleared we were held up by a procession of storms which swept up the Denmark Strait. Without navigational aids near perfect weather was essential for the flight, and for a week we suffered frustrating delay. conscious that each day was making our vital fjord ice crossing more perilous. Not until the 3rd July was there sufficient gap between the endless depressions and on that afternoon Vagn and I, with Peter Chambers, the Daily Express feature writer, made the first flight. In the light twin-engined Beechcroft Bonanza we flew out in improving weather, heading north-west over the pack ice. Meanwhile the remainder of the party and our stores were being ferried in a Cessna to Isafjardjup on the north coast of Iceland, there to await the further flights.

We banked low over the small cluster of buildings at Scoresby Sund and came in to a bumpy landing on the stony ground across the bay. Two Greenlanders with their dog teams and a handful of Danes were waiting to welcome the first summer arrivals. A bay which seemed more water than ice separated us from the settlement and expertly the Greenlanders leaped across the leads and drove their teams on broken and sometimes sinking floes. We innocents inexpertly followed and, within a few yards of the shore, Peter Chambers was up to his neck in icy waters; this was the fate that was to befall most of us that night. Ten hours and two flights later the whole party was assembled at Scoresby Sund. We were eight days behind schedule.

Scoresby Sund is the most northerly Eskimo settlement on the East Coast. Scoresby, and others who followed him, found evidence enough of former occupation, but it was not until 1924 that the present settlement was founded. This was the first effort at decentralisation made necessary by the combination of an increasing population at Angmagssalik and a steadily decreasing seal stock. It now has a population exceeding 200—and 800 dogs—and it is still dependent upon a hunting economy.

It was some of the hunters of the settlement whose advice and assistance we now sought concerning the problematical 75 mile crossing of the fjord ice to Kap Stevenson. Most of those consulted simply smiled and shook their heads; but others, less pessimistic, said "imarer". In a land where every journey is subject to the foibles of ice or water, wind and storm, the outcome is always uncertain, and "imarer", meaning "perhaps" or "maybe", is the first Eskimo word one learns.

Of those who admitted that perhaps after all it just might be possible were Boas, Jacob and Madigalak, three of the best hunters on the coast, and they agreed to attempt a dog sledge crossing to Kap Stevenson. On the 5th July we set out, seen off by half the population almost all of whom were convinced we would soon be back; or. if not quite so lucky, end up sitting on a floe drifting out into the Arctic Ocean. We remembered the words of the Danish doctor: "In three years", he said, "I've only had one natural death".

In fan formation, 10 dogs to a team, pulling heavy Greenland sledges, and towing our own light Nansen sledges, we sped at the speed of a slowly running man, across the ice, now patterned with a thousand pools.

The sun shone brilliantly down, the line of distant mountains on the far shores of Scoresby Sund was still as far away as is France across the English Channel, but in this crystal clear air even Kap Stevenson no longer seemed remote and our spirits. dulled by days of inactivity, were now high and our mood was optimistic. But alas the Greenlanders did not share our feelings. Only a few hours out and an open lead split the ice for a mile or more; it was an ominous herald and there we halted with much solemn shaking of heads. Perhaps even more ominously we could now see open water, but if this reduced our spirits further, to the Greenlanders it was like a magnet. They crossed the lead and hurried forward, no longer with any mind for the fjord crossing, possibly with no hope for one, but only now with the thought of hunting. Open water meant seals and the Greenlanders' deepest instinct and greatest delight is to hunt. Soon they were on their stomachs, their rifles steadied on a rough wooden stand, eagerly awaiting the seals' surfacing.

Sadly, a dozen were killed before one floated, and bullets whined past us as the hunters fired with little regard for any human in the line of sight. We understood even better the dearth of natural deaths.

Our camp that night out on the ice was one to be remembered. The far mountains, lit in pastel shades by the subtle light of a sun that dipped but never sank, had an unreal beauty. The Eskimos, ever alert behind their rifles, and the lines of tethered dogs, gave the scene a Greenland atmosphere that we would never again so fully capture. The Greenlanders, emphatic that the break up had already started, suggested they return for an open boat while we man-hauled to Kap Stewart, the nearest point of land on the northern shores, to await their arrival. This last we attempted to do, but soon we found ourselves on fast flowing ice floes noisily grinding together in rapid and alarming movement. Concerned at the hazards of this unfamiliar element we promptly turned around making instead for the isolated Eskimo settlement of Kap Hope. Even this we could not have reached but for the assistance of the friendly people of this place who came pole vaulting over the floes to our rescue. The crossing of the fjord ice, the success of which was so vital to our plan, had failed.

At Kap Hope we waited for two days enjoying the hospitality of these endearing people whose warmth of character is a direct contradiction to the bleak severity of their background. Civilisation may have touched their life with its radios and rifles, its sewing machines and outboard motors, but here, where the Eskimo can still retain the ways of the hunt, travel with his dog team and paddle his kayak, the traditional qualities of humour, honesty and hospitality have not been lost. We felt very privileged to be their guests.

Our Greenlanders returned and on 8th July we set out in an open 15-foot boat powered by two outboard motors. Our own inflatable boat, loaded with stores and the two sledges, we towed behind us. Almost immediately we suffered a day of high wind, but if this delayed us it did hasten the break up of the ice. We crossed Hurry Inlet in much open water, but with so little freeboard that we feared for our safety. We rounded Kap Stewart, where musk ox grazed, and for two days followed the coast of Jameson's Land, sailing a zig-zag pattern through

the leads. Never before had a boat forced her way so far, so early in the season.

The next day and night was to be the climax of the voyage, with the outcome uncertain until the very end. Kap Stevenson was now about 30 miles away across the fjord, but where a sudden wind would spell disaster the Greenlanders were most reluctant to risk their craft so far from shore. At last we persuaded them to try and hopefully headed out into open water, only an hour or so later to be halted by unbroken and unyielding ice. Back we came disappointed and despondent but not yet defeated.

Another thought had occurred. If we could not reach the south shore of the fjord perhaps we could cross the wide mouth of the northern arm of Scoresby Sund to Milne Land. Again we headed hopefully out, again ice barred our way and again the Greenlanders urged our return. But Vagn's gentle persuasion won the day, and exploiting what few open channels there were, we threaded a tortuous course between the floes. Twice we halted to mount icebergs to scan the way; it seemed advance was impossible and even return unlikely, so hemmed in were we by ice with hardly a glint of water. It was bitterly cold, the sea was freezing and we shivered as we sat uncomfortably cramped in the boat. The sun had now reached the limit of its northern dip, casting a soft light on the mottled surface, so beautiful that even in discomfort and uncertainty it was impossible not to feel uplifted by the magical quality of the night. Both shores were now equally distant, both seemed equally unattainable, but slowly we persevered through ice so rotten that we could split it with poles or axes and force the floes apart. Slowly the mountains of Milne Land came closer, Suddenly, unexpectedly there was open water patterned only by the reflection of a hundred icebergs. For 20 hours we had been afloat and now, with the issue less in doubt, we pulled up on to a floe to cook a meal. The sun was high in the south when we waded ashore just off Kap Leslie. Kap Stevenson was as remote as ever but the crossing to Milne Land had made possible an alternative plan. A day's sailing round the coast from Kap Leslie was Denmark's Island where a Danish geological expedition had a forward base for their helicopter. At £100 an hour its charter would be vastly expensive, but a

prompt air lift to the plateau could put us back on schedule. Alas this was not to be. Permission to charter was received by radio from Copenhagen, but the helicopter was operating elsewhere and we were to suffer the frustration of a ten-day delay.

The dreary wait ended on the 22nd July. The helicopter came in from Mesters Vig and in worsening weather took off again on the first lift with Alastair and me on board. In a few minutes we had done what would have been a long day's sailing over the fjord and were mounting the heavily crevassed Syd Glacier, the ascent of which on foot would have taken a week, if it had been possible at all. We emerged at its head on to the plateau where the horizon was lost against the cloud and the anxious pilot nearly turned round again. I was urged to throw out markers; down went an orange bag which was almost immediately lost, but another marker we did retain in sight and we were soon safely down beside it in a wild flurry of snow. Ducking below the rotors we hauled out the gear and we were left alone on the Inland Ice. We set out to recover the orange bag; it contained all the expedition's tobacco.

The pilot was shaken and attempted no further flight after his return that night. He did not in fact come back until the following evening, when in two more lifts he brought in the rest of the party and stores. At last, a month after our arrival in Iceland, we stood beside our sledges on the edge of the unknown. There was something rather final about the helicopter's departure.

For the sake of better sledging surfaces we were to travel at night and, with the snow already hardening, we were anxious to be off. Sledges were loaded, skis put on, harnesses donned and we were on our way. It was thirteen years since I had last pulled a sledge and within as many yards the awful truth returned; of all methods of travel, man-hauling is the most ponderously slow and relentlessly gruelling. We pulled for only four hours that night and covered as many miles, then we made camp. To muscles softened by inactivity it seemed far enough. It was —20°C, with enough wind to make it seem bitterly cold.

The next night we were gently mounting over the East Ice Cap. The landmarks at our backs dropped below the horizon,

303

no new ones appeared in front; it became a plateau of ice with nothing but our tracks behind to catch the sweep of the eve nothing ahead to give direction. It was difficult to steer a straight course even with constant compass corrections. A glance back showed a wandering wavy course that was wasteful of both effort and time. We were pulling a total of 1,200 lbs. and if we covered a mile an hour it was fair going; often it was half that speed. A short break after every hour's hauling gave muscles and back welcome relief, but it was too cold to linger long.

At midnight with the sun like an orange flare burning just below the horizon, we erected a tent into which we all crowded for soup and a brew. Such halts became the routine of every night of travel. An hour later the sun had returned, projecting long pencil-like shadows far across the snow and then ahead the tip of a far away mountain slowly climbed above the sky line, another appeared, and then another, until the whole of the forward horizon was broken by lines of nunataks, all bright red in the morning light. When we made camp we were looking down on to a vast system of un-named glaciers. We knew that we should have to descend some 2,000 feet or more into this glacier basin before we could begin the long haul to the West Ice Cap. A careful study of the aerial photographs suggested that at only one place was a sledging route possible and it was for this break that we now searched. All we found were steep icefalls and steeper buttresses. By some miscalculation. or magnetic anomaly of the underlying rock, we were 60° off course and it took us half a night's travelling to correct the error. The new day was well on its way before we were on the proper line of descent and the sledges ran free as we gathered speed towards the broad break for which we were aiming. Only the Danes had the skill to control a fast moving sledge on skis; there were many tumbles before it became too steep and we completed the descent on foot. It was our longest night and day of travel, but hunger and fatigue were forgotten in the stimulation of faster progress and new and exciting horizons.

It had been excellent weather, cold indeed, but with unclouded skies and constant sun. These were the anticyclonic conditions that we fondly believed were characteristic features of an East Coast summer. After a bad start the weather had

at last reverted to its normal brilliance and with gathering fitness we would make an ever increasing speed to our mountains. Such were our optimistic thoughts as we settled down to sleep on the morning of the 26th July; nothing could stop us now.

But more than optimism was required to counter the inclemency of this most perverse of summers. Our sleep was disturbed by rising wind and in the evening when we made breakfast it was blowing a blizzard; it was still blowing when we made a meal in the morning. It continued to blow for a further 48 hours and what had seemed at first to be a minor lapse in the weather, giving welcome excuse to refresh tired muscles, was becoming a serious threat to progress. The dismal pattern of snow and storm, with which we were to be almost continuously cursed for the next four weeks, had now set in.

It was obvious that we must travel regardless and, when enough visibility returned to see the base of the nunataks six miles or so across the basin, we loaded our sledges. For four nights we travelled beside a line of alternating icefalls and basalt buttresses following the course of some vast nameless glacier whose bounding walls we only vaguely and intermittently saw. For much of the time we could see only the tips of our skis or the man in front, or now and again the dark depths of a crevasse. It continued to snow and the sledges ploughed deep, limiting the effort of an hour's labour to half a mile. Camp VIII was made after hauling all night in a blizzard which had reduced our pace to a crawl. Spurred by the urgent need for progress we had struggled on, until exhausted by an effort out of all proportion to the result, we had made camp, exchanging weariness for the discomfort of wet sleeping bags.

A matter of growing concern, adding a further spur to make an all-out effort to cover distance, was our increasing need for an air drop. We had originally planned to receive this at the highest part of the West Ice Cap, where we could leave a depot before descending to the Watkins Mountains. It was now evident that far short of this point our dwindling food stocks would make an air drop essential and accordingly we now radioed Mesters Vig, where the Catalina of the Royal Danish Coastal Command was based, requesting a drop on the first fine day. If the bad weather continued the situation could

become critical.

But a brief respite from the depressing pattern of blizzard and snow was on its way. On the evening of the 1st of August the clouds suddenly rolled away revealing splendid vistas of vast rock buttresses that, unseen and unsuspected, had been towering above our camp all the time. With the clearing skies came a drop in temperature that gave us a consolidated surface and our best night of travelling. For once man-hauling was almost enjoyable. Encouraged by fast and easy progress we should have continued through the day as well, but by the time we had made the morning radio schedule, the snow softened and once more we ground to a halt.

The sun shining from the cloudless sky was so warm that we could take our ease comfortably in the open while we dried out our sleeping bags, soaked from a week of wet camps. In the afternoon we heard the unfamiliar note of aircraft engines and we switched on the radio homing beacon. We lit a smoke flare to give wind direction and the old wartime Catalina flying boat slowly circled our camp, losing height before making the first run in. Down came a case of whisky on a yellow marker parachute, followed by boxes of food and the mountaineering equipment. Dipping its wings in a last low flight, the Catalina departed.

There was food galore and delicious luxuries like peaches and cream and cans of refreshing orange juice. We sat on the sledges scoffing these welcome delicacies, like children at a party. What was less welcome was the enormous addition to our load, days before we could leave the depot. Just how much slower we should now be we discovered that night, although weight alone was not responsible. It was our second night of hauling with no interval of sleep between and our strength was sapped, not only by this additional burden to our toil, but a little by fatigue and even more by an all enveloping cold, more intense than anything we had known before. It was -25° C, which alone is not too bad, but there swept off the plateau a harsh wind which dulled our minds, weakened our resolve and seemed to penetrate to our very bones.

The sun made its brief dip below the mountains and a greyness gathered across the surface. But what the snow lost in colour the sky gained, and we six stooped figures wearily shuffled our skis against a vivid orange light, like the backcloth of some stage extravaganza. It was breath-takingly beautiful, but gloves could not be removed and no photograph records its splendour. When we made camp, Vagn and I had frostbitten toes and fingers.

We were to have a further day and night of cold brilliance, otherwise the next two weeks were a nightmare of almost continuous white-out, soft surfaces and impossible navigation. For ten days it snowed and on only four days did we briefly have visibility. The depth of soft powdered snow increased daily. Off skis we would plunge to our thighs and the sledges ploughed ever deeper. Relaving sledges became the necessary but tedious and time-consuming routine. The output of a night's toil could be as little as three miles. So far did we fall behind a schedule already much damaged, that the prospect of ever reaching the Watkins Mountains, never mind climbing any of them, became increasingly remote. We were to be picked up at Gaasefjord on the 24th August and, with the Sound soon to freeze and the departure of the last ship at the end of the month, there could be no latitude, even if our rations were to be stretched.

With visibility reduced to occasional brief and restricted glimpses it was difficult to assess our position, but what little we did see included a snow dome recognisable on our aerial photographs. We were well on to the West Ice Cap and on the 12th August, when the ground fell away gently before us, we knew we must have reached its crest. Our height was 8,600 feet. If only the clouds would roll away we should be looking at one of the finest mountain scenes of the Arctic; as it was we could hardly see the tent next to us. Only twenty miles down an unseen glacier before us, a night's travelling with a lightly loaded sledge, and downhill all the way, was Ejnar Mikkelsen's Field and all the other fine mountains which for so long had been the centre of our thoughts. We were nearer to them than anyone had been before, but blizzard and soft snow had done their work, and time had run out. We must turn our backs with the Watkins Mountains still unseen.

The decision to return was too clear cut for there to be any dispute. It had taken us 21 days to reach this point; we had eight days less in which to make the equally lengthy

return to Gaasefjord. We could hardly extend our rations further, and we had such imponderables as a difficult spur to negotiate and the uncertain descent to the sea. The wisdom of our decision was shortly to be confirmed when a radio message was relayed to us stating that Gaasefjord was reported blocked by ice. This was a blow indeed; the only alternative pick up point was Fohnfjord, a thirty mile backpath to the north. We had no choice but to radio a request for the vessel to pick us up there on the 26th August. Any prolonged onslaught of bad weather, or an error in navigation, would create a critical situation. Speed was now essential to our safety. One sledge was abandoned and all equipment except what was deemed necessary for survival.

We were fit and determined men urged by the spur of necessity; but despite all efforts the next night's hauling produced only a paltry three miles before once more we were bogged down in blizzard and soft snow. But the high wind was to produce some comfort; it gave a consolidated surface. The following night we made excellent progress in conditions that were otherwise far from good; it was still snowing and blowing and our faces became unrecognisable behind masks of ice, but we covered 12 miles or so.

Navigation was the problem. For the next seven nights we were to travel in a permanent white-out, setting our course by dead reckoning with no sledge wheel to assess distance; this had earlier been damaged and discarded. Nights became darker and our spirits ebbed with the light. We pulled in silence—except for the call of compass direction—each enveloped in his private misery. At the best of times man-hauling is monotonous drudgery; in these everlastingly frightful conditions, when we saw nothing for days but the tips of our skis, it became utterly loathsome. Always before we were stimulated by the prospects ahead; now we were defeated and anxiety replaced ambition.

We had some reason for anxiety. We knew that the exit from the plateau could be a difficult and time-consuming operation. The key to the problem was a long spur of undulating ice cap that thrust itself between two nameless glaciers running down to Gaasefjord. The glaciers themselves we had dismissed as impassable. At the end of the spur the photo-

graphs suggested that a glacier led gently down almost to the moraine. But we had already learned that aerial photographs can be deceptive. Seen from a great height angles are lessened, difficulties concealed, and there was no certainty that either the spur or the descent from it would be easy, or even possible. With each night of travel like the last, groping our way through a white-out, anxiety increased, for without visibility we could never find the spur and, even if we did, could travel along it only with the utmost difficulty. The uncertain accuracy of our navigation was another cause of concern. We had food left for only eight days.

The very uncertainty of the situation, however, created something of a challenge and, even with prospects seemingly so cheerless, our spirits were not low—except of course for those gloomy hours through the middle of the night when every foreboding thought was magnified by cold, fatigue and boredom. It was partly to spare us this, and partly the better to exploit any return of visibility, that on the 19th August we changed to day travelling. With this change came the miracle. In the evening the wind veered to the north-west, the temperature dropped to -30° C and the clouds dispersed. Still far ahead, but exactly in the line of travel, we could see the dark waters of Gaasefjord. For two weeks we had travelled without visibility and we emerged from the murk exactly where we wanted to be. None of us will really know if it was the result of brilliant navigation or incredible good luck.

We camped that night where we could see the long spur we had to follow, trying to assess the angle and depth of its depressions. Given good conditions it would take at least three days to reach the end and we wondered if the weather would hold so long. Without visibility, navigation along its crest would be extremely difficult. There were a dozen subsidiary ridges, any one of which could be followed in error, all of which would lure us into an impossible situation. The spur was defended by miles of vertical basalt, alternating with icefalls of frightful steepness. To follow a false course would mean either precious days wasted in reconnaissance or abandoning the sledge and involving ourselves in a massive problem of major mountaineering.

But good fortune sometimes favours the incautious. Just at

the time when it was most essential to our safety and progress, we were to have visibility. For three days, and the whole length of the spur, we enjoyed brilliant weather. The next day we contoured the head of a glacier to the foot of the first depression and in a slow but steady rhythm hauled the sledge 1,000 feet up to the first summit of the spur. It was desperately hard work but even the mid-day sun did not soften the snow, and we pulled for once on a good surface. A shallower depression followed, then miles of level going before again the angle steepened to plunge, this time at least 2,000 feet down, to a narrow col. Reconnaissance was needed and we camped on a shoulder half way down the slope above buttresses that fell 6,000 feet down to the main glacier. This must be some of the finest basalt scenery in the world.

Brakes round the runners were necessary to control the sledge on the descent to the col and all the time we were looking at the frightfully steep slope opposite, wondering if we would have to haul half loads. Half loads or full, it was going to take hours of back breaking toil and we briefly considered the possibility of descending here to the main glacier. The icefall to the west of the col looked less intimidating than the others. But we could see only its upper half and we dare not commit ourselves without a reconnaissance which would take most of the day. Even if we could get down, there was still twelve miles of the main glacier which was so contorted and creased by pressure ridges and crevasses that we should be reduced to back-packing along the moraine. It was a poor alternative and with a will we put ourselves to the slope, worried lest any slackening of the tension should cause the sledge to take control and hurl us back to the col and over the icefall. We dared not pause for rest until the angle eased off. We made our next camp on the bottom of yet another depression with another steep rise ahead.

Wishfully discounting the difficulties, we thought of this as positively the last camp on the snow. Tomorrow, after the first hard pull, it would be down hill all the way to Gaasefjord, to a blissfully new world of colour and comparative warmth, to a friendly world where animals and birds lived and plants grew, to a lush greenness and softness that all of a sudden seemed infinitely desirable. Never mind that no vessel could

get into Gaasefjord and there were still 30 miles of back-packing. The route to Fohnfjord was low, all the way over the tundra. Hard going though it might be, it would be beside running water and lakes and with all the splendid display of colour that closes an Arctic summer. Except that the nearest humans were 150 miles away, and there were icebergs in the fjord, it would be like Scotland in the autumn.

But it was not to be. We were soon going down hill but alas not yet to Gaasefjord; we were to be exhausted and hungry men before we reached those shores. Soon after mid-day we arrived at the crest of the glacier that, according to our photographs, offered, among a number of uncompromising routes. the only line of descent. Two reconnaissance parties circled its head. Both parties returned disconsolate. Not only was the lip defended by a series of vertical ice steps but the glacier descended at a frightfully steep angle to an icefall of chaotic seracs, there to plunge into depths unseen. This, the glacier of our choice, proved, of all those seen, to be the least possible. Happily, on our reconnaissance Jack had spotted a less alarming alternative. The eastern arm of the glacier basin, and the true terminal of our spur, passed over a series of snow domes linked by narrow ridges. From the last of these summits it then seemed to fall at an angle, neither broken nor too steep, far down towards the main glacier. We had no certainty that it could be descended, but there was positively no alternative. It would be back-packing all the way.

We contoured the head of the glacier nursing our sledge at an angle where only two could be spared for hauling, the rest of us exerting all our strength to prevent it rolling over the ice cliffs and taking us all with it. It was alarming and possibly very dangerous. The snow domes and the ridge which we now followed in the soft evening light of that long day gave us the finest views of the whole expedition. At one side the ridge fell steeply on to the chaotic icefall, on the other it plunged down 6,000 foot cliffs to the green ice-mottled waters of one of the world's wildest and most remote fjords. Our camp that night, where the ridge so narrowed that further sledging was impossible, was the most magnificent we were ever to occupy. It was also our last comfortable night.

The date was the 22nd August and we had food only for

311

another three days—and that was on half rations. We thought with deep gratitude of the good weather with which we had been blessed and wondered where we should now be without it: probably still groping our way on the Inland Ice seaching for the spur. But our luck with weather had now run out. When we got up in the morning dark clouds were massing in the west and already the mountain tops opposite were disappearing in cloud. Michel erected the aerial and tapped out the daily report to Reykjavik, 500 miles away. A message from Scoresby Sund was relayed back to us; the vessel 'Entalik' was being despatched to Fohnfjord to pick us up there on the 26th August.

The Yorkshire Ramblers' Club Journal

We packed our gear and found there was little we could abandon except the sledge and one tent. There were our magnificent and expensive skis of course, but these each one of us cherished most dearly and we added them to our load. We estimated we were carrying over 80 lbs per man, and thus weighed down, we faced into the gathering blizzard to begin a nightmarish two-day descent. Jack Carswell, always more a mountaineer than a sledger, led the way, happy to be off his skis and clutching an axe. He cut steps round the base of one snow peak and to the summit of another. We staggered after him.

Staggered is the operative word and our legs, backs and shoulders ached after only a few yards; blinding snow blew sayagely into our faces. It was all rather unpleasant but our greatest concern was route finding. We had to descend, virtually blind, 6,000 feet down a complex rock ridge or face—we could not yet be sure which—of a mountain that no one had ever seen. With such loads, and lack of food and time, we could hardly be involved in difficult or prolonged rock work. But, although the weather had turned sour on us, we still retained some luck. The ridge, for that is what it proved to be for half the way, went better than expected. Certainly we could see nothing and angles were impossible to assess so that we roped up, lest we floundered over some awful steepness, but we did make easy progress and steadily we lost height.

After several hours, rocks started to break the surface and, a little lower, we were reeling on awkward block scree where our unstable loads became almost unmanageable. When we fell, which was often, we had to be assisted to our feet. Now the snow was wet, adding an enormous moisture content to our loads, and we ourselves were thoroughly wet, so that in a state of considerable fatigue we abandoned our six pairs of beautiful Norwegian skis. It was just as well, for soon we were involved on steeper slopes with many rock escarpments which, if we could not turn, we had to climb or abseil. We were getting weaker and suddenly we realised we had not eaten for 12 hours, so we briefly halted to munch a dry meat bar. We were now nearing the cloud base and we caught glimpses of the massive glacier below. After a lengthy reconnaissance we descended to it down the only weakness in a line, miles in length, of otherwise uncompromising crags. Soaked to the skin we made camp in a state close to exhaustion.

But it was a camp that held little comfort for the six weary occupants of a pair of leaking two-man tents. Between fitful sleep we pondered on the prospects ahead. Certainly it was a relief to be off the plateau and we were deeply grateful that we had stumbled, on what we later learnt, was the only feasible line off an otherwise formidable mountain; but our worst trial and perils could still lie ahead. We were below the main steepness, but, before we could even begin the crossing of the pass to Fohnfjord, there was a long day ahead of moraine and glacier which would tax us badly. The boat, safety and unimaginable comfort, might then be only another 30 miles, but who was to know what difficulties there might be on the way, the only guide to which were the same photographs that had flattened out the terminal glacier of the spur. As we shivered in our tents that night we began to consider the wisdom of committing ourselves in such a state of fatigue, on reduced rations, and in this appalling weather, to a route that could take many more days than three. Already there was a good coating of wet snow and our dream of pleasant streams and sunny green meadows had long since vanished.

In the morning there was a further foot of fresh snow and this was the final factor that caused us to abandon all thoughts of crossing the pass. Already debilitated by our earlier efforts and a growing need for more food, the combination of wet, cold, and deep snow could so delay us that we might well collapse with exhaustion and hunger. To struggle on regardless

in such conditions would be folly. We would radio our decision and await results. We felt certain that once our situation was known, the 'Entalik' would make strenuous efforts to force her way through to Gaasefjord. Anyway the helicopter might still be at Denmark's Island.

Things were not going to be quite so simple, however. Shut in below high mountain walls we failed to make radio contact and failed again at a second schedule later in the day. If this loss of our radio link was to continue we would have no choice but to go to Fohnfjord; either that or wait for days without food until some expensive and embarrassing rescue operation could be mounted. Anyway we still had to go down the glacier.

Actually the glacier itself proved far too crevassed, so we staggered and stumbled down the moraine at its side until our further progress was barred by a giant cliff, that as far as we could see extended across the whole width of the glacier. It was far too high to abseil. But now the bounding walls had lessened. There was a path to the east to which Alastair and I climbed. This was the solution to the problem; from its crest we could see an easy line of descent all the way to Gaasefjord.

We camped a few miles short of the fjord, well in the open, selecting our site to give radio signals the best chance. It had been a shorter day than the descent from the plateau, but almost as gruelling, and again we were in a state close to exhaustion. We ate our meagre meal, felt just as empty after it, and sought some warmth in saturated sleeping bags. For some of us there was no sleep at all that night, just hours of constant shivering.

From our tent the next morning we could hear the tapping of the morse key. This was a tense moment and there was enormous relief when Michel gave a smiling acknowledgement to our anxious enquiries. His signals were being received and he reported our position and situation. At mid-day a not entirely comforting reply was received. It read, "Entalik in Fohnfjord, radio contact lost, no helicopter available, greetings." Briefly we reconsidered the walk over the pass, but our rations were now reduced to one-sixth of a meat bar per man per day—a mere 65 calories—and when we tested our strength a few yards from the tents the idea was quickly



dismissed. Instead we moved camp to a position overlooking the fjord where we judged we could be easily seen.

There followed three days of hungry waiting. We were discomforted rather than concerned by the present lack of food; it was the uncertainty of future prospects that caused us most anxiety. If the radio link with 'Entalik' could not be resumed we might be here for another week, and there was the additional fear that, however strenuous the effort, the vessel would be repulsed by the excessive accumulation of ice in the bottleneck 20 miles down the fjord.

Of course we knew we should be picked up somehow, but it might take a long time, and our last wish was for an embarrassing American helicopter rescue from the West Coast. We flinched when we thought of the headlines. Meanwhile we would make the best of the situation and see what food we could find round about. There were some suspicious looking toadstools, and being assured that few specimens were poisonous, I tasted a small portion. I was questioned regularly on the state of my health, and when it seemed I was not going to die, we all rushed out to collect a panful. It was an evil smelling brew that we served out.

At last on the morning of the 29th August we heard gunshots from the fjord. Michel was on the radio at the time and he sent his closing message; they would listen for us no more. It was some time before we could see the red hull of the 'Entalik' looking so small and lost among the icebergs. We waved the orange sledge cover and I poured the remainder of our paraffin on to some vegetation we had dried out. Others took the tents down and packed loads. The boat swept the head of the inlet, but it was only now when we had something to give scale to the scene that we realised the massive architecture of the fjord. It was soon obvious that they had not seen us; our tents and banner would be lost in this vast landscape. We did all we could to attract attention, but slowly the 'Entalik' sailed away and disappeared, even out of the vision of our glasses.

We had radioed our exact position and it seemed astonishing that they had not searched for us more thoroughly. The hurried departure of the 'Entalik' could only mean that closing ice was threatening the exit to the fjord. Our brief joy at imminent rescue was suddenly replaced by a mood of profoundest gloom. We could make no further transmissions, we had neither food nor fuel, fog was creeping up the fjord, it was again snowing hard, the tents leaked, we were already wet.

For ten hours we pondered on the bleak prospects, resigned now to a long wait. But in the evening our gloom was suddenly lifted; unmistakably we could hear the throb of a diesel engine. The boat was returning and through the glasses we could see it searching the south shore of the fjord. And there it remained; obviously they were mistaken about our position. Nobly, Jack and Vagn set off to walk the five miles round the coast—a fine effort for anyone in our weakened state.

Some hours later we were in the warm cabin of the 'Entalik' with endless mugs of black coffee and food unlimited. For 40 hours we did little else but eat and sleep as we battered our way down the fjord in yet another storm. At Scoresby Sund the Danish administrator came down to welcome us. "You have done well", he said, "the East Coast has had the worst summer within living memory."

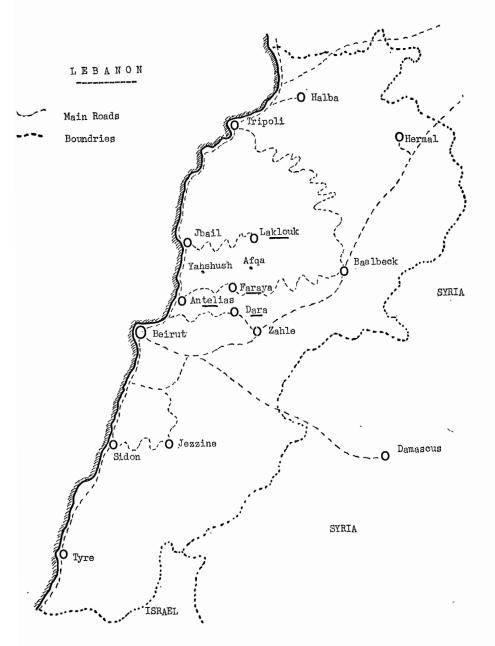
UNDERGROUND IN THE LEBANON, 1968 AND 1969 by J. R. Middleton

LEBANON—the fabled land of Milk and Honey, of the Phoenicians, the Romans, the Crusaders—country of cedars, gorges and monstrous caverns. My interest was the caverns: drawn by the fact that all but a small part of the country is composed of limestone, even to the tops of its 3,000 metre peaks. I began to make enquiries.

There was a small but very active Spéléo Club which had been in existence since 1952, the country contained Jeita, one of the world's most magnificent show caves, and Faouar Dara, then the seventh deepest pothole in the world. Finally, and a most important point, it still remained relatively unexplored. Contact was made with the Spéléo Club de Liban and extremely friendly letters were received, so in August 1968 a small party of four Y.R.C. members and two wives headed for Beirut.

Our main object was to join the Lebanese in a pushing exploration of Faouar Dara and to find out the true potential of the country for a further trip. We more than succeeded in both these objectives; we bottomed their number one pothole at 622 metres (2,040 ft.) and discovered well over 800 metres of new passage and we walked and explored this breathtakingly beautiful country, finding it rich in caves and potholes. Nor did we forget its history; we visited the Phoenician city of Byblos, the Crusaders' castle at Sidon and several of the well-preserved Roman hill forts.

After such an introduction we could not fail to return and so by June 1969 we were again enjoying the friendly hospitality of the Lebanese. We spent several exciting days amongst the Bedouin in the High Kesrouane area and discovered five new potholes. We visited Laklouk and extended an existing pothole by over 200 metres of very large passage. We also continued our education by seeing the great temples of Baalbek, the destroyed city of Tyre, Beit-ed-Din, the old capital of the Druse, and we made a flying visit to the very Moslem city of Tripoli. But the highlight of our two years' work came in the last three days: a simple surveying trip into Magharet el Kassarat turned into a new discovery of over 1,800 metres of



magnificent stream passageway. Besides being a tremendous discovery for us, it also proved of great importance to the Lebanese since it meant a new and easily accessible source of that most valuable commodity in a hot country—fresh water.

FAOUAR DARA

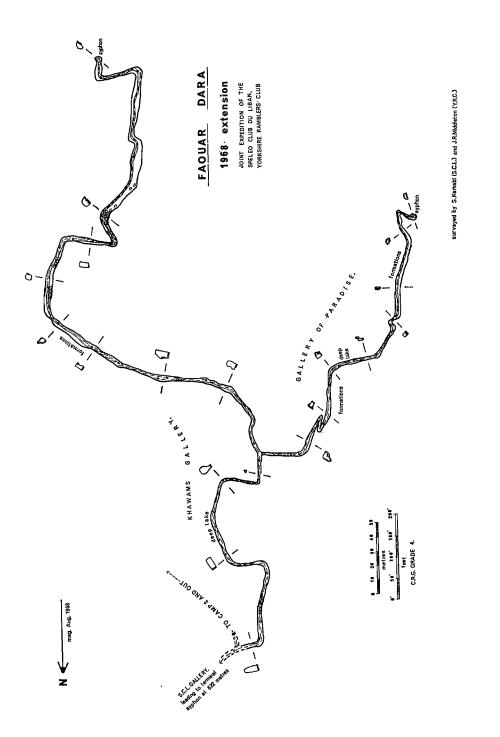
The entrance to the hole, at 1,598 m. above sea level, was discovered in 1955 when a preliminary exploration was made to the top of a 120 m. pitch not very far in. No further visit was made until 1961 when a depth of 512 m. from the entrance was reached. A third major attempt was made in 1962 when a siphon stopped further progress at 622 m. A test in 1965 with 50 Kg. of fluorescein showed that the water resurges in two places, one in the sea, the other from a spring at Faouar Antelias about 10 Km. from Beirut and 50 m. above sea level.

Faouar Dara presents a tremendous challenge and the purpose of our 1968 expedition was to explore thoroughly the bottom passages, including a large inlet, and to try to find a way past the siphon.

For three weeks prior to our arrival members of the Spéléo Club de Liban had been busy transporting equipment to the hole and as far down it as possible. For our first week-end we continued this operation and laid a telephone cable to a point about one third of the way down. This initial reconnaissance served to test our fitness, which had severely wilted under the scorching Lebanese sun, and to give us a good idea of what we would be up against.

Tuesday, August 6th, was the day of our big push and at 9 a.m. a small convoy of cars bounced up the track leading to the small village of Dara. Here we sat in the shade by the side of a water trough and made our final plans. An advance party consisting of Sami Karkabi, Ghassan Beyhum, Antoine Boustany, Tony Dunford and myself was to set off immediately and a second team, Georges Srouji, Farid Zogbi and Jacques Loiselet would go down about twelve hours later.

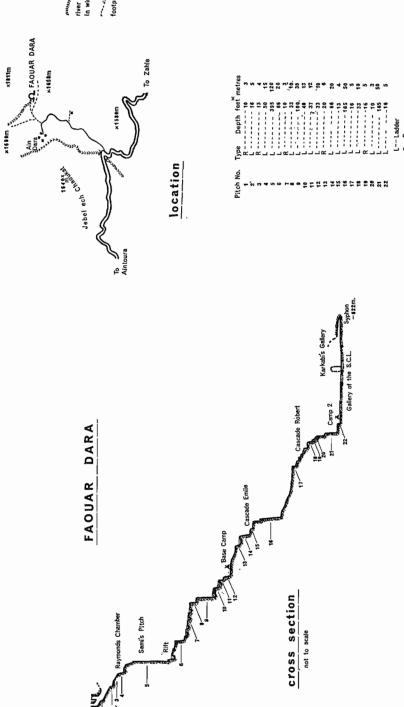
We quickly covered the short distance to the cave mouth and set off down the high meandering passage to the 120 m. pitch; only at the entrance and at the terminal siphon is it possible to see the roof. The small chamber at the top of this



big pitch was well equipped so that the long stay of the surface party would not be too uncomfortable at a temperature of only 4°C. An efficient hand winch speeded our descent which finished in a deep and beetle-infested lake. Crossing this in dinghies we went down a narrow rift, on to a 20 m. pitch, through a twisting passage, over small lakes, down short and long pitches, arriving eventually at the place where all the kit bags had been left on previous week-ends. This was just past Base Camp Chamber where earlier expeditions had made their first camp, but our object was to reach the bottom camp in one hard push. Hard it certainly was; apart from carrying six kit bags each, the passage, after a beautiful 50 m. pitch, became monotonously repetitive. It was "load dinghy, cross lake, unload dinghy, go back, load dinghy, cross lake, descend pitch, load dinghy ad infinitum". Or so it seemed as there was very little walking, just these numerous little lakes, or 'marmites' (cooking pots) as the French call them, followed by short pitches into more lakes. This section, ending with a second 50 m. pitch, took us eleven hours and proved the most arduous part of the whole system.

The second 50 m. pitch was worth seeing because of the incredible fluting of the top 20 metres, though we were really too exhausted to take proper note of it on the way down. A short passage led from the enormous chamber at the bottom of this pitch to a further short drop into a lake and at the other side of this we came to the second dry place in the whole pot; here was to be our camp, a shingle bank just ten centimetres above river level. After twenty-six hours of strenuous caving we could have slept in the water.

A solid twelve hours' sleep recharged our batteries and after breakfasting and contacting the surface we set off for the unexplored inlet 100 metres downstream. The river coming down this proved to be larger than the one passing our camp and after 150 metres of easy going we were on new ground. We went through a tunnel and into a large and well decorated passage which we named 'Khawam's Gallery' after the instigator of our expedition, who had been killed in an accident just six weeks before our arrival. The passage divided and we followed the larger branch for 470 metres; it was roomy and in places well decorated but finished in a low and wide siphon.



So we returned to the junction and went up the smaller 'Paradise Gallery' which we found to be much more sporting: it contained waist deep lakes, high narrow passage, low wide passage and wondrously decorated walls and roof throughout its 275 m, length. The finish was again a low and impenetrable siphon.

After surveying all the new passage we went back to the main river passage, 'Spéléo de Liban Gallery', and down its 500 metre length to the siphon. This was definitely a 'no go' as far as we were concerned as it was quite large and deep, though it looked promising for cave divers. We made a thorough search on the way back but were again unsuccessful, finding only a muddy and rather unstable inlet about 60 metres long. We did however climb a yellow flowstone cascade into a large chamber 60 m. long and 45 m. wide, its height immeasurable but rising 10 metres at the end to a flowstone wall down which tumbled a stream. At the top of the cascade leading to the chamber we found an area containing many cave pearls each in its own basin.

After a short sleep we packed up and started the return journey which was arduous but uneventful. Within 15 hours we were back in Base Camp Chamber and after another very brief rest we started the ascent towards the surface. Not far from the top of the awkward 30 m. pitch we met the relief party who took over our loads, so from there we raced for the entrance. We surfaced at 9.30 p.m. on Friday, the 9th of August after 84 hours below, to be met unexpectedly by cameras of Press, Television and Films, for whom we had to make four repeat exits.

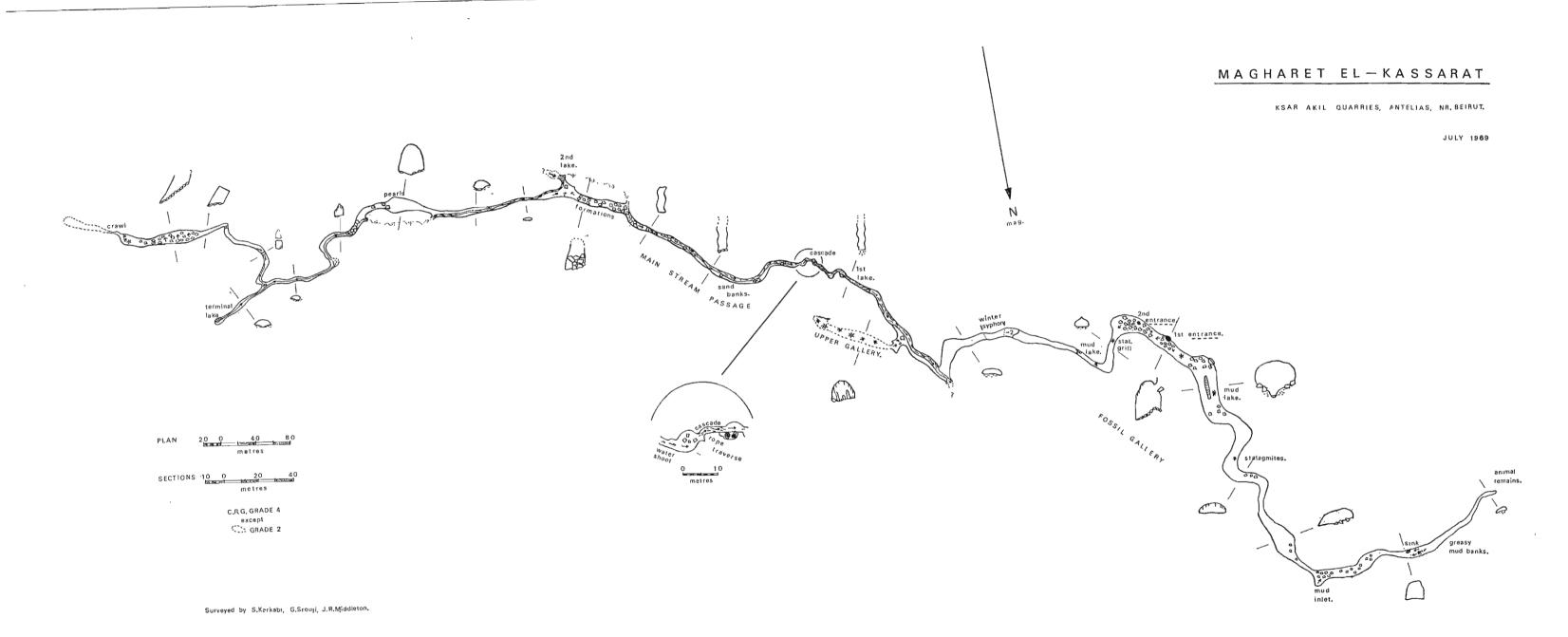
MAGHARET EL KASSARAT

The fluorescein test at Faouar Dara showed that part of the water resurged near the Casino at Faouar Antelias just north of Beirut. An exhaustive search of the surrounding area was made, but without success until the early spring of 1969, when the limestone quarry immediately above Antelias broke into the roof of a large passage 14 metres wide and 20 metres high. The Spéléo Club, which has excellent relations with the populace, was informed and a small team went to investigate. There proved to be two entrances, both of them pitches; the

easier one 13 metres to a cone of rubble. At the bottom was a large but very muddy passage; this was first followed on a rough but generally downward course for 230 metres to a deep siphon. The other way led through 598 metres of even larger galleries and chambers, the smallest place in the whole system being 4 metres square. The end was on the top of a mud and sand choke in which bones were found, suggesting a blocked connection with the world-famous prehistoric cave of Ksa Akil, also in the quarry.

Nothing further was done until Sami Karkabi suggested that on an off day we might like to visit the cave and see what we thought. This 'off day' was only three days before we were due to leave for home. Bill Woodward and I went down with Georges Srouji and Sami, expecting a rather easy and unexciting trip. First we went to the upper end and surveyed back, arriving in about four hours at the place where the siphon should have been, but it was no longer there, it had completely dried up. We stopped and looked at each other, then in the silence we heard the dull roar of a distant river. We dropped everything, ran into the empty siphon, up the other side, over a mud bank, round a corner, into a large chamber and we were there—by the side of the raging Faouar Dara river. To the left it vanished down two impassable shoots but upstream there was nothing but an enormous passage challenging us to follow. We took up the challenge and after wading through the river over a much eroded floor for 140 metres we came to a lake. Sami took off his clothes and swam round a corner for about 40 metres to where he could hear a cascade; when he came back we decided that we would need dinghies, ropes and other equipment before we could safely cross this lake.

We returned next day laden with four kit bags and quickly made our way to the lake. Georges and I set off with two bags in the first dinghy and made easy progress for 70 metres to a constriction where the water gushed through with considerable force. With our minds only on all the new ground still to be discovered we pulled our way up the right hand wall to a calmer section—or so we thought, but next moment our boat swung sideways and we were thrown into the cold torrent. Luckily we were both swept to either side but it was a terrible blackness until Georges managed to get his light going again.



TORAL AZ 11 PRAHUAN

Associated by the state of the

We then found that the bag containing the ladders and rope had irretrievably sunk; this meant that we could no longer progress up the cascade just 18 metres away.

We began a rather dismal return, surveying as we went and it was whilst doing this that we discovered the utterly fantastic 'Upper Gallery', reached by a mud slope climb from the river. The gallery was dry and its entire 120 metre length was crammed with every formation imaginable from monstrous stalagmites to delicate crystal flowers and helicities.

Our last day day dawned and again we attacked; Sami dived with his aqualung and surfaced first time with the missing bag-a good omen. Within half an hour we had fixed a line round the wall and to the top of the cascade and were continuing our pursuit of more passage; fifty, a hundred, two hundred and twenty metres of gloriously meandering stream passage, to a boulder choke. We climbed this into a large oxbow where we discovered two delightful grottoes amidst a chaos of house-sized boulders. The way then descended to a large sand-covered passage gradually increasing to 35 metres wide and 15 metres high; a small stream entered from the left, crossed the sand and joined the main river which had reappeared only to race down a narrow channel into a siphon. Upstream continued as a large lake, so before unpacking the dinghies we decided to look at the small inlet. After only 45 metres this looked as if it would finish in a siphon as the roof came down to within one metre of the floor, but no, it rose abruptly into a beautiful passage with a stream running down the centre, mud banks on either side and a perfect half round roof. We left the stream after 90 metres and entered a chamber 57 metres long and up to 20 metres wide finishing in a calcite floor of incredible beauty containing, at a very conservative estimate, over a thousand cave pearls, a hoard such as none of us could ever have seen before.

We skirted round this masterpiece of Nature and raced on, soon coming back to the stream, then a further 175 metres of passage to a junction. Straight forward was the larger so we followed this into a chamber containing a deep lake with no other inlets. So back into the other side passage and under a 3 metre high natural rock bridge leading into a classic fault passage at an angle of about 60° (see plan sections) starting

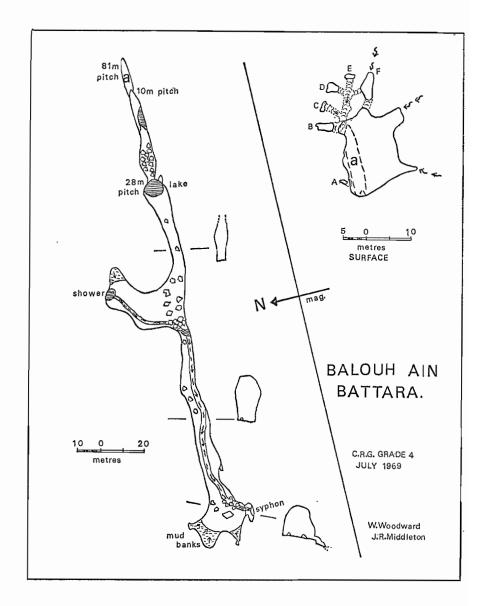
at 5 metres high and 4 metres wide, gradually enlarging in a straight line to 20 metres high and 20 wide, but with a steep boulder slope going from the base of the right hand wall to half way up the left. This passage suddenly finished after 90 metres and closed down to only crawling height; Georges, who was well in front, explored it for a further 50 metres into a low chamber with no exit.

This rather muddy looking 'little' inlet had taken up more of our time than we anticipated and, after surveying back to Main Stream Passage we regretfully had to abandon thoughts of further exploration upstream and make for Beirut and home. However, with 1,800 metres of totally new passage to our credit we could not really be disappointed. The Spéléo Club de Liban must now have a challenge which will keep it occupied for some time; this very large passage system is still 970 metres below the siphon in Faouar Dara and 22 Km. away in straight map line, with only the same limestone formation between.

BALOUH AIN BATTARA

On the road leading to Balaa from the ski resort of Laklouk is a signpost inscribed "Point Naturel. Gouffre". Across two fields and at a point where three dry streams meet is a small outcrop of sharply eroded limestone in the middle of which is a magnificent shaft surrounded by six smaller ones. Sami Karkabi had once before explored this system to a definite choke at the bottom of a 30 m. pitch but he explained to us that something might have changed; during last winter he had visited the pot one week-end when it was half full of water and again the following week-end when there was none.

So, with a large support party under Albert Anavy, Sami, Bill Woodward and I descended this rather horrifyingly impressive entrance shaft at point A (see plan). This is a free hang of 40 metres to a ledge, then 41 metres against the wall into a rift at one end of which is a twisting 10 m. pitch which took us into the darkness, over some boulders and to a 28 m. pitch. We found it best to descend this for only 20 metres and then to traverse along a ledge on to a calcite slope and so avoid the lake at the bottom. The other side of the lake was where Sami had finished last time, but now there was nothing but a smooth



floored passage 4 metres wide and higher than any of us could see.

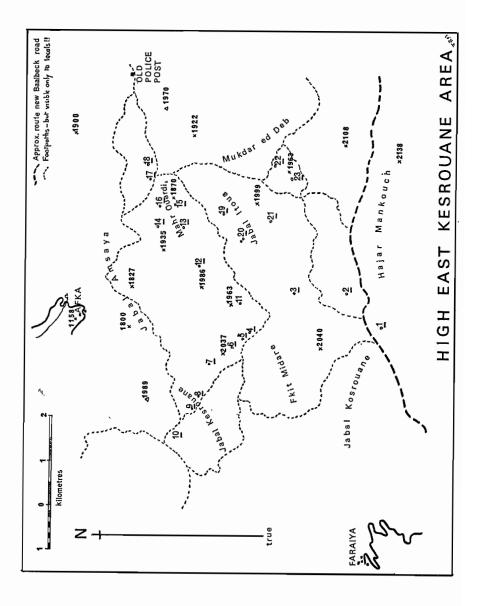
We moved down the passage and into a large chamber at the end of which cascaded a fair sized stream. Downstream was a 3 m. clamber down boulders to the side of a small lake, then a large easy passage for 120 metres into another big chamber. In front and to the right of us were mud banks rising 10 metres up the walls while to the left the roof came down to within 1.5 metres of the floor on the edge of a 1 metre drop into a small chamber. Here the floor descended steeply over shingle to an impenetrable siphon; a disappointing finish but a magnificent new streamway.

THE HIGH EAST KESROUANE AREA

Situated high above the picturesque township of Faraya at the 1,800 to 2,200 metre level lies a barren and desolate region inhabited only by the occasional Bedouin. Gently rolling hills of dazzlingly white shattered limestone sizzle under the unfiltered sun and sparse patches of green consist only of spiky thistles or an occasional eccentrically shaped juniper. We visited this area twice; the first time on a reconnaissance when we covered some 24 Km., looked at 9 known holes and discovered for ourselves, without really trying, 5 new ones. On our second visit we descended some of our own new pots and one noted by the Lebanese but not explored. The size of the pots so far discovered in this area varies from a few metres to the giant Bedouin Pot (Houet Bedawiye). No. 11 (see map) which is 205 metres deep in one drop. There is little horizontal development, possibly because all the beddings are very close together. For the position of each pot see the corresponding number on the map.

The Black Hole (No. 18)

This pot was the main object of our trip to the area; it had been previously noted, but not descended. The entrance was impressive and had a welcome surround on one side of five cool junipers. The shaft, down which each of us went in turn, proved to be 80 metres of just free hanging ladder on to a pile of boulders 9 metres high. An interesting thing about this pot was that whilst the northern side walls were solid rock the



southern side was composed almost entirely of a friable small pebble conglomerate.

Gouffre Jacques (No. 17)

After the descent of the Black Hole, Georges, Janet and I visited this small pot at the bottom of the valley by the side of the main footpath. The entrance looks like a fairly recent collapse and was very loose; it leads to a straight 18 m. pitch down a rift into a small chamber.

Gouffre Bill (No. 13)

A discovery by Bill Woodward almost on the top of a hill. A small but solid entrance and a drop of 18 metres into a good chamber with a few mud-coloured calcite flows and a further small aven at one side.

Gouffre Janet (No. 14)

Again named after its discoverer and consisting of an interesting collection of four open potholes within an area of 50 square metres. The first shaft we descended was between some boulders and was 35 m. deep ending in a small chamber containing some good flowstone. Shaft 2 was only 15 m. deep but had a squeeze leading off which became too tight. The third one was only 2 m. deep and the fourth was 28 m.; only Chassan descended.

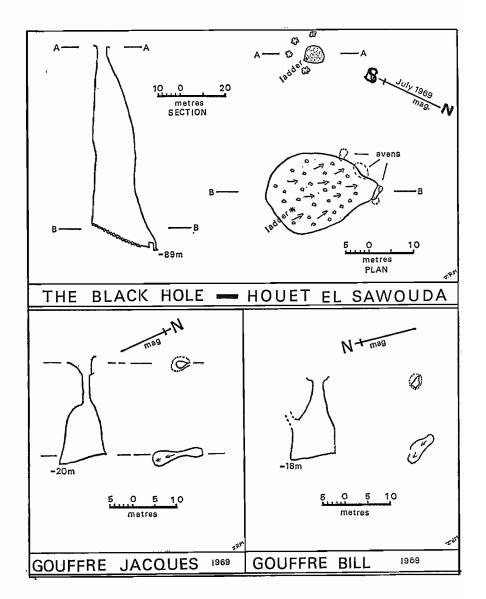
Gouffre de Sentier (No. 22)

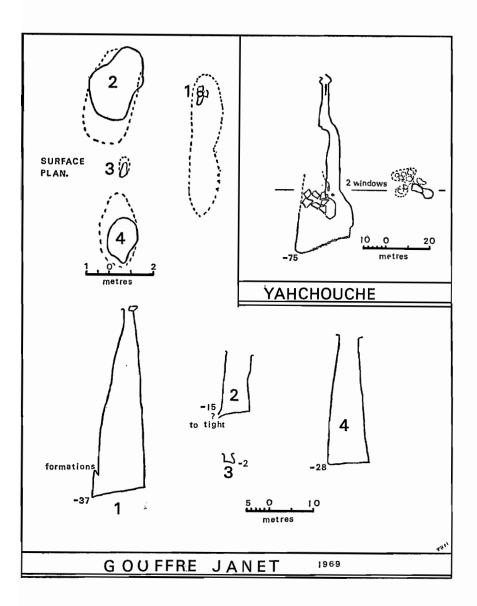
An open and easily accessible pot which we discovered and descended on our reconnaissance day; it is only 8 m. deep and can be climbed at one end. A small cave at the other end contained quite a plug of snow.

Gouffre Shehade (No. 23)

A Bedouin told us of the position of this one; we did not have time to go down it but the shaft looked most promising and it is certainly between 70 and 90 metres deep.

A note on the naming of pots in this area is perhaps appropriate; many of them have been named after people and not after some prominent nearby object, as is usually recommended. The reason is that there are no readily identi-





fiable objects and few of the hills are named; every valley, hill and rock looks like any other.

Grotte Afka

The most impressive of any cave mouth; a large stream emerges from an entrance about 80 metres wide and 40 metres high. Unfortunately this magnificence is short lived as once inside the river siphons. There was a series of small upper passages.

LAKLOUK—ROUISS AREA

Grotte de ain Lebné (No. 3)

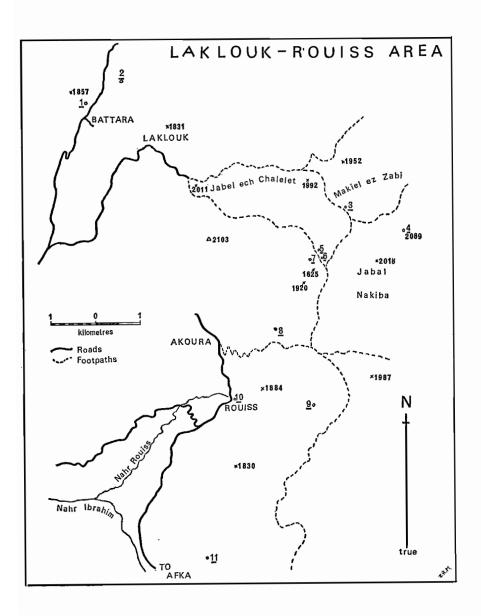
On a most spectacular three day walk from Laklouk to Rouiss in 1968 we visited this cave which is situated just before the junction with another valley. An open pot 5 metres deep leads to a chamber with one obvious way leading off, this continues for quite a distance through mud-covered passages to a sump. Back in the chamber a not so obvious passage leads to a stream which can be followed upwards for about 650 metres through a well decorated stream passage into a large chamber with the stream cascading down at one end. There were also two side passages which we explored for short distances.

Ein el Jozz (No. 5)

The entrance to this cave is at the top of a side valley, a stream flows out of it. Exploration of the cave made an extremely beautiful, impressive and sporting trip; it finished with an impenetrable squeeze about 500 metres in.

Grotte Rouiss (No. 10)

This, the source of the River Rouiss, is impressively set into the base of a 200 m. high cliff only 50 metres from the road-side. It consists of an absolute maze of passages totalling well over 1 Km. in length. At only one point did we find it possible to descend to the stream and even then we could not follow it. The potential in this cave is fantastic if a new way can be found.



Grotte Jeita

This is a show cave about 21 Km. north of Beirut and is the source of the Nahr el Kelb (Dog River). It is difficult to imagine a cave of greater beauty than this one. It consists of two sections, an upper abandoned gallery and a lower river gallery. Both are magnificently decorated and we were lucky enough to visit the further reaches of both on two trips. The upper section was easily visited and we did it all in an afternoon though we could have spent a week admiring the helictites. The lower river gallery is 6,200 metres long and of this we managed to do about 1,000 metres of extremely sporting passage.

ACKNOWLEDGEMENT

I cannot finish this article without expressing our sincerest thanks to all the members of the Spéléo Club de Liban and especially to the President, Monsieur Ahmed Malek, for all the kindness and hospitality which so much helped to make our two expeditions such an outstanding success. In particular we wish to thank them for allowing us to use their Club House in Beirut, for nursing us all through an attack of food poisoning, for allowing us the use of their equipment, for being our constant guides and companions and above all for becoming our friends.

MEMBERS OF THE EXPEDITIONS

William Woodward	1968 and 1969
Mavis Woodward	1968 and 1969
John Middleton	1968 and 1969
Janet Middleton	1968 and 1969
Trevor Salmon	1968
Anthony Dunford	1968
David R. Smith	1969

MAPS

On the maps of the High East Kesrouane and Laklouk-Rouiss areas hills are marked with a cross and their heights are given in thick type, in metres; potholes are marked by a circle and the number beside each circle refers to the pothole given in the following list, which shows the name if given and the depth is explored.

High East Kesrouane Area

1.	Gouffre de Tournant	60 m.
2.	No name	12 m.
3.	No name	
4.	Houet Joe	25 m.
5.	Houet Kandriss	90 m.
6.	Grotte Gouffre	50 m.
7.	Gouffre Rectangular	25 m.
8.	Houet el Kantara	12 m.
9.	No name	20 m.
10.	No name	10 m.
11.	Houet Bedawiye	205 m.
12.	Gouffre Elias	
13.	Gouffre Bill	18 m.
14.	Gouffre Janet (4 pitches)	37 m. 15 m. 2 m. 28 m.
15.	Gouffre Ignoble	
16.	No name	
17.	Gouffre Jacques	20 m.
18.	The Black Hole	89 m.
19.	Gouffre des Chaucas	
20.	Houet el Atoura	120 m.
21.	No name	
22.	Gouffre de Sentier	8 m.
23.	Gouffre Shehade	

Laklouk—Rouiss Area

1.	Three Bridges Pot	180 m.
2.	Balouh ain Battara	152 m.
3.	Grotte de ain Lebné	Cave, length 1 Km.
4.	Houet el Ahak	
5.	Ein el Jozz	Cave, length 500 m.
6.	Name not known	Cave, length 50 m.
7.	Name not known	Cave, length 20 m.
8.	Neba Rechme	_

9. Name not known

10. Grotte de Rouiss Cave, length 1 Km.

11. Houet Saroun

EDINBURGH IS A CAPITAL CITY

by D. J. Farrant

MY friends have always accused me of taking jobs in places deliberately close to mountainous areas and indeed such suspicions might be to some extent justified. My first choice was Brecon, admirably situated between the fruitful and often unexplored region of the Brecon Beacons, the Black Mountain and the Carmarthenshire Van. Next came St. Bees, an ideal spot, which led to four years' continuous exploration of every corner of Lakeland. When, however, I moved to Edinburgh some five years ago, I was assured that for the first time I had put business before pleasure and that my mountaineering activities would henceforth be seriously curtailed in comparison with earlier freedoms. Well, what a challenge to a Yorkshire Rambler!

The first thing to be done on arrival was to examine the local prospects and Edinburgh must be unique among British cities for providing rock-climbing of a high standard right in its principal thoroughfare. Castle Rock is a large, black, forbidding buttress looming above the Princes Street Gardens; routes of some severity have been achieved on it but all such climbing is strictly forbidden. The usual visitors to this crag are either ambitious small boys or moonstruck tourists with ideas above their station (for those with an intimate knowledge of Edinburgh topography this last comment is not without its point). The invariable result is a shout for help, followed by a winching operation by the Fire Brigade and subsequent police action. Nevertheless the practice continues: only a few weeks ago when on top of a bus in Princes Street I spotted a marooned cragsman waving frantically. I waved back.

Within five minutes' drive of Princes Street in the Royal Park of Holyrood are the famous Salisbury Crags where climbing has taken place for at least a century. Strangely enough though, nobody has official permission to climb upon them and such permission cannot be granted without a special Act of Parliament. Thus once more the climber is liable to arrest. In practice however, climbing is done in the early hours of the morning before the Park Rangers come on duty at 9.00 a.m., and certain university and school climbing clubs in the city

have established a type of customary access which the police patrols look upon with benevolence.

There are several other interesting climbing possibilities in the Edinburgh area and these are now summarised in a newly published guide to the outcrops in the district. The magnificent Bass Rock at North Berwick has routes upon it but approach has to be made from the sea and there is a high objective danger of being speared by an enraged gannet. Traprain Law at Haddington offers a wide variety of excellent routes on sound rock and is probably the best local prospect. The sea cliffs at Aberdour, across in Fife, offer some good routes but the quality of the rock is suspect and this time it is the fulmars that provide the aerial danger. Here, when suspended from small holds on the cliff face, one gazes down at the gurly sea that foams beneath and thinks of Sir Patrick Spens lying fifty fathoms down. The Currie Railway Wa's(1) on the outskirts of the city were opened up by Dougal Haston who lives nearby and these also provide fascinating practice even for the lesser mortals. The hazard of an occasional goods train ended with the closure of the line but there is still the prospect of young spectators spitting from above. A final possibility, a quarry near Castle Campbell at Dollar, was once suggested to me by someone who used to be a friend of mine. This possibility was nearly final in more ways than one. Never have I climbed on such a death-trap and my companion and I felt fortunate to escape from a face route when we discovered that the whole crag was gently rocking in the breeze.

Having considered some of the interesting local problems, I turned my attention to the possibility of using Edinburgh as a centre for rather more extended day trips. To my delight I discovered that by rising early on a Sunday morning and being on the road by 7.00 a.m. I could reach wonderful climbing country in time for a full day on the hills.

One of the first expeditions of this type was a memorable February one to Balquhidder with a friend who, despite living in Yorkshire is a member of the J.M.C.S. The previous day had been foul: bitterly cold with a high wind and sleet squalls howling in from the river. The forecast for Sunday was even

⁽¹⁾ Wa'—Contraction of WALL (Scot.) Webster's New International Dictionary. Ed.

worse but, nothing daunted, off we set in the dark at the statutory hour of seven and drove through Stirling and Callander to the head of Balquhidder; the seventy-five mile journey took ten minutes under two hours. We set out from Inverlochlarig, the traditional home of Rob Roy, and made straight for the southern ridge of Beinn Tulaichean. It was raining lightly and as we got higher the rain changed to a drifting snow-storm which was bearable only because the snow was moderately dry. After about half an hour's upward trudging with our eyes dully fixed on our footsteps, we looked up and without warning the sun suddenly burst through the snow, dispersed the clouds instantly and gave us dramatic views of the twin peaks of Ben Vorlich and Stùc a' Chròin away to the south-east and the graceful Stobinian ridge just beside us. This faculty of the Scottish weather for sudden diametrical change is something that never ceases to amaze me; it is a pity when a promising day loses its bloom, but it is infinitely wonderful when a glorious day is formed out of nothing. It means that in Scotland one need never climb in bad weather without genuine hope of a clearance.

Our route up Tulaichean continued in splendour: the snow conditions were excellent and the sunlight was so strong that snow goggles were essential. The view from the summit was a vast expanse: Ben Lomond and the Arrochar hills, the An Casteal horseshoe, the up-reared pinnacle of Lui, the distant scimitar of Cruachan, the massive collection of hills in Glen Etive and above Bridge of Orchy, and away around to the hummocks of Tarmachan and the bulk of the Lawers. The descent to the col with Cruach Ardrain was easily accomplished and we then cut our way happily up the steep and rocky slope to the summit. We wanted to complete the ridge round to Stob Garbh but the glazed rocks of the north-eastern face presented some problems. First of all we turned the awkward corner by cutting down the precipitous north face with considerable care and then engineered a direct line across the snowfield to rejoin the ridge just above the col. This had provided a sporting challenge, the consequences of which we were able to appreciate more clearly from the top of Stob Garbh when we could see the enormous drop above which we had been traversing.

The descent into Inverlochlarig Glen is heavily fringed with

crag on the map so we investigated carefully first. In this we were joined briefly by a beautiful fox who scornfully rejected our route and stepped delicately away across the crag face with all the grace of a born mountaineer. To our pleasure we found a deep gully absolutely choked with soft snow and we galumphed heavily and happily through it to the burn far below. The last part of the day's walk down this exquisite glen still in glorious sunshine gave a sense of completeness to a magnificent day.

Later in the same year, with the autumn colours enriching the countryside, my companion and I set off at the usual time and were up at Loch Moraig on the edge of Glen Tilt before 9.00 a.m. It had been a pleasure in itself to drive unimpeded up the usually traffic-choked A 9; although the morning was rather damp and misty there were encouraging signs of an improvement. We started off for the Beinn a' Ghlo and made our way first up the southernmost peak of Carn Liath. This provided quite easy going and we reached the summit in about an hour and a half. We went along the ridge in the mist with just a few misgivings about the lie of the land, but trusting to our ability at compass reading. We need not have worried for soon the mist swirled away to reveal a golden autumn land of large rounded hills linked by narrow but gentle ridges. They seemed to have something of the characteristic of the Cairngorms which could now be seen rising firmly to the north, and yet they also possessed a charming Lakeland echo that could almost have been Borrowdale at its best. Far below us we heard the thrilling roaring sound of the stags as they stepped proudly through the glen, secure in the knowledge that they could not now be stalked for another year.

Our ridge swung round in interesting but capricious directions and revealed a deep and impressive, if unmenacing, corrie on our right. Then it led us over a finely denoted col to the second summit, Braigh Coire Chruinn-bhalgain. With the sun now shining fully, we had a splendid view from the peak: north to Ben Macdhui, Derry Cairngorm, Beinn a'Bhùird and Lochnager; east to Glas Maol and Glen Clova; south to Lawers, Schiehallion and the Fifeshire Lomonds—a wonderful panorama that stood out with a fine clarity of definition. We continued our route round to the principal peak of the range,

Càrn nan Gabhar, then followed the attractive southern ridge down to the track. We were down at the car in good time, having been out for about seven hours.

Just over two months later, in the New Year, we again took our familiar route to Callander and Crianlarich and drove through to Forest Lodge at the head of Loch Tulla. The conditions were very depressing as we set off up the Glen Kinglass track: the mist heavy and thick, we could not see a thing. At this stage we doubted whether we should even find our objective, Stob Ghabhar. However, we found the tiny hut at the bottom of Allt Toaig and made fair progress by following the rise of the burn. As we got up to the col between Stob Ghabhar and Stob a'Choire Odhair we discovered to our delight that we had up to now been held in a valley mist and that the tops above were sparkling in the January sunshine. We worked our way round into the huge main corrie of Stob Ghabhar and cut above the frozen lochan to face the superb north-east buttress. The steep, narrow strip of the famous Upper Couloir looked quite formidable but our hopes of attempting it were dashed by lack of time and inadequate snow conditions. Instead we moved into a broad open gully to the east of the couloir and took our line up this. The snow was quite crisp in most places, although its quality was variable, and we were able to kick good steps without great difficulty. Although the going was straightforward it became progressively steeper and we were always aware of the abysmal slide below us into the distant lochan. The last hundred feet provided a splendid climax, the slope became almost vertical and we had the sensation of climbing up a ladder on the last few holds.

The final step that gave us access to the ridge brought a whoop of joy, for the valleys were still filled with the thick white mist that looked as if a boiling, turbulent sea had rolled into all the glens. The peaks alone stood out triumphantly above the chaos writhing at their feet. The extent of the view was thrilling: southwards to the Lomond and Arrochar hills and even down to the Paps of Jura; west to Cruachan, Ben More (in Mull), Starav and the Etive hills, Bidean nam Bian and the Aonach Eagach; north to the Mamores, Nevis and the Grey Corries; far out eastwards to Beinn a'Ghlo and the

Cairngorras—an unbelievable panorama.

From the summit we circled above the crags of this fine main corrie on to Sròn nan Giubhas and admired a fine cornice overhanging the edge. Here it was that we put up our only pair of ptarmigan of the day; they were completely white and almost impossible to distinguish when motionless on the snow. The line of descent on the eastern ridge was quite sharp and narrow but we had no problems until we had to cut down into the corrie. We had some difficulty getting into our chosen gully and once in it there were a few tricky moments, including the necessity to turn an ice pitch. We got down without incident and completed the day by climbing the subsidiary peak of Stob a'Choire Odhair. This had seemed quite close and accessible from the col, but it proved a much longer plod than we had bargained for. The view from the summit was again superb, especially of the sunset over Cruachan, but daylight was fading fast and we only just got down the steep nose of the mountain to the track before night was upon us. We made a torchlight procession back to Forest Lodge and were amused to find ourselves plunging back into the mist once more, conditions that apparently had prevailed all day.

After experiences like these I have proved to myself that as a mountaineering centre Edinburgh has a lot to offer. I have made many other more extensive trips from the capital that have lasted several days, but these do not fall within the scope of this article. It is perhaps interesting to record that Edinburgh folk have done some remarkable things in a week-end: climbing both Ben Hope and Ben Klibreck in the far north of Sutherland; putting up new winter routes in gullies in the remote parts of the Fannichs in Wester Ross; doing the full traverse of the major peaks in Arran; and all with managing to be back in the office on Monday morning. My own favourite plan is to leave the city at mid-day on Saturday (the earliest I can get away) and return for 9.00 a.m. on Monday, having climbed the Pinnacle Route on Sgùrr nan Gillean in the meantime. This depends on the operation of the Sunday ferry, but I am sure it can be done and I am looking forward to the pleasure.

HIGH ADVENTURE

by Timothy Smith

IT WAS WITH PLEASURE as well as with a sense of privilege that I agreed to lead a small expedition which went to seek out the world's highest mountain. The difficulties were many; they were however overcome by the determination of each member of our party. No praise is too high for our team who can now number themselves amonst those who had trod the ultimate heights, invaded nature's last stronghold and yet returned to tell the tale!

To gain access to the Icefield Ranges is one thing, to explore the higher reaches of the Himalaya is, as Hamish once said, quite another.

I would like at the outset to record my appreciation of the selfless devotion and sound judgement with which Col. James Roberts and Miss Hawley organised everything on our behalf and thus paved the way for our success, although this was in a way due to three things. Their foresight and planning, the helpful advice of several members of our club and the splendid efforts of our porters, without whom the expedition would have failed.

The voyage out was uneventful, we stopped for tea in Athens, had dinner in Teheran, breakfast in Delhi and were in Kathmandu in time for lunch. Here we were met by Miss Hawley who introduced us to Dawa Tenzing, our Sirdar, a patriarchal figure of indeterminate age, exuding personality and alcoholic fumes. He was with General Bruce on Everest and has played some major rôle in almost every expedition since then. The old man is deeply devout; he has already given two of his daughters to a nunnery and most of his property to the Monastery of Thyangboche. He was described by the 1952 Swiss Expedition as "King of the Sherpas" though we felt that "Dictator" would suit him better; as benign as he is wise he can be something of a terror when his authority is even remotely questioned. Dawa has known tragedy; in 1957 his eldest son was killed on the Y.R.C. Expedition to the Jugal Himal⁽¹⁾ and his wife, led to believe that he too had perished. on Everest, was so overcome with grief that she flung herself (1) Y.R.C.J. Vol. VIII. No. 29.

into the river; Dawa returned to bear a double loss.

On 26 November 1967 we hired a light aircraft, thus saving the arduous seven day trek through the foothills to Jiri, a Swiss agricultural station. Here we were greeted by a deafening cheer from our porters: friendliness is one of their outstanding characteristics. One could not help but compare this welcome with the rather dour reception accorded us by the Swiss who could not have cared less about our presence.

From this point we set out on foot and I was gratified to see that esprit-de-corps, so important on expeditions such as ours, was uniting our party into a closely knit community. The importance of team spirit cannot be over estimated; Hamish once said that when you are swinging helplessly at the end of a hundred and twenty feet of rope it is a good thing to know that the man at the other end is a friend. It was this spirit more than any other single factor which brought success.

Our first day was agony, it seemed never to end; we were to make our camp that night by a river and after climbing a low pass it was obviously the one below us, and far enough at that. How quickly we were disillusioned: Dawa, now driving his porters at an even greater speed, told us that tonight's camp was beyond that ridge up there in the clouds, "Not a bad day" he said, "tomorrow is a real bugger". The vastness, the silence, the beauty of the terraced fields on the limbs of the mountains, the trees wearing orchids, the blossom, the flowers, the prayer flags fluttering beside cairns of stones: we had already fallen for the magic of Nepal.

On and on through jungle we forced our way towards our goal, over bare wind-swept ridges, across raging torrents spanned by a single log or a chain bridge fashioned by the local blacksmith. We were beginning to suffer visions of chilled beer, feather beds and warm baths when all of a sudden we came across an enterprising character who had set up a stall to sell chang, a fiery local brew. I sent up a fervent prayer that I for one would not be found wanting in the ordeal that lay before us. Several hours later we turned away with thick heads and made our way through the gathering darkness to our halting place in the valley.

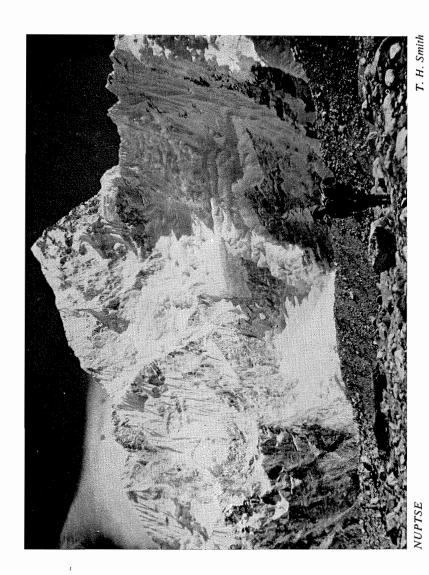
Two days later we crossed the 11,700 ft. Lamjura Pass. Our porters, many of them barefoot, gallantly trudged through the

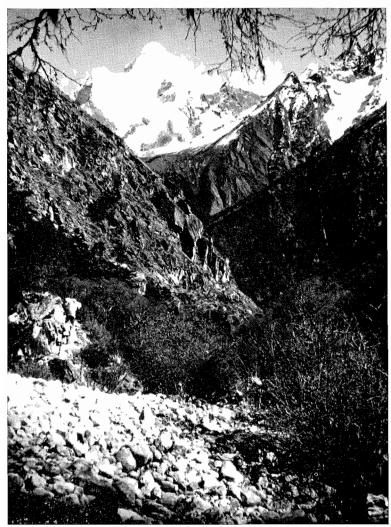
snow hour after hour. As we stood on the summit of the pass we were humbled by the magnitude of the task we had set ourselves; in such moments a man feels very close to the immensity of Nature. There we stood until the sun set and the mountains became a vision such as few human eyes have beheld.

It was our usual practice to hold a medical parade for our porters at sundown and that evening we had a ghastly shock when one of the men appeared with scarlet feet: was this one of the symptoms of some dreaded fever? After a brandy we were able to collect our thoughts and to discover that he had in fact been wearing red socks whilst wading through the snow; really it was only a blister that he wanted lancing. The same evening we were nobly entertained in a Sherpa house, a neverto-be-forgotten experience. An ancient crone offered me a bowl overflowing with thick greasy Tibetan tea, "You know my son" she cackled "he tells me you are his Sahib, greetings". I hesitated a moment, especially since Sherpa custom demands the draining of the cup three times. Boiled potatoes were handed round and a large quantity of rakshi was consumed, this at high altitude has the desired effect without a great deal of perseverance. We all enjoyed a splendid evening.

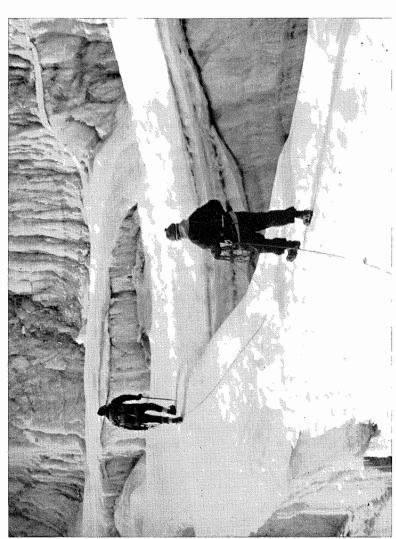
For several days we crossed the rugged terrain towards Everest till eventually we descended into the gorge of the foaming Dudh Kosi. We went down through a forest of oak, pine and rhododendron; the sun burst in a million golden splinters through the trees and Khumbila (18,901 ft.), a vast tower of snow-veined rock framed in foliage, grew mightier as we slipped and slithered our way to the floor of the valley. We crossed and recrossed the mighty gorge on bridges built by Sir Edmund Hillary, then we started the steep ascent to Namche Bazar; it was at this point that I began to appreciate all I had read about the rigours of high altitude climbing. As we drew near to the col we got our first glimpse of Everest, rearing its majestic head against the cloudless sky; it was as if a supreme artist had touched the snowfields with a rose tinted brush.

At Namche Bazar, a squalid and austere village, was the military check post where we had our visas stamped. On enquiry we were relieved to learn that our flight out from





AMA DABLAM T. H. Smith



T. H. Smi

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Lukla three weeks later had been confirmed, so all was fine. Although it was late in the day we decided to push on to Khumjung where we were welcomed at the gateway with scarves and pots of chang, which seemed always to flow at the slightest provocation.

Pemba Norbu took us round to his house; like all Sherpa houses this was made from stone and rammed earth with a rock and shingle roof, the ground floor, used for storing firewood, fodder and other things, is also where the livestock live. Never wander into a Sherpa house without a light; if you are not eaten at the door by a ferocious Tibetan mastiff you are apt to fall over a sheep or be butted by a yak on the way to the stairs which consist of a notched log, a death trap at night. Upstairs a large room stretches the full length of the house, the focal point being the open hearth at the top of the stairway; here too is the master bed piled with gay Tibetan rugs where the women tend their children and cook and the men of the house entertain and drink, one's importance being measured by how close to the fire one sits. The house was full of smoke as there was no chimney and it seemed the whole village had crowded in to meet us—what a memorable welcome!

Next day we set out for Thyangboche and on the way passed many chortens and prayer walls which necessitated our branching off to the left to pass them on the correct side; on one occasion I came face to face with a yak, so decided not to carry local customs to extremes. As we slowly wound our way up the zig-zag track we feasted our eyes upon the magnificent views, crowned by the graceful Monastery itself nestling on the Col: surely the most beautiful place on earth.

What surroundings! The pyramid of Everest, thrusting up above the high and dazzling Nuptse Lhotse Ridge at the head of the valley, seemed only an arms stretch away. Kangtega (21,932 ft.) and Thamserku (21,680 ft.) to the south east looked so close that one could almost feel them while to the north loomed Taweche (20,889 ft.), which still defies climbers; and there, right above us was the unyielding rock pinnacle of Ama Dablam (22,493 ft.) reaching for the sky. We rested two days here as the guests of the Head Lama.

We were now at over 13,000 feet and for the next portion of our journey we wound our way along the steep sides of the 346

gorge, quite exposed in places. We passed through Pangboche which was almost deserted, but needless to say our porters somehow found a chang party which inevitably delayed our progress up the valley; we did not really mind as we knew that this was one of the last outposts of civilisation. We sent on the porters and our Sherpa cook to prepare the camp site at Lobujya and we set off with Pemba Norbu and Dawa Tenzing on one of our side trips which became a familiar feature of our trek. On this occasion we struggled up a steep ridge leading on to Pokalde (19,049 ft.), every step seemed an effort and I wondered how I would make it higher up as we were only just above 16,000 ft. Fortunately we came across an unexpected valley edged by precipitous peaks and we had no alternative but to descend to Lingtren. It had proved a long hard drag for our unacclimatised bodies. After a long rest we set off to cross the Khumbu Glacier and we quickly learnt the meaning of glacier fatigue; crevasses wound their way in all directions and moraines were never ending. Fortunately the weather was fine and we eventually reached Lobujya. A comfortable camp had been established and there was plenty of sleeping accommodation for our porters. A welcome meal had been prepared for us and we were thankful to be able to crawl straight into our sleeping bags as the intense cold and high altitude had made us very tired. It was in fact our usual practice to have a meal about 5.30 in the evening and after this there was little to do but to retire to our sleeping bags for some thirteen hours. I came to realise that in the books I had read in the past not much was said about the discomforts of day to day living.

It was only a morning's walk to our next camp at Gorak Shep but we had to take it slowly as we were rapidly gaining height and were now well over 17,000 feet. The path eventually faded out as we slipped and slithered across the huge moraines of a tributary glacier: and there at last was the little lake beside which we wanted to set up our base camp. We had made it! We were at nearly 18,000 feet on the slopes of Mount Everest, our ambition achieved; a day I shall never forget, and the sky such a deep blue that it was as if we had landed on another planet.

It was from the upper reaches of Pumori (23,442 ft.) that

Sir Edmund Hillary and Eric Shipton had their first glimpse into the Western Cwm and so discovered the route which led ultimately to the first successful ascent of Mount Everest. Our main aim was to carry out a similar reconnaissance and this was the highlight of our trek. So it was upwards from Base Camp that we painfully trudged, but soon the high altitude began to affect our muscles and our bodies seemed to deteriorate. Hamish, negotiating a steep rib of ice, discovered that light weight crampons were made for birds, at least that is what I thought he murmured as he plunged past. It was at a point just over 20,000 feet that we were forced to retreat.

The view was breath-taking, the wilderness of mountains around us was a symphony of modulated shadow, only Everest itself stood in the sunshine, its great pyramid framed against a turquoise sky. To the left Pumori towered above, inhospitable and awe-inspiring, to the right soared the great shoulder of Everest, bleak in the evening light; below on the glacier Base Camp was a row of dots.

It had been a great experience and I was sad to turn my back on the majestic stage where great dramas of suffering and triumph had been played in the past. No pen can fittingly describe our feelings as the evening sun sank below the horizon.

APPENDIX

The Travel Agent's slogan read "Why not pack a suitcase and take off for Mount Everest?" Basically this is what we did.

The whole trip was organised for us by Lt. Col. James Roberts, whose address is Mountain Travel, P.O. Box 170, Kathmandu, Nepal. He supplied all the camping gear; this was ideal for trekking but would not have been fully adequate for a serious mountaineering expedition at high altitudes, though no doubt this could be arranged. It is most important that all equipment be carefully checked and examined by members of the expedition; this we omitted to do and to our horror discovered on arrival at Jiri that there was no tinopener and no wick for the paraffin lantern. Later we learnt that the Primus Stove would not work; this meant that our porters had to make a three days' walk to fetch wood. Sleeping bags can be provided but we took our own and were very thankful. We also took a full set of down clothing and could not have done without it.

Colonel Roberts arranged all the Sherpas and porters for us, a sirdar, a cook, a personal Sherpa for each member of the expedition and eight porters. He also laid on all the food, some of which we bought on the way; I would however suggest that a hamper from Fortnum and Mason would be greatly appreciated at high altitude, yak meat tends to get tedious, not to mention the appalling taste of Ghee—rancid butter.

We paid Colonel Roberts a fixed sum to cover the entire trip and by so doing we avoided having to fix rates for the porters which could have proved rather a tricky problem.

A visa is required to enter Nepal and can be obtained at the Royal Nepalese Embassy, 12a Kensington Palace Gardens, London, W.8. On arrival in Kathmandu a trekking permit must be obtained from the Ministry of Foreign Affairs (closed on Saturdays).

Innoculations needed are Smallpox, Cholera, Yellow Fever, Polio, Typhoid and Tetanus.

As a rough guide for anyone proposing to tackle such a trip, the return fare London/Kathmandu by air works out at about £300, the trek depending on the number of people in the party, at around £150 per person per month, or did so in 1967. Chartering a plane to fly in to Jiri and out from Lukla cost us £70: a scheduled flight was supposed to start in 1969 and could work out considerably cheaper. So, what with hotel bills and rakshi money it would not be difficult to get through £550 per person.

ITINERARY

November

- 26. Flew from Kathmandu to Jiri (approx $\frac{1}{2}$ hour).
- 27. Left Jiri 07.00 hours, arrived camp site just below col above Chyangma, 9,000 ft., 17.00 hours.
- 28. Passed through Bhandar, crossed the Likhu Khola, after steep ascent camped at Sete, 8,400 ft., 16.15 hrs.
- 29. Continued long ascent to Lamjura Pass, 11,700 ft., camped near first settlement over Col, 1545 hours.

30. Dropped down to Junbesi, skirted round to Ringmo, crossed Taksindhu Pass, 10,500 ft., camped below Monastery, 17.15 hours.

December

- 1. Dropped to Dudh Kosi ascended to Khari Khola, 6,500 ft.
- 2. Climbed steeply for several hours, crossed Pass, 10,000 ft., down to Puiyan, 9,500 ft., 15.45 hours.
- 3. Traversed high above Dudh Kosi, dropped to Surkya, passed through Chauri Kharka, camped at Phakding, 8,500 ft. 16.45 hours.
- 4. Passed through Benkar and Jorsale, ascended to Namche Bazar, first view of Mount Everest. Climbed over Col to Khumjung, 12,000 ft., 16.45 hours.
- 5. Visited Dr. and Mrs. McKinnon at Khumde Hospital, then on to Thyangboche, received by Head Lama, given afternoon tea.
- 6. At Thyangboche.
- 7. Left Thangboche at 10.15 hours; entertained to lunch by Mrs. Tenzing at Deboche. On to Dingboche where we camped 14,000 ft. Fabulous view of Makalu 27,805 ft. from just above village.
- 8. Climbed spur leading on to Pokalde, dropped to Lingtren, crossed Khumbu Glacier to Lobujya.
- 9. To Gorak Shep where we set up Base Camp.
- 10. Climbed a spur leading on to Pumori, approx. 20,000 ft.
- 11. Visited various sites of Everest Base Camps and had a look at huge icefall flowing out of Western Cwm.
- 12. Explored upper reaches of East Changri Glacier.
- 13. Retraced steps to Lobujya.
- 14. Down to Thukla, turned up Chola Khola as far as Dzongla.

- 15. Visited the Chola Col, 18,635 ft.
- 16. Climbed an unnamed peak north of Dzongla.
- 17. Returned to Dingboche.
- 18. Visited Ama Dablam Base Camp site, rebuilt memorial to Harris and Fraser, killed on mountain in 1959. Climbed Ambu Gyabjen, 18,637 ft.
- 19. Went down to Deboche.
- 20. Climbed Lura, 17,710 ft.
- 21. Traversed to Phorcha on fantastic footpath, descended to Dudh Kosi, ascended steeply to Khumjung, a long day.
- 22. Down to Namche Bazar and on to Phakding.
- 23. Returned to Lukla for flight out.

FOOTNOTE

In Autumn of 1968 Cook's announced a package tour to Everest, Realizing that no one would be likely to want an indifferent and middle-aged mountaineer on a "real" expedition, and having anyway little time available for organisation or on the trip, I at once put down my name. It would be better to see and not to do than neither see nor do; and though no lover of crowds, I expected only pleasant people would wish to go. To my great pleasure Harry Stembridge joined me, and a year later (25th October 1969) we presented ourselves with 40 lbs, of personal kit at London Airport to join a party of 50 due to journey from Kathmandu in two groups separated by a two day gap. Our group included retired gentlemen, business men (and business women), lawyers, accountants, civil servants, a doctor, a medical student, two housewives and a priest, average age 50, most but by no means all experienced in the hills; but my forecast proved accurate and we rapidly knit together into a very happy group.

Unlike Tim Smith we had no airlift from Kathmandu; some of our day's stages were shorter than his; and we had no opportunity for subsidiary ascents. Otherwise our itinerary followed his, and lasted 25 active days followed by some days of sight seeing and refilling the waist-band at Kathmandu and in India.

It is said that the Japanese plan a hotel at Namche and it may be we were among the last to see the Sola Kumbu unspoilt. And what a sight! Let those interested make haste. For those with time, energy and like-minded companions a private expedition would be preferable, and Col. Roberts would do most of the organisation: but a package tour, though clumsy and inflexible, is not to be scorned, especially by the idle. Eric Shipton was a self-effacing and interesting leader and Cook's organisation in its best traditions.

R. E. CHADWICK.

RETURN TO CORCHIA 1969

by G. Edwards

FIRED WITH ENTHUSIASM by reports of new developments in the cave, four of us decided to organise a flying expedition over Easter. An expedition in 1968 had pushed the previous year's finds⁽¹⁾ as far as a river gallery but had not explored this, neither had the Italians. The objects of our Easter trip were to see if this river was in fact the same River Vidal, known lower in the cave, to examine the prospects upstream and to complete the survey. The problem was how best to use the ten days available, five down the cave and four travelling.

The party set out from Manchester in a Viva van loaded with 1,000 feet of ladder, 1,500 feet of rope, personal luggage and caving gear. Crossing the Channel by an early ferry on Saturday, we made good progress through France and spent the night some 50 miles north of Lausanne. Using the St. Bernard Tunnel through the Alps and the Italian autostradas, we reached Levigliani on Sunday evening and camped at the foot of the téléferique. On Monday, after obtaining permission to use it, we spent the morning waiting in the bar; however, by 5.30 p.m. we were assembled at the cave entrance, each with two kitbags and a box. We were in luck, the Italians had already laddered the cave, also we had already bottomed it in 1967 and knew the way, so Camp 1 was reached in good time.

After a meal and armed with 200 feet of ladder and ropes we set off for the new section, first explored in 1967 by D. Sinclair and R. Mumford. A large passage with many climbs led to the river gallery; downstream the passage contracted to an impassable narrow crack but upstream it grew to great proportions. After 100 yards there was an inlet on the left, with a stream falling from high up in the roof; straight on were three deep blue lakes. On the way back to Camp 1 we noted a side passage as a possible by-pass to the downstream narrows.

Early on Tuesday morning we were quickly into the new section and exploring the side passage which did in fact rejoin the river gallery after a 25 ft. and then a 50 ft. pitch (Pozzo Vanouchi). Following the river down a series of rapids (1) Y.R.C. Journal, Vol. X, No. 34, p. 152.

in a high narrow passage, we soon found it necessary to traverse, until after 1,000 yards we came to a huge gulf about 100 feet deep. This could be laddered dry from a balcony on the right. Leaving the tackle we turned back and surveyed from Pozzo Vanouchi to Camp 1.

On Wednesday we surveyed downstream from Pozzo Vanouchi, along Torrent Passage as far as the huge gulf, which we named O.E.2; here we resumed exploration by laddering it, Mumford, Sinclair and I descended, leaving Lomas at the top in charge of the life line. A large passage followed, with deep pools, and led to the top of another pitch, The Roaring Forties, 40 feet deep. This was laddered from a ledge on the left wall; in the spray and wind it was impossible to keep a carbide lamp alight. The next pitch followed at once and there was no way of laddering it out of the water. Sinclair went back to O.E.2 and sent Lomas down with a bag of pitons, whereupon Mumford and I tried to peg out on to the left wall, but we were defeated by the danger factor and blind cracks; if an accident should happen there was little chance of bringing the victim out alive. It was upsetting having to leave this magnificent virgin river gallery but time was short and we had a tight schedule to keep. We called this Frustration Pitch.

Early on Thursday we went down the 90 ft. pitch, the three of 25 ft. and the 35 ft. to the top of the 140 ft. pitch in the old cave in order to survey this section, which is not unlike a Yorkshire severe. Four hours later we were back in camp and soon finished packing up and tidying; then we set off on the long trek back to the surface, surveying as we went. Good progress was made up the first three pitches but the 175 ft. pitch turned the tide against us. It took four hours to drag all the bags up; this shattered us and there was still the entrance passage. This is a series of climbs and traverses, awkward with kitbags; we reached the entrance in two hours and slept there until 7 a.m. on Friday, when we took the téléferique to the foot of Monte Corchia where we slept again before starting the journey home.

The following October David Sinclair organised a seven-man expedition to push the new river gallery downstream beyond Frustration Pitch to its limits and to survey and photograph

354

it. No work had been done since we were there at Easter; the Italians had not even dye-tested the water to prove whether the river was the same as the Fiume Vidal known lower down the cave.

We left Stoke-on-Trent in a heavily laden Ford Transit on Friday 10th of October, but engine trouble delayed arrival at Levigliani until Tuesday the 14th; because of this plans had to be changed. To arrive home in time for work the following Monday we would have to leave Italy on Friday the 17th, which meant only two days' caving and an immense amount of work to be done. So we decided upon just one long trip into the cave.

Permission to use the téléferique had been obtained beforehand so there was no delay and we reached the cave entrance early on Wednesday morning. Carrying only two kitbags of ladder each we went in at 9 a.m. and reached Camp 1 in three hours with little effort, though Lomas had to retire feeling unwell. From Camp 1 the new river gallery is only half an hour, so here we changed into wet-suits and from carbide to electric lighting.

After laddering Pozzo Vanouchi, Gamble, Sinclair and I went ahead carrying the ladders for the next three pitches, Q.E.2, The Roaring Forties and Frustration Pitch; we left Lewis, Roberts and Smith to follow with the 250 feet of ladder and rope for the expected new stuff. It was hard work traversing Torrent Passage but, as we had hoped the water had gone down a lot since Easter. The view at Frustration Pitch was quite different; at Easter all that could be seen was water, now a good ledge could be seen and using this we easily gained the bottom of this 35 ft. pitch. The landing was in a huge passage bestrewn with large blocks of limestone; round a corner I met Sinclair who excitedly told me of a pitch 200 feet plus, but on dropping down large rocks Gamble and I were able to convince him that it was no deeper than 150 feet. By this time we were worried as to where the others had got to, so we went back to find them. We met Lewis at the top of Frustration Pitch, laden with ladders and rope, Smith had stopped in Torrent Passage with a faulty light and Roberts had decided to stay at the top of Q.E.2. The last 120 feet of ladder was soon hanging in the unknown void

from a ledge on the right.

Attached to the last 150 feet of rope I descended this magnificent shaft, about 20 feet from the water and 10 feet from the nearest wall. The ladder appeared to be a long way off the bottom, but by the time I was 75 feet down I could see that it did in fact reach. Once on the bottom I did a quick reconnaissance while Sinclair and Gamble came down, leaving Lewis at the top. I was confronted with a huge boulder choke, bigger even than the one at the bottom of the cave, described by Arculus (Y.R.C.J., No. 34, page 156). There was no hope of a way through, we tried every nook and cranny. So again disappointed, we turned back, naming this fine last pitch Parliament Pot (fine on top but disappointing underneath).

De-laddering was slow and painful and as tackle mounted up it became obvious that we could not make it in one go. Back at Camp 1 fifteen hours after entering the cave we had our first meal. We managed to detackle as far as the bottom of the 175 ft. pitch where we left the stuff and made for the entrance. In the quarry building Lomas had prepared a fine curry, after which we immediately fell asleep. At 11 a.m. on Thursday, after sleeping for five hours, we went in again, this time accompanied by Lomas in fine fettle, he pulled all 14 bags up the 175 ft. pitch by himself in a fantastically short time; this more than made up for his absence on the previous trip. In 3 hours all the tackle was lying in the warm sun while we made for the village to have a cold bath. Later that evening an Italian insisted on showing us the sights of Viareggio and a marvellous time we had, feasting on squid with a view of all the forest fires raging in the surrounding Apuan Alps.

MEMBERS OF THE EXPEDITIONS

D. S. Sinclair	B.S.A. Manchester (Leader)	April & October
H. A. Lomas	B.S.A. Manchester	April & October
G. Edwards	Yorkshire Ramblers' Club	April & October
R. Mumford	North West Pothole Club	April
A. Gamble	B.S.A. Manchester	October
H. Lewis	Derbyshire Cave Club	October
D. Roberts	B.S.A. Manchester	October
P. B. Smith	B.S.A. North Midlands	October

MOUNTAIN RESCUE AND SEARCH IN THE LAKE DISTRICT

by R. Cook

THE EXTENT to which rock climbing and mountain walking has increased in the past few years is amazing; sadly this has brought with it a comparable increase in the number of accidents, mainly due to lack of appreciation of the dangers involved.

Twelve years ago nearly 60% of accidents on the mountains were rock climbing and 40% walking, in 1960 the proportions were 50/50 while today, 1970, mountain walking accidents account for 60% of the total. Records show that 75% of accidents are due to inexperience, ignorance and incompetence caused by unsuitable footwear, poor clothing, lack of adequate food, not turning back in bad conditions and so exceeding physical ability. Three out of four exposure cases resulted from faulty timing, late starts and being overtaken by darkness.

In the years 1965 to 1969 Lakeland rescue teams were called out 438 times and had to deal with 61 deaths and 346 injuries. In 1968 teams turned out on 23 occasions to search for persons reported missing and 1,150 man-hours were wasted by searchers because the missing persons did not appreciate that the Police should be informed (a 999 call) as early as possible if they had to spend the night elsewhere than at their base or if they had reached safety and gone away.

The responsibility for searching for missing persons and recovering bodies from the mountains rests officially with the Police, but the idea of policemen undertaking this work without the help of experienced mountaineers is almost too ludicrous to merit consideration. Nowadays the Police act as link between the rescue teams and base. When they receive notice of a person missing or of an accident, they inform the local Team Leader and alert the members of the team. Then they man the Radio Communications equipment, call out extra help if necessary, call ambulance and doctor as required and they are often themselves active members of the team.

The history of how it all started is interesting. It has always been a tradition that one goes to the help of anybody who is in need, day or night. In the early days of climbing when help was required it was farmers, quarrymen and local residents who, with the Police, took on the responsibility of finding and bringing down those who were reported lost or injured. Miners' headlamps were used for searches in the dark, borrowed lorries for transport and the injured were often carried down on gates.

The Mountain Rescue Committee had its origin as far back as 1933 when the Fell and Rock Climbing Club and the Rucksack Club devised a stretcher (later known as the Thomas Stretcher) for use on steep, rough country. Suitable medical items were collected, made up into kits and deposited at various centres and in hotels. Later the First Aid Committee of British Mountaineering Clubs was formed and appeals for donations were made. In 1946 the Mountain Rescue Committee (MRC) came into being and arranged with the Ministry of Health for the cost of first aid equipment and replacements to be provided through the National Health Service. The M.R.C. now provides morphia to rescue teams affiliated to it and organises insurance cover for all persons engaged in an official search or rescue.

The first official Lakeland rescue team was Coniston in 1947, comprising farmers, quarrymen, shopkeepers and other local residents with Jim Cameron as Leader. Rusty Westmorland formed Keswick later in the same year, then followed Langdale with Sid Cross as Leader. By 1960 there were seven main rescue teams in Lakeland. Dr. Madge, Medical Officer of Health for Kendal, formed the Lake District Mountain Accidents Association and organised searches in the southern part of Lakeland, with bloodhounds to help. Later the teams not then in the Association combined with the Search Panel to form a newly constituted L.D.M.A.A.

As a result of a prolonged search in 1960 Sid Cross called a meeting of all interested parties and the Search Panel was formed consisting of the Leaders of the seven main rescue teams, a representative of the Police, the Wardens of the Eskdale and Ullswater Outward Bound Mountain Schools, with myself as Hon. Secretary; later Brian Stilling came in as Incident Report Officer and John Wyatt as Lakeland Chief Warden. As a result of all this it is now possible to put at least 250 searchers into the field on the first day, 400 or so on

the second and up to 500 on each subsequent day. The R.A.F. Mountain Rescue Team, and helicopters, are also available.

From the foregoing it will be seen that there is in Lakeland a very large voluntary unpaid organisation ready at all times to do what it can for those who get into trouble. All teams are self-supporting, funds being obtained from appeals to Climbing and Rambling Clubs, Local Authorities, collecting boxes, donations received as the result of accident, social functions and lectures; in addition charitable organisations such as the Wolfson Foundation have made generous gifts, and teams have received Radio Communication sets on loan from the M.R.C. The expense of running such an organisation is heavy.

The most essential items of equipment, and the most costly, are ambulances of the Land Rover type, capable of negotiating very rough tracks, and radio equipment. Each team must be provided with stretchers, ropes, spare clothing and boots, plastic splints, head lamps, field glasses, rucksacks, carabiners, pitons and hammers, crash helmets, slings, anoraks, sleeping bag and blankets for the injured, ice axes; all of these are subject to depreciation and must in time be replaced. The Langdale team alone has spent over £400 on such equipment over the past four years; depreciation and replacement costs some £230 per year.

Radio communication has now come to play an essential part in mountain rescue and its value has been greatly enhanced by the introduction of light-weight walkie-talkie sets; those made by Pye are the most satisfactory but cost £105 the set. Appeals for these to the Ministry of Health have been turned down and when Lord Chorley raised the point in the House of Lords he was told that "if young men undertake this voluntary and dangerous sport, they should form themselves into clubs and make contributions to purchase some of this equipment." However, voluntary contributions have made it possible for most of the teams to be equipped with these sets, few are now without and funds are gradually being accumulated to provide them. The following points show how necessary such sets are and what great advantages they give:—

(a) On a widespread search, the Panel directs operations from Base; the need to be in constant touch with all

operating teams during a major incident is vital.

(b) Much time is saved by the Panel being able to deploy forces on the fells. As a team completes a task instructions can at once be given as to what it is to do next.

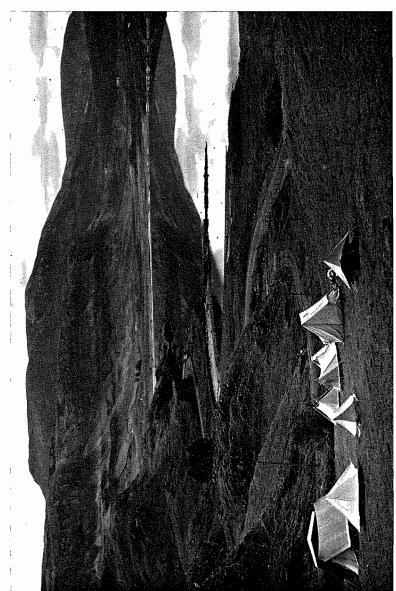
- (c) At night additional searchers and rescuers can be asked for and directed to the scene of the accident. When lowering the stretcher down rock faces instructions can pass between those above and the man who is guiding the stretcher down.
- (d) When a casualty is found, this is reported to Base, giving the estimated time of arrival in the valley; thus Doctor and Ambulance are not kept waiting.
- (e) Base can give medical advice about on the spot treatment to the casualty as required.
- (f) Nearby teams can be deployed to help bring down the casualty more quickly and safely.
- (g) The major problem of recalling teams when a search or rescue is over is made easy, especially in bad weather.

It is recognised that any planned system of search procedure must be flexible but, subject to that, the following sequence of events has been agreed between the Search Panel and the Police:—

- (1) Almost all requests for search are made late in the evening to the local Police Station; the Police Officer responsible calls out the nearest rescue or search team.
- (2) If the missing person has not been reported safe by 23.00 hours the Team Leader will take, or send, out a group of six to eight men to search the tracks or areas indicated, however dark the night and whatever the weather. The remainder of the team will be warned to report at daybreak.
- (3) Early next morning, the Leader of the night search will report to the Police and Team Leader; if his group has been unsuccessful the remainder of the team will be briefed and sent out at daybreak. If the Police and Team Leader agree that it is desirable the Search Panel will be called in to meet at a specified time and place.
- (4) When the panel meets, it will call in, through the Police, as many search teams as it considers necessary and will begin to deploy them as is deemed expedient.

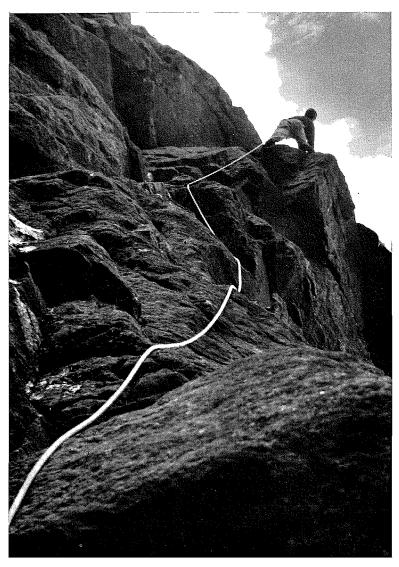
EPILOGUE

On Raven Crag a climber fell off the difficult step near the top and finished up in a tree with one leg jammed on one side of the trunk and the other on the opposite side. Sid could not free the leg and sent for a saw to cut the branch away. When it arrived he got himself lowered down on a rope and started to saw through the branch. It was difficult as he was swinging round on the rope while sawing and he got the shock of his life when he suddenly saw a boot falling away from the victim—he thought he'd sawn the fellow's leg off. But no, the laces had broken in the fall and the boot had slid off as the man struggled to free his foot.

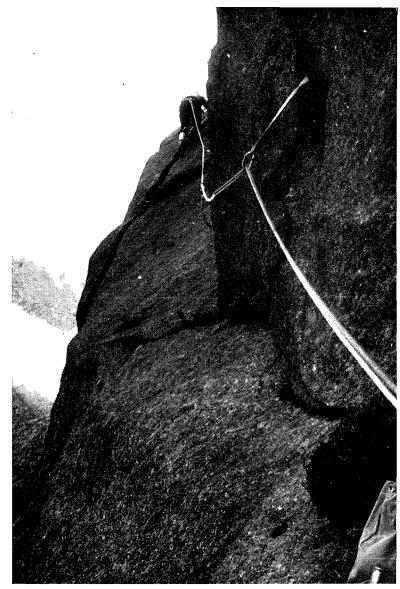


B. E. Nicholson

CAMP SITE, INCHNADAMPH, WHIT. MEET, 1969



CRACK OF DOOM, DIRECT APPROACH, SRON NA CICHE, SKYE R. Harben



TIDE MARK, CIOCH NA h'OIGHE, ARRAN, EASTER, 1970 S. Goulden

FELLSMAN 1969

by J. H. Hooper

AT TWELVE NOON on May 17th 1969, along with 291 other walkers, I pushed my way along Ingleton main street as the 1969 Fellsmen Hike began; the super fit 'hard men' at the front were running, those less fit travelled more slowly, joking as they went. At this stage of the journey, in bright sunshine, 50 miles of walking is child's play and 10,000 feet of climbing can be done by anyone; but those with experience of this event know that only half of the starters will finish.

The Hike was first held in 1962 as an event for Scouts and a silver-mounted stone-age axe was given as the prize for the first man home. In 1965 E. M. Tregoning (President of the Yorkshire Ramblers' Club 1968—1970) presented a trophy for the fastest novice. Since those days it has rapidly developed into what is probably a unique event open to all fell-walkers, under the organisation of Keighley District Service Unit.

Some people may complain that they do not like organised walks but the very nature of the Fellsman means that it must be organised to an extreme degree; by no means does this detract from its being a severe test of endurance and navigation. There are twenty check points (see end) to be visited in set order and a specified minimum of equipment must be either worn or carried to ensure that each entrant is self-sufficient.

Ingleborough summit was reached by Crina Bottom in one hour and four minutes; already the field was spread out over about two miles with the front men half way to the Hill Inn while the rear walkers were still on the lower slopes of Ingleborough. Keeping up a good pace and trying not to run except on short steep descents I headed along the ridge and down the near vertical slope along a broken down wall towards the Hill Inn. Six miles gone, Whernside was the next target, over a wall, through a field containing an athletic bull and two cows, on to the farm road and then, with the sun on my back, up the hillside to glorious views of Morecambe Bay, Barrow-in-Furness and the Lakeland Hills.

A quick descent down the long slope brought me to Kingsdale Head where I drank some stream water before setting off up the hard grind to the check point on Gragareth. Here, on looking about me, I noticed that there were considerably fewer bodies around than when I left Ingleton. Approaching the summit of Gragareth I found enough spare breath to suck an orange to help me on my way to Great Coum, whence I could see the Howgill Fells in the sunshine before going down via Flinter Gill into Dent.

Dent provided a welcome cup of tea, which I stiffened with glucose, also the opportunity to put a bunion plaster round a blister and, as a precaution, to stick another large plaster under one heel, which had been feeling hot. Then I was away on a line of ascent that I had picked out while coming off Great Coum. Forty-eight minutes later, after 1,400 feet of constant incline I left Aye Gill Pike for a fairly easy walk to the railway tunnel mouth, one mile north of Dent Station, the next objective. Although not the most direct route, it is less wearisome to walk a little further north and then follow the railway track to the station than to cross the grain of the country, which involves some short steep ups and downs.

At Dent Station I stopped only long enough to have a mug of soup and to drink some water which was disguised in a beer barrel (most Ramblers would have preferred the reverse) before pressing on along the road to Garsdale. After one mile on the road I turned on to the open country towards the top of Great Knoutberry. The going seemed suddenly to have become hard, my legs lacked strength and my stomach felt tired. Downhill from Great Knoutberry I moved better, the sight of the check point on the Ribblehead—Hawes road near Redshaw Farm gave me courage and thoughts of darkness spurred me on. I wanted to get as far as possible before nightfall; during the hours of darkness competitors are formed into groups of six as a safety measure; this can be either a hindrance or a help. In my case I felt it would be a hindrance before Fleet Moss; between Snaizeholme Fell and Dodd Fell Hill lies the valley of Snaizeholme and in my estimation the climb from the valley bottom to Dodd Fell is the worst on the whole route, considering the distance already covered. The way I was feeling made me doubt if I could make the climb and still be able to complete the Hike; therefore my plan was to contour round the head of the valley on a longer but less

strenuous route. In a group of six I would have to bow to the majority decision which, I had no doubt, would be based on "the shortest distance between two points is a straight line."

On reaching Redshaw I filled my mug with tea and carried on walking, intending to drink it when cool, but instead I threw it away, not wanting to burden my stomach further. Checking in on Snaizeholme Fell completed, I wandered off into the gloom towards the valley head. Very soon, with nobody in sight and darkness fast falling I sank to my knees and vomited; at once I felt better and ploughed on vowing in future not to drink water from beer barrels.

It was dark as I crossed the Pennine Way on the approach to Dodd Fell and before long I heard falling water; switching on my light I saw a large hole in the ground with water running down one side. Whether it was a pothole or some other formation I could not say as size is hard to judge under such lighting conditions. Lambs appear to be sheep; sheep, cows; three foot deep gullies, precipices. Soon after this I met up with five more walkers and together we found Dodd Fell trig. point; as none of the others knew the route I was forced into the lead. A slight veer southward to miss some rough going and to maintain height, then the Roman Road from Gearstones to Bainbridge; the metalled surface made a change to walk on for four or five hundred yards. Sharp right at a wall-end, half a mile on sheep pasture and we reached the door of the Fleet Moss Hotel. After checking with 'reception', soup and hot drinks could be obtained. This was my first real break since mid-day, it was 11.23 p.m. and twenty-nine miles were behind me. I was pleased to sit for twenty minutes and soak up tea, glucose and an orange.

Just before midnight our group resumed the journey under a moonless sky. The next stage involved crossing or circumventing the notorious Fleet Moss on a black night and finding four miles away the check point on Middle Tongue. This was in the centre of a flat area of peat hag gouged many feet deep with gullies making it impossible to walk in a straight line or see ahead most of the time; it is easy enough to miss the trig. point in daylight. Deciding that circumvention was the best policy the group headed southward along the road to Oughtershaw for five hundred yards and then started a detour of the bog.

By a process of picking out odd bits of broken fence which were known and walking for a given time on a previously calculated bearing we arrived by wrist-watch and compass spot-on the target at 02.10 hours. Now everything looked set for a fast time, the worst country was behind and only sixteen miles of relatively easy going remained.

As we left the check point low clouds appeared against the dark sky, blowing up quickly from the north-west; within minutes wet snow-flakes the size of pennies were falling in a freshening wind. As this was the 18th of May snow was hardly expected although the weather forecast had mentioned it, but that had been written off as undue pessimism by some meteorologist. The next six or seven hours underlined the wisdom of the 'Fellsman' organisers in specifying in such detail the required equipment.

Clad now in balaclava helmet and cagoule my boots slid on the wet snow lying on tufts of long grass and as the snow fell faster over-trousers were pulled on. Some of my companions, like the foolish virgins, were running short of light, though it was batteries they needed, not oil. With lack of light and probably with trying to keep our backs to the wind and snow it was not long before we realised that we did not know exactly where we were. It was not quite a case of:

Those behind cried "Forward!" And those before cried "Back!"

but half of the group said 'more left' and the other half 'more right'. Finally we all agreed to go downhill until we hit the road or at least descended below the snow line. In the grey of dawn a stone barn was seen ahead; where there's a barn there should be a track, and sure enough there was. The track brought us into the yard at the back of the White Lion Hotel at Cray, only half a mile off course and we were thankful it was not further.

On reaching Cow Pasture two mugs of tea were more than welcome and after twenty minutes' rest one other member of the group and I set off again, now in daylight which only enabled us to see the thick cloud obscuring the way ahead. My boots were sodden, half buried in two inches of snow and, as far as I could ascertain without removing them, my feet finished at the instep. With helmet on, hood up, hands in

pockets and everything laced up snugly we followed one of those useful aids to navigation: a stone wall. I pressed on as quickly as possible hoping to raise enough steam to thaw out my feet. Buckden Pike passed without further event though the route by the wall to Park Rash was more tedious than usual as snow covered the water filled hollows.

Feeling thankful and relieved that only one top remained before the finish, a compass course was struck from Park Rash earthworks diagonally across the snow-covered western face of Great Whernside, calculated to strike the ridge some distance north of the trig. point; visibility was so poor that it would have been easy to pass the check point several feet below and not see it. As we approached the ridge the wind strengthened until on the ridge a full gale blew, driving clouds of fine snow. The check point tent was in amongst the rocks deriving what shelter was available. A hasty consultation followed the check-in and it was decided to drop straight down to Kettlewell via Hag Dike and get below the snow-line. This plan went well except for a fall on snow left from winter. Below 1,500 feet green fields made a sudden change from snow and in Kettlewell it was hard to believe that there was snow above us as it could not be seen for cloud.

All that remained now was a seemingly endless seven mile road walk to Threshfield, where I checked in after 23 hours and 4 minutes, covering approximately 51 miles.

The first man home was Alan Heaton of Accrington who finished in 13 hours 52 minutes, so quickly that he missed most of the snow!

MAPS: ORDNANCE SURVEY 1" to MILE SHEETS 89 and 90

Check Point	Nat .Grid. Ref.	Height ft.	Approx Mileage	Time Hours
Ingleton	697732	450	0	12.00
Ingleborough	742745	2373	31/4	13.04
Hill Inn	744777	935	$5\frac{1}{2}$	13.41
Whernside	738814	2419	8	14.34
Kingsdale Head	710796	994	$10\frac{1}{4}$	15.04
Gragareth	688793	2058	$11\frac{1}{2}$	15.47
Great Coum	701835	2250	$14\frac{1}{2}$	16.37
Dent	707872	441	17	17.21-17.37

721886	1825	18 1	18.25
763876	1150	$21\frac{3}{4}$	19.26—19.30
788872	2203	$23\frac{1}{2}$	20.17
806852	1250	25	20.55
817851	1773	$25\frac{3}{4}$	21.22
841845	2189	$28\frac{3}{4}$	22.43
860853	1900	30 1	23.23-23.50
909811	2109	$34\frac{3}{4}$	02.10
944797	1183	$37\frac{1}{2}$	04.10-04.30
961788	2302	$38\frac{3}{4}$	05.15
986756	1600	$41\frac{1}{2}$	06.20-06.30
003739	2310	43	07.25
995639	600	51 1	11.04
	763876 788872 806852 817851 841845 860853 909811 944797 961788 986756 003739	763876 1150 788872 2203 806852 1250 817851 1773 841845 2189 860853 1900 909811 2109 944797 1183 961788 2302 986756 1600 003739 2310	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

MIDNATTSSOLENS LAND

by R. G. Humphreys

THE END OF JULY, a month clear between jobs, and a rare opportunity to take rucksack and a little coinage and to step off the world for a while.

I have always wanted to cross the Arctic Circle, preferably in Alaska; but Lapland is much more convenient, and ancient tales of Yorkshire Ramblers' Club expeditions to the Lofotens, and George Spenceley's more recent films had aroused my curiosity; and I wanted to see some of the rest of Scandinavia in passing.

So rucksack stuffed and boots polished, I flew from London to Oslo and spent a couple of days seeing the tourist sights in brilliant sunshine.

The express train for Trondheim leaves Oslo at noon, travelling gently northwards past cornfields towards the mountains; through Lillehammer, into the Gudbrandsdal, climbing steadily to over 3,000 feet at the Dovrefjell (which looks just like Rannoch Moor) and down to Trondheim by nine o'clock in the evening. Then a change to the night train, which crosses the Arctic Circle in the small hours.

Nine o'clock the next morning, before turning sharp left for the last few miles to the end of the line at Bodö, the train unloads passengers who are continuing northwards at Fauske, where there is a wooden station, a café, and a park full of rugged Volvo buses, belonging to Nord Norge Bussen. This is the well worn tourist trail to the North Cape, but the trees are by now small and thin, and underfoot there is more and more bare rock, so that civilisation seems many miles away.

The journey from Fauske to Narvik, crossing four ferries, must be one of the most spectacular bus rides in the world. On the left there are frequent views across the sea to Lofoten and Vesteralen; on the right are the mountains. The mountains are not high (about 4,000 feet) and are rounded; but since they are naked rock, dropping vertically into the fjords, the topography is unique.

Because of the scouring action of the Ice Age glaciers, some of the fjords are a mile deep, which means that there is more fjord below water level than above it, which is quite a thought when peering over the bow of a ferry into the inky depths.

Narvik is an industrial town—the unloading point for iron ore from Sweden—but it is spotlessly clean, and the northern part of the town, over the hill from the harbour, looks down onto a bay with bathing beach and fishing boat quay. The water was warm enough to lie in.

The first thing to do in Narvik is to strike straight up the hillside at the back of the town to the Fagernesfj, in order to get the lie of the land. There are three deep fjords to the south, and to the north there is a gentler area around two bays in which the naval battle took place during the last war. Twenty miles to the east is the watershed which forms the boundary between Norway and Sweden; and to the west lies a jumble of sea and islands containing peaks beyond number.

Local buses serve the villages in the nearby fjords, and the railway into Sweden serves the Rombaks Fjord; so that it is a simple matter to travel to the end of one bus route, and to walk over the tops to the head of the adjacent valley and then ride back to the town. The country round Narvik is relatively sheltered and so the lower slopes are covered in stunted forest. This is extremely hard going—you nearly need a machete—and since the ground is soft underfoot and full of mosquitoes, the best that can be said of the scrub belt is that it is nice when you have got through it.

The thing that most surprised me (it was by now the first week of August) was that having been seen out of the village by the local school children trying out their English (you need to ask them the way to avoid dead ends in gardens and farmyards), there is not a solitary soul to be seen; there are no trees and no sheep, so that the locals have no cause to climb high; I once saw through the binoculars a fisherman, but otherwise nothing. There are not even many birds.

I moved northwards a little way (by bus again) to a spot called Gratangen where there is a Turiststation—that is to say, a modern hotel on the main road. High season is in the spring, for ski-ing; in August it was very quiet. There was a view straight down the fjord to the midnight sun, or strictly speaking to where it would have been if it had not by then dropped a few degrees below the horizon; but at midnight it was not dark, and there was a glorious sunset effect every

night.

All the mountains around have a bit of snow on top; they slope upwards at a walkable angle from the South West, but the North East face tends to be vertical for the top 1,000 feet. This always tends to take me by surprise, and reduce me to my hands and knees as I peer over the brink into the next valley.

I had to forgo the summits, because (and as far as I can see, looking round, the problem is a general one) they require either a climb or step cutting up a snow slope; and being alone and not partial to bashing myself on granite, I made great play with my camera instead.

Then into Sweden, to the Abisko Turiststation, a massive place which forms an important link in the tourist route and whose barrack-like exterior conceals great comfort within. The country here is frankly 'dull Scottish'; the mountains reach 6,000 feet but do not somehow look much higher than Ingleborough. I was perhaps put off by the weather, which was now damp and cloudy as it often is away from the Norwegian coast. Abisko is on the shores of a lake, in a nature reserve; for 250 miles southwards there runs the Kungsleden, a walking route which is equipped with huts and which leads past the Kebnekaise, which, at 6,946 feet is Sweden's highest mountain. Near to the hotel there is a genuine Lapp settlement, which reminded me exactly of Indian reservations on the tourist routes in America.

I made a sortie along the Kungsleden and was surprised to find planks laid for mile after mile over the boggy bits. This sounds cissy, but the distances that the Swedes trudge, often with large packs containing children, are considerable and would not be possible if they had to plough through the soft going.

There is much more wild life here—genuine reindeer (which look like birch trees in motion), lemmings scuttling off the path at every pace, and all sorts of bird. Not knowing a budgerigar from a black-backed gull, much of this was lost on me; but even I could see there was a good deal of variety. There were people there spending their entire holiday wandering round with massive binoculars and little books by Peter Scott and James Fisher.

GROTTA DI MONTE CUCCO, 1969—1970

1969: A PARTY of 20 cavers, gathered from many parts of England and Wales under the leadership of our member David Judson, descended the Grotta di Monte Cucco, (province of Perugia, Central Apennines, Italy), in July and August 1969. Their objectives were to explore further the Grotta di Monte Cucco, both in depth and laterally, and to survey and photograph.

The entrance is at an altitude of 1,390 metres, near the summit of the Monte Cucco (1.566m.), almost in the centre of its precipitous East face. The seventy feet deep inclined entrance shaft has a very sturdy fixed iron ladder. Two initial large high galleries have been operated as a sort of show cave for many years, small parties of visitors being shown round by local guides with long paraffin wax flares.

An Italian party, of the Gruppo Speleologico di Perugia, Club Alpino Italiano. (GSP-CAI), had reached an apparently terminal mud and boulder choke in May after descending a gruelling series of pitches following in close succession: 178m (585 ft.) 'Gitmo'; 130m (405 ft.) 'P-X'; and 110m (360 ft.) 'Pozzi Miliani'. They had reached a depth of minus 807 metres, (2,650 ft.); possibly the deepest in Italy. Two parties from the British Expedition reached the bottom, five men in all, but found it to be a hopelessly muddy region, with very limited prospects for further exploration.

During the last few days of the Expedition a completely new series of passages was entered from the Saracco Hall, at minus 600 feet. An enormous cavern, rather larger than Gaping Gill Main Chamber, was entered, and another series of pitches discovered. "Expedition 1970 to the Grotto di Monte Cucco" has been formed to follow up these explorations, and to make a survey of the whole system so that the different vertical sections of the system can be related on plan.

Close liasion has been maintained with the GSP-CAI throughout, and an extremely valuable working relationship developed with some of their members.

1970: July—August; again a team of twenty, under the leadership of David Judson, with a strong Y.R.C. contingent; John Middleton, Glyn Edwards and Bill Woodward.

I caused rather a stir by mentioning a large bird with an exceedingly long tail that had been wheeling round me as I took a short cut back to the hotel via a desolate little side valley. "It was probably a long-tailed skua", they said laughing in a rather hysterical way. They produced a book of birds, and lo, there was the very creature, standing on the same rock, as far as I could tell. There was much consternation: they had spent two weeks looking for it, since it was very rare and had last been seen by Peter Scott (or was it James Fisher), when the photograph was taken in 1953. The book said the nest had been in the lonely Karsagge Valley and the map revealed that this is where I had been. One chap left there and then in search (it was after dinner) and the rest got up early next morning. I had to leave for Stockholm; I trust it was not a large magpie.

And so overnight by electric train back to the short days of southern latitudes, to the considerable delights of Stockholm in summer, followed by the flight back to work for a well earned rest.

373

Despite an extended ten man Italian camp in the lower regions of the 1969 British discovery during April—May 1970, parties are still able to make considerable new ground. There was evidence of an Italian descent of the Wet Pitch as far as —280 ft., Middleton and Edwards pushed on down a narrow rift to —330 ft. Beyond the water disappeared down an impenetrable fissure. The 'enormous cavern' discovered in 1969, called Salone di Luna because of the likeness of its floorscape to the surface of the Moon, yielded no more, but gave rise to some dramatic photography.

The Fault Passage, beyond the top of the Wet Pitch was explored exhaustively and produced about 1 Km. of very interesting new passage. The whole system, old and new, with the exception of the deep shafts below Salone Saracco, was surveyed to CRG grade 5c. It is hoped that the finished product will appear shortly in the 1970 CPC Journal, together with a more detailed account of the Expedition.

D. M. Judson.

CHIPPINGS

WHERE DID HANNIBAL CROSS THE ALPS? Rudolf Fischer, Die Alpen, 2nd Quarter 1969 p. 65, makes a study of the writings of Polybios, 2nd cent. B.C., and Livy, 1st cent A.D., both probably taken from a lost source, Silenos, who accompanied Hannibal. He concludes that Hannibal, in the autumn of 218 B.C. left the Rhone in the neighbourhood of Valence, followed the Isère as far as Pontcharra, passed through La Rochette and over the Col du Grand Cucheron into the Valley of the Arc, and so up the Maurienne through Modane to Bramans. Here he had to leave the valley, because the Gauls rolled rocks on to his army from the heights, and keep to the high ground south of the Ambin valley, which he crossed at Le Planey. Leaving the Col du Petit Mont Cenis (2182 m) to the north-east he followed the Savine valley to a little lake where he rested two days to await his baggage train. Of all the passes that historians have named as probable, it is almost certain that the actual crossing was over the Col de Savine-Coche (2,520 m) which separates the valleys of the Savine and the Giaglione and from which Hannibal could look down into the plain of the Po. Thence to Susa his infantry followed the Giaglione while the pack animals and elephants had to pass over high ground to the south to avoid an impassable rock-fall in the valley. The whole crossing from Pontcharra to Susa took 15 days and half the army was lost on the way, leaving him with 20,000 infantry and 6,000 cavalry.

THE DANGER OF LIGHTNING IN THE MOUNTAINS. Alvin E. Peters, Les Alpes, 2nd Qr. 1969 p. 119. Although according to the statistics lightning does not constitute a major climbing danger, it is as well to know where and how lightning may strike, and to take certain elementary precautions. The article, with 8 diagrams, describes how best the climber should place himself so as to avoid or minimise the danger of being struck. This article is a translation into French of one which originally appeared in the American Alpine Journal.

GAELIC NAMES. The authors of articles on Scotland may feel surprise, or even indignation, when they find that in the

printed Journal their spelling of Gaelic names have been brutally handled. The Hon Editor should perhaps explain that he makes a point of checking the name of any Scottish mountain more than 2,500 feet high in *Munro's Tables*, 1953, edition and of adopting Munro's spelling. It is appropriate to quote from page 11 of this work:

"The Ordnance Survey spelling, even when obviously wrong, is always followed, as it is considered that the *Tables* to be of practical use must correspond with the standard maps". As is well-known the O.S. spelling is very incorrect, the same word being often spelt in different ways, even on the same sheet. The names, too, in the O.S. often differ from those locally used. Wherever a name is given on the O.S. map, however, it has been retained in the *Tables*."

Climber and Rambler, Vol. 8, No. 11, Nov. 1969, contains a ski-ing supplement. R. Rickard describes 3 areas of Scotland, Cairngorm, Glencoe, Spey Valley and Glenshee, illustrated by clear maps.

BEARS IN THE VAUDOIS ALPS. *Die Alpen*, for the 4th quarter of 1969, contains a suggestion by Daniel Ruchet that bears should be re-established in the more remote regions of Canton Vaud. He points out that the Alpine bear, Ursus Arctos, never deliberately attacks man, unless a foolish approach is made to its young. It feeds on such small things as ants, wood-worms, grubs and grass. It is only 133 years since the last bear was killed in Vaud, and in the Jura north of Geneva, three were shot in 1851.

APOLOGY. In No. 34 of this Journal, facing page 253, to illustrate an article entitled *Cave Exploration in South Wales*, a preliminary survey was included of Ogof Ffynnon Ddu II and III. The Hon. Editor very much regrets that no acknowledgement was made to the South Wales Caving Club by whom this survey was prepared and trusts that they will accept his apology for this unfortunate omission.

DECIMATION OF THE MONROS. A fringe benefit of metrication could be a shortened course for the peak baggers of the British

Isles. Multiplying mountain heights in feet by point 3048 to convert to altitudes in metres applied to Monro's Tables for Scotland leaves 130 separate mountains included among 239 tops over 1,000 metres. The remaining one thousanders are four in Wales and two in Ireland.

SLOPE. Another result of Europeanisation concerns capital letter C. 10°C should be called ten degrees Celsius in distinction from ten degrees centigrade which means a gradient of ten in a hundred.

CHAMPION COMMUTER. A former member of the Club has done the Marsden-Edale walk more than one hundred times—for a bet "dinner on the house" at an inn in Edale, though, sad to relate, the free dinner did not materialise owing to a change of tenancy. Wear and tear has necessitated the renewal of a hip joint with a plastic implant, but our hero vowed that he would have Christmas dinner at Edale.

SECOND ASCENT by J. H. Hooper. The climb really started at the top of the vertical red wall after a slight overhang. The angle was easy, a mere forty-five degrees, but after about eight feet on good holds progress halted. Although the angle remained the same now every slight ledge was undercut; not a hold in sight, just a smooth expanse sloping upward.

The only chance now of gaining the summit was by a narrow ridge leading at an angle to my present route. A traverse of a few feet relying on the friction of the gritty surface and I was astride the ridge, but still no holds. Only smooth roundness! The only way upwards was by gripping the ridge between my knees, feet, and hands. At last after several more feet in this manner the summit ridge was attained, and there on the final stack marking the first ascent of the ridge was the aluminium pole with one strand hanging from it.

Standing upright now I could see under the clear blue sky Great Whernside and Buckden Pike; ninety degrees east lay the White Horse of Kilburn and the Yorkshire Moors.

Now grasping the pole with one hand I realised I had the answer to the question, "Why do we climb?" It was, "To

remove my television aerial which the wind damaged last night!"

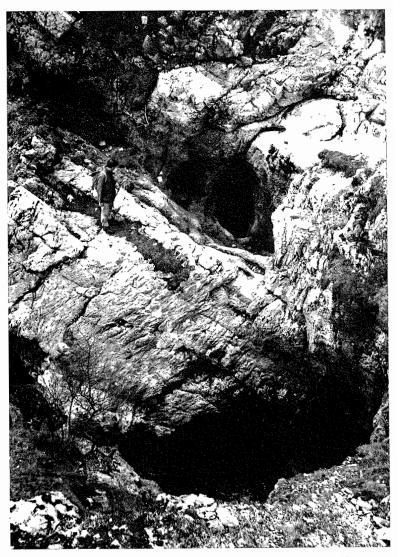
The moral to this narration is: if any fellow Rambler wishes to climb to his chimney stack let him first procure a roof ladder which reaches all the way to the ridge, because descending is more terrifying than ascending.

BLAYSHAW GILL POT (Nidderdale). A trip down this rather interesting pothole in early March 1969 by D. R. Smith and J. R. Middleton resulted in an extension of about 100 metres to the middle series. After moving a few boulders at the end a way into the stream was found and after a tight crawl a long section of hands and knees crawling and stooping led to a siphon. Several small cross rifts bisected the passage. No signs of previous exploration could be found and in the absence of any survey we could only presume this to be new.

RISKS IN DAILY LIFE. In an assessment of the risks of nuclear power plants in *Physics Today* (v. 23 No. 5 p. 32) Dr. W. H. Jordan of Oak Ridge National Laboratory quotes the following table:

Type of risk	Death rate per 10° hr (about 60 y) of exposure	
Riding in a private car (USA)	0.95	
Riding on railroads and buses	0.08	
Flying on a scheduled airline	2.4	
Riding on a motorcycle	6.6	
Death due to disease, old age	1.0	
Smoking cigarettes	1.2	
Rock climbing	40.0	
Radiation at rate of 5 rem/y (extrapolated linearly from expe at high-dose rate)	0.05 priments	

TAFF FECHAN. Mountaineering, Vol. V. No. 5, 1969. contains a supplement by Peter Leyshon and Cledwyn Jones describing in detail the 37 climbs on Taff Fechan. The map reference is Sheet 141 of the 1" O.S., Brecon, SO.062104. Diagrams by Elaine Jones and Peter Leyshon.



LIMESTONE ARCHES, TRALIGILL, INCHNADAMPH
B. E. Nicholson

HGH MOSS, SEATHWAITE, DUDDON, OCTOBER, 1969

GLENBRITTLE (same number). R. H. Stainforth gives some valuable advice to all intending to use the Hut in *Glenbrittle Hut Comment*; he was Hut Warden in May and September, 1968.

Scottish Climbing Club Huts. *Mountaineering*, Vol. V. No. 6, 1969, page 41, gives a list of 13 Huts and 4 Bothies in Scotland which the A.S.C.C. are prepared to make available to other A.S.C.C. and B.M.C. Clubs when not required by their own members. Full details are included.

LOCH CORUISK. The S.M.C. Journal, May 1969, contains a salutary editorial resume of the Coruisk affair.

W. C. SLINGSBY. In *Die Alpen*, 3rd quarter, 1969, there is a commemorative article by H. H. Ther, of Ulm, on Cecil Slingsby, "the father of Norwegian Alpinism", "a man who remains almost unknown among us, but whose name ought to be equated with those of Whymper and Mummery."

CAVE ABSTRACTS

UNITED KINGDOM

Gaping Gill—early descents. Writing in The Speleologist, Vol. II No. 15, 1968, page 9, Peter Johnson describes how he tracked down the diary of William Metcalf, in the possession of his great grandson who lives at Church Stretton. Metcalf records three descents: on June 7th 1845, when he reached the ledge; on August 1st 1846, when a party of five reached the Main Chamber nearly 50 years before Martel and on June 21st 1850 when Metcalf and Thomas Clapham explored to the end of West Passage.

Gaping Gill—latest discoveries. Gerald P. Benn, Bradford Pothole Club Bulletin, Vol. V, No. 4, Winter 1968/9, gives a detailed and exciting account of the breakthrough at Whitsun 1968 from the Far East Passage into the Whitsun Series, about 1600 feet of new passage, the end of which is within 200 feet horizontally and just over 100 feet vertically of the B.P.C.'s dig in Clapham Bottoms. A few weeks after this the University of Leeds Speleological Association discovered over a mile of passage beyond the downstream sumps in Hensler's Stream Passage; this "Far Country", as they named it, ends very close to the Terminal Lake in Ingleborough Cave—the separation being estimated as between 100 and 600 feet.

Inchnadamph—New Cave. No. 82, August 1969, of the B.S.A. Bulletin reports the discovery by two members of the Grampian Speological Group, of the Allt a' Chalda Mor Stream Cave, at Achmore, about a mile north of Inchnadamph, at map reference NC 254235. Part of the stream runs down the cave which is about 50 feet deep and 200 feet long, ending in a sump. The discovery was made under melting snow conditions and further developments may be possible in dry weather.

Route Seventy Diagram. S. J. Collins, in Descent, No. 6, 1969, page 2, describes a simple and effective way of making a diagram to ilustrate the major features of a cave without going into detail.

Space Blankets. Speleologist, Vol. 3, No. 20, page 8, gives an up-to-date assessment of space blankets now on the market.

These are made of aluminised polythene, weigh about one lb. and are in packs not much larger than a packet of twenty cigarettes. On the same page is an instructive article about how to recognise and treat a case of exposure.

Skye. In Speologist, Vol. 3, No. 17, 1969, page 16, R. H. A. Stainforth, in an article entitled Speleoskye, shows a map with 16 caves which he has explored and he is of the opinion that there must be many more.

FRANCE

The 'Maladie Verte' of Lascaux. Studies in Speleology, Vol. 2, Part 1, 1969, page 35; by Marcel Lefevre and Guy S. Laporte.

Radio-carbon dates for charcoal found on the floor of the cave gave the age of the pictures as 16.000—17.000 years. When they were discovered in 1940 they were in a remarkable state of preservation. In 1960, when the cave had been open to the public for twenty years and visited by more than 120,000 people per year, green patches began to appear on the walls and threatened to encroach upon the paintings. The cave was immediately closed and a commission of specialists appointed to study the circumstances which had allowed the green patches to appear, to find a way of destroying them without damaging the paintings and of preventing their return. The rock was found to contain various algae, one of which, genus Palmellococcus, was causing the patches. Having lain dormant through the millennia its growth was stimulated and fed by organic matter brought into the cave by visitors (pollen, breath, sweat, bacteria). The treatment consisted of first ridding the cave of bacteria by dispersing antibiotics in aerosols, then by spraying the paintings with a 1:200 concentration of 40% formaldehyde in double distilled water. Stronger solutions were used on unpainted surfaces. The result was that after three months the algae had been completely killed and the green patches decolourised. There was a slight recurrence three years later but this was soon disposed of in the same way.

No decision has yet been made about re-opening the cave to the public.

SWITZERLAND

Potholes of the Alpe Selun in the Churfirsten. Stalactite, 18th

year No. 2, December 1968, pp. 30 to 53, by Albin Vetterli.

The Churfirsten is a range of mountains rising to some 2,200 metres and lying between the Walensee and the Toggenburg valley. It is a karstic region, some 35 km² in extent, strongly tilted towards the north and intersected by deep erosion valleys. Through the whole region there is not a trace of surface water and nothing is known about the hydrogeological system. Fifteen kgs of dye introduced into the stream running into a 280 m, deep pothole showed no result in spite of a week's careful day and night watching of all local streams. There are 46 known holes, of which 27 have been examined by members of the O.G.H., Ostschweizerische Gesellschaft für Höhlenforschung (East Switzerland Cave Research Society). Descriptions and surveys of eight of these are given. The work is difficult as many of the holes are blocked by snow and ice, others by boulders, and work is only possible from late August until the winter; melting snow makes an earlier start impossible. Several of the holes are more than 200 m. deep The area certainly presents a challenge. The Hölloch Muotatal Canton Schwyz. In Y.R.C. Journal No. 34, (1968), page 270, it was stated that the Hölloch, with 93.336 metres of passages, was the longest known cave in the world, and that the difference in level inside the cave was 577 metres. Stalactite, 19th year, Nos. August 1969, page 25, now reports that after the winter campaign of 1968/69 the total length has risen to 104 Km, and the difference in level to 740 metres. In spite of this, the Hölloch is no longer the greatest in length; according to most recent information Flint Ridge Cave in the United States measures 117 Km.

Longest and Deepest—Switzerland. The same issue of Stalactite gives lists of the 18 longest and 29 deepest caves in the country. Hölloch is first in both lists; second longest is the Grotte de Milandre, at Boucourt, Canton Berne, 8,074 metres, second deepest, Gouffre du Chèvrier, Leysin, Canton Vaud, 510 metres.

REVIEWS

Alpine Journal, Vol. 74, No. 318, 1969.

It is not possible to review the new look Alpine Journal: one can only make obeisance to it. It is so very large to begin with, that one has, albeit most profitably and pleasantly, to devote time to it. It is printed, produced and edited in magnificent style. It is full of splendid photographs of stupendous peaks and fearsome faces in all parts of the world. It is also full of top people distantly glimpsed on incredibly dirrettissima routes: the pick of the tops in all senses. It is impossible to summarize its contents and invidious to single out one or two articles from so much that is outstanding.

Scottish Mountaineering Club Journal, Vol. XXIX. No. 161, 1970.

New routes on the Brack, Arrochar, by R. Richardson; a solo 8,000 ft. winter traverse of Creag Meaghaidh, by Tom Patey; Dun Da Ghaoithe, Mull, by Roger North; North face of the Matterhorn in summer by Ian Rowe; Aqua-sport, in distinguished company, in Clachaig Gully, by Allan Austin; excerpts from earlier S.M.C. Journals illustrating the first uses of motor cars in Scottish Mountaineering, c. 1903-08, illustrated by a photo of an elephant pulling a caravan through Glencoe in 1930; a note on the climbing possibilities of the peaks of the far north of Sutherland—Ben Loyal, Ben Hope, Foinaven—by R. J. Jolly; three reports on expeditions to Greenland—Upernivik Island, W. Greenland; Mount Mikkelsen, E. Greenland; South Stauning Alps and Antarctics Havn/Mestersvig; also an individual appraisal of the Mount Mikkelsen expedition by I. H. M. Smart; Creag an Dubh Loch by J. Grieve; Creag Meaghaidh, by N. Quinn. Midland Association of Mountaineers, Vol. V. No. 1, 1969.

Miangul Sar in Swat-Kohistan, (The Innominate Karakoram Expedition 1968) by M. J. Mahon; Cader Idris by Michael Hall; the sea cliffs of Anglesey, by C. Perry; Frendo Spur, Aiguille du Midi, by Roger High; Cairngorm days, by David Smith; Boulder, Colorado, by Bob Burns; the Sylvan Traverse on the Milestone Buttress, by Dave Hughes; school expedition to Mount Kenya, by Hugh Thomas; climbs in the Lakes, by Dave Roberts; and in Skye, by Roger High. Craven Pothole Club Journal, Vol. 4, No. 3, 1969.

Grotta di Monte Cucco, Umbria—notes by John Whalley and David Judson; The problems of owning potholes, by J. A. Farrer, Lord of the Manor of Ingleborough; Gaping Gill Meet 1969; Islands from Raasay to Rousay, by Hugh Bottomley; Birks Fell Cave extension, ed., by Randal Coe; Water Gill Cave, Buckden (now permanently closed), by John Whalley; Week-end in County Fermanagh—Tullyhona Cave, by Peter Rose; Poll-na-Leprechauns, by David Judson; Summer Meet in Co. Clare, by Neil Platts; More of Scrafton Pot, by Steve Warren. Fell and Rock Journal, Vol. XXI (No. 2) 1969.

An anonymous account of the shock of a friend's death by avalanche in a hut; A week in the Cairngorms, by David Roberts; Nine weeks in

Reviews

Peru with the 1968 Plateriyayoc Expedition, by Owen Davis; The 30th December on a wet Munro, by Frank Alcock; Recollections of Cloggy, by Gordon Dyke; Rokkomborre and Dittitind in Arctic Sweden, by Don Greenop.

More away than at home in this number, apart from the usual very useful list of new climbs in the Lake District, and some fine photographs.

Rucksack Club Journal, Vol. XVI, No. 2, 1969.

J. T. H. Allen on the Manchester Karakorum Expedition 1968 to Malubiting, which unfortunately ended in a fatal accident; a 27 hour excursion in Tenerife on a Mount Teide under snow in March, by A. O. Davies; Kirkefjord in the Lofotens, by M. P. Halton (a Manchester University M. C. Expedition which also ended with a fatal accident); F. Heardman contrasting then and now in walking, mainly in the Peak area, and lamenting the closure of pubs, the disappearance of huts, and the passing of farming families; a non-climbing article on life in the valleys of Karakorum—shamans, goitre, blood feuds and all, by Ian Grant; and finally, without pressing any parallel, life in the Duddon Valley and the $4\frac{1}{2}$ year saga of the building of High Moss—a satisfactory conclusion to a good number.

Himalayan Journal, Vol. 28, 1967-68.

In 1967 twenty climbing parties of various nationalities were in Chitral, partly of course because other areas of the Himalayas were closed to climbers. But more people are looking to the Himalayas, and for them this journal is a most useful source of information, quite apart from the intrinsic interest of its articles. Most of this number is concerned with the Western half of the range—Chitral, the Kulu Valley, Tirich Mir, the Hindu Kush, Garhwal, with one article on West Nepal, two on Sikkim and one on Bhutan.

Cambridge Mountaineering, 1970.

Cloggy, by J. L. Cardy (Diglyph, Mostest, Slanting); Route Major, Brenva Face, Mont Blanc, by R. I. Ferguson; Hindu Raj 1969 (attempt on Thui II—Yarkhun Valley) by R. J. Collister; Lakeland and Welsh climbing, by J. R. Escott; Dent Blanche, Ferpêcle arête, by D. G. Hardie; Nibbling at Bens, by M. Geddes; Kishtwar Himalaya, by Barbara Harriss; Limestone outcrop at Saussois, Burgundy, by P. E. Winter.

A.B.C.

The Libarian also gratefully acknowledges the following journals:

Alpine Journal, 1968.

Appalachia, 1968, 1969.

Appalachia Bulletins, 1968, 1969, 1970.

Bristol University Speleological Society Proceedings, 1967-68, 1968-69, 1969-70.

Cairngorm Club Journal, 1968.

Cambridge Mountaineering, 1969.

Climbers' Club Journal, 1968.

Craven Pothole Club Journal, 1967, 1968.

Deutscher Alpenverein. Mitteilungen. Jugend am Berg., 1968, 1969.

Equipe Spéléo de Bruxelles. Bulletin d'Information, 1967, 1969.

Fell and Rock Climbing Club Journal, 1968.

Himalayan Journal, 1966.

Japanese Alpine Club Journal, 1967, 1968.

Leeds University Speleological Association. Review, 1968, 1969, 1970.

Midland Association of Mountaineers Journal, 1968.

Mountain Club of South Africa Journal, 1967, 1968.

National Speleological Society (U.S.A.) Bulletin, 1968, 1969.

National Speleological Society (U.S.A.) News, 1968, 1969, 1970.

Pinnacle Club Journal, 1967-68.

Scottish Mountaineering Club Journal, 1969.

South Wales Caving Club Newsletter, 1969, 1970.

Spéléo Club de Paris. Grottes Gouffres, 1968.

Spéléo Club de la Seine. L'Aven, 1967, 1968.

Spelunca, 1968, 1969, 1970.

Swiss Alpine Club. Bulletins, 1968, 1969, 1970.

Swiss Alpine Club. Reviews, 1968, 1969.

Wayfarers' Journal, 1968.

IN MEMORIAM

Since the publication of the last Journal the following members have died: R. de Joly (Honorary Member). W. Allsup, A. L. Middleton, D. Shaw, H. P. Spilsbury, H. G. Watts.

ROBERT de JOLY

Founder-President of the Société Spéléologique de France, Chevalier de la Légion d'Honneur, 1950 (Military), Officier de la Légion d'Honneur, 1967 (Speleology), Croix de Guerre, writer of four books and 150 articles on Speleology, Honorary Member of the Yorkshire Ramblers' Club since 1946, Robert de Joly died on the 11th of November, 1968, at the age of 81 after a short illness.

Second only to Martel, de Joly was, between 1925 and the outbreak of the second World War, the leading personality in French speleology. Born in Paris in 1887 of an old Cevennois family, he developed at an early age a preference for the 'Midi' and whenever possible he used to visit his grandparents on the Causses, the limestone district of the Gard. It was on the family estate on Causse de Montdardier that at the age of 14 he made an interesting archaeological discovery in a cavern. As soon as he had got his Engineer's diploma at the Ecole d'Electricité de Paris he made his home in the south, first at Marseilles, later at Uchaud and finally at Orgnac in the Ardèche.

Throughout his long life de Joly had three ruling passions; the first was aviation and even more so, motor cars. In the early years of the century he used to take part in motor rallies on the dusty roads of the period and in the last year of his life he acquired a superb Porsche which he used to drive round the twisty roads of Ardèche at 200 Km. per hour. The second was firearms, especially pistol shooting, at which he excelled. It was not until he was in his forties that he began seriously to devote himself to the third and eventually the strongest, the exploration of gulfs and caverns.

In 1930 he founded at Montpellier the 'Spéléo-Club de France', in 1936 to be renamed 'Société Spéléologique de France', and at the same time he revived the publication of the revue 'Spelunca', started by Martel in 1895, but lapsed since the 1914/18 war. It was thanks to his enthusiasm and energy that French speleology so quickly got back on to its feet after the second war.

de Joly served in both wars, he finished that of 1914/18 as Lieutenant de Train, in charge of horse-drawn mountain supply columns, in the second war he was a Captain in the Armée des Alpes.

His most active years were probably 1934 to 1936; in 1934 he made 45 first descents, 27 in 1935 and 30 in 1936. In 1935 he made the great discovery of Aven d'Orgnac, a cave with which he was to be closely associated for the rest of his life. Many of his later years were spent arranging Aven d'Orgnac as one of the finest show caves in France. The part open to the public is only about one fifth of what is now known;

much of the exploration into systems Orgnac II, III and IV has been done in recent years by J. Trébuchon and it was he who, on 7th May, 1967, arranged an 11-hour expedition to show de Joly, who had just celebrated his 80th birthday, some of the wonders of these new systems.

Five senior members, one of them a doctor with his medical kit hidden in his knapsack, were detailed surreptitiously to help the Guest of Honour, while at a discreet distance followed a team of younger members with cave-stretcher, splints, cases of instruments and reanimation equipment. When well underground de Joly showed them that he carried his own reanimation equipment—a little flask of superb white wine. At the point in Orgnac III at which it was considered prudent to turn homewards de Joly, after some remonstrance (he wanted to see The Sugar Loaf at the very far end of Orgnac III) said 'Vous assistez à mon agonie sportive. C'est ma dernière expédition. Je la savoure." ("You are witnessing the death-agony of my hobby. This is my last expedition. I am relishing it.")

It was only three days after the event that the writer had the great pleasure of meeting de Joly and of being shown not only Aven d'Orgnac but two other caves in the district. He was thus able to see at first hand the energy with which his host led him underground to depths of 125 metres and distances of 1,000 metres, the skill and intrepidity with which he drove his motor car and his readiness to give his guest some sharp advice as to how he should drive his own Lancia Flavia.

de Joly was not only a forceful and accurate explorer and surveyor of caves, his engineering training was in constant use to devise new and to improve existing equipment. In his home he had a fine workshop and many of the improvements he introduced into general use in caying were the work of his own hands. He always carried in his pockets even when wearing dress clothes, an array of diminutive tools with which he could deal with any emergency. The story is told of a Congress at which he was President. After a morning devoted to the official opening, the company was to reassemble at 2 o'clock for the inauguration of a speleological exhibition. The organiser, with the safety key of the exhibition hall in his pocket, was detained after lunch and arrived after a serious delay in a state of great annoyance at having kept the President waiting. To his surprise there was nobody outside the door, which was ajar; inside was de Joly lecturing the assembled company about the exhibits. Apparently de Joly, precise as always, had arrived at 2 o'clock and, after waiting a quarter of an hour, had produced from his pocket the appropriate tool and picked the lock.

It was as the result of his work on ladders that he first made contact with the Y.R.C.; some of the correspondence between him and E. E. Roberts has survived the years. The first letter, from de Joly, dated 3rd December, 1932, is addressed "Monsieur le Président du YORKSHIRE RAMBLERS' CLUB, LEEDS, Angleterre," and in it he deplores the

In Memoriam

lack of acknowledgement of his several letters and brochures; he says he had hoped to establish close and useful contacts with our Club. To this Roberts, at the request of the President, W. V. Brown, replied, sending a copy of Y.R.C. Journal No. 20 and giving the Club's correct address in Leeds, 10 Park Square; there followed an immediate reply from de Joly describing his work over the previous two years on 'ultra-light' ladders. Compared with the weight of 1 Kg per metre for the rope ladders with wooden rungs in general use at that time, he used ladders weighing only 570 grammes per metre, with a breaking strain of 600 kgs, with nickel/chrome rungs and fitted with 'instantaneous' couplings, also in nickel/chrome, for joining one ladder to another. As ropes he used safety line with telephone cable woven into it, his boots were chrome leather dressed with tallow and fitted with special crampons which he claimed were far superior to tricounis.

The correspondence went on and in 1937 de Joly reported that he had now made ladders of 46 grammes per metre instead of 90, he asks whether the Y.R.C. are using them. Then comes an interval of nine years; the next letter is dated February, 1946, de Joly asks the name of our President, they wish to make him an Honorary Member of the Société Spéléologique de France. The ensuing correspondence mentions the election of Clifford Chubb to this honour in March, 1946, of Roberts a year later and of de Joly to the reciprocal honour in the Y.R.C. Although he was never able to realise his ambition to join our Club, and especially Roberts, in the caves of Yorkshire, his interest in the Club continued to the end of his life and in recent years he regularly contributed an article for our Journal on Speleology in France.

Great individualist, dynamic leader, meticulous organiser of expeditions, beneath a natural roughness and a sense of authority that tolerated no contradiction, Robert de Joly was described by his colleagues as "a great honest man who never betrayed a friendship." It was inevitable that his strong, original character should lead to his being violently criticised by some, highly respected by others. One reproach was sometimes made by his own collaborators about his technique of exploration, namely his ideas about the special functions of the leader—first into a cave, first to overcome a difficulty, first at the bottom, last out, sometimes leaving equally experienced fellowmembers to jobs on the surface or to shiver for long hours as relays. Quoting the Spanish caver Arcaute "When it's horizontal democracy is fine, when it's vertical then it's got to be dictatorship." Robert de Joly was certainly always for dictatorship.

H.G.W. the writer of this obituary is indebted to the Féderation Française de Spéléologie for their permission to quote freely from 'Spelunca' 4 me série, 1968, No. 4, which issue was devoted entirely to Robert de Joly. There are two copies in the Y.R.C. Library.

On a tourist visit to L'Aven d'Orgnac, which was discovered and explored by de Joly in 1935 (YRC Journal 34, p. 249), the Acting

Editor saw the memorial urn to de Joly which is set in the main chamber amidst formations of great beauty, variety and size. The speed and accent with which the guide spoke prevented the Acting Editor from fully understanding the tribute paid to de Joly but the respect in which he is held was plainly evident.

WILLIAM ALLSUP

With the death of Bill Allsup who joined the Club in 1919 we have lost one of our oldest members.

Because he spent most of his working life in India and Assam he was unable to take much part in Club activities except on his infrequent visits to this country.

Allsup learned his mountaineering and caving with his old friend, E. E. Roberts. He had a true love of the wild and inaccessible places and spent all his short leaves exploring the country round Shillong and the foothills of the Himalaya. He was the moving spirit in the foundation in 1927 of the Mountain Club of India which in the same year amalgamated with the newly formed Himalayan Club. He also wrote and published a book, *Notes on Walking around Shillong* (1934).

Allsup was a very competent though not outstanding rock climber, leading the V.S.s of those days though hampered by an accident in which a rock fall crushed his foot.

He was a most lovable man and happy companion, holding very definite ideas on mountaineering matters. He did not hesitate to expound these views both by word of mouth and voluminous letters which neither the recipient nor himself was ever completely able to decipher.

On retiring he came to live at Bridge End, Patterdale, but owing to ill health was unable to do much walking. He was however a fairly regular attender at the Annual Dinner and took a keen interest in Club matters.

J.G.A.

ALAN LOMAS MIDDLETON

At the time of his death on 19th May, 1970, Alan Middleton was the longest serving member of the Club, a distinction which gave him great pleasure. He became a member in 1912 and was Vice-President 1947-48.

He was brought up in a family tradition of fell-walking by his father, Gilbert Middleton, and his uncle, Noel Middleton, both of whom were members of the Club. It is reported that he was taken by his father to the top of his first Yorkshire fell, Ingleborough, at the age of six. Subsequently he spent much time in the hills, particularly on the Yorkshire and Lake District Fells. Notes made by him in his early edition of *Baddeley* show that in his youth he was a fast mover over long distances in hill country. For many years he had a cottage in Little Langdale as his Lake District base.

Increasingly his business commitments prevented him from taking a very active part in Club Meets, though he continued a regular attender at the Dinner, at Club Lectures and at the Leeds Lunches.

He was a big man of imposing presence but a very kindly man. His friendliness will be remembered by all, but especially by those new members whom he helped to feel at home in the Club from their first appearance at Meets. This kindliness together with his evident enjoyment of the hills and of the comradeship of the Club endeared him to Club members.

The long family connection with the Club will be continued for many years through the membership of Alan's three sons.

A.B.C.

DONOVAN SHAW

Don Shaw, who died on 4th May, 1969, joined the Club in 1930. His first visit to Switzerland followed in 1931, and his experiences around Saas Fee are related in his charming article in Journal No. 20.

Always happy in the hills, he also climbed in Skye, North Wales and Scotland. His quiet humour will be long remembered by his friends.

H.S.B.

HARRY P. SPILSBURY, O.B.E., 1897-1970

On the 14th May, 1970, Harry Spilsbury fell whilst descending Ben Alligin, his head struck a rock and he died instantly. So passed one of the great personalities not only of the mountaineering fraternity but of many other spheres of activity, leaving a host of friends to mourn their loss.

Born 1897, educated Merchant Taylor's School, Great Crosby, he joined the Civil Service, Inland Revenue Department. During World War 1 he served as a gunner with the British Expeditionary Force, was taken prisoner and spent the last year of the war working in a German coal mine. Returning to the Civil Service he rapidly became Senior Inspector of Taxes in Liverpool, where he remained until his retirement in 1959, when he was awarded the O.B.E. in recognition of outstanding ability. In 1940 he married Ruth Watson who shared his many interests.

The Y.R.C. elected him to Honorary Membership in 1956, and he was, in turn, president of the Wayfarers' Club, the Rucksack Club and the Fell and Rock Climbing Club. In 1955 he joined the Board of Directors of the Outward Bound Mountain School at Eskdale, Cumberland, subsequently becoming Chairman. Membership of the Management Committee of the Outward Bound Trust and also of the Board of the Ullswater School followed.

Gifted with an excellent baritone voice, he sang in the choir of Christ Church, Waterloo, for nearly thirty years, and was a prominent member of the Waterloo and Crosby Amateur Operatic Society. To the Y.R.C. and several other climbing clubs his singing of climbing songs at our annual dinners gave constant pleasure.

A bold and enterprising mountaineer, perhaps his chief love was for the bare, gnarled, intimidating peaks of the Lofoten Islands and Arctic Norway, where in 1934, 1935 and 1936 he did some outstanding climbs. His article, *The Lofoten Islands (Wayfarers' Journal*, no. 5, 1937) remains the best climbers' guide to the area.

He was an accomplished ski-mountaineer, returning year after year to the Oetzthal and the Stubaithal areas for arduous high level cross-country ski-ing. The "Haute Route" on skis from Chamonix to Saas Fee was traversed, and he was only prevented from completing it the reverse way by a severe chill.

The fitting and maintaining of climbing huts occupied a great deal of his time, and he was particularly well-known as Warden of the Robertson Lamb Hut in Great Langdale. Here he was looked upon as being something of a martinet and woe betide anyone who left R.L.H. in a mess. Harry told them where they got off without mincing words. Yet there is no doubt in my mind that he set the high standard to which the leading English clubs aspire for their huts. Had it not been for his persistent efforts it is doubtful if the Glen Brittle Memorial Hut would have ever got under way. Due to its remoteness there was difficulty in getting firms to tender, while soaring costs and local restrictions added to the headaches. Only a man of Harry's tenacity could have seen it through. The joint Meets held at R. L. H. every September, which he organised and catered for, gave enormous pleasure to decades of Yorkshire Ramblers.

To use this tenacity, this thoroughness, this giving of his best to everything to which he laid his hand, was perhaps more than anything characteristic of the man. He was forthright, hated humbug and had no use for dodgers. Yet no man had a warmer personal interest in the affairs of all he met. If asked for advice or help he gave unstintingly, and his knowledge, and skill as a craftsman were entirely at the disposal of those who needed them. He was a delightful companion and a loyal friend, kindly, witty and informed, with a great capacity for enjoying the good things of life.

One who never turned his back
but marched breast forward,
Never doubted cloud would break,
Never dreamed, though right were worsted,
wrong would triumph,
Held we fall to rise,
are baffled to fight better,
Sleep, to wake.

H.L.S.

H. G. WATTS

Tim Watts was one of the group described by Roberts as "the Stockton men", who came to the Club in the 1920's and 1930's from I.C.I. After Marlborough, Oxford and Leyden he went to I.C.I. at

In Memoriam

Billingham in 1927 as a research chemist. He joined the Club in 1932 and, starting under Roberts with surveys in G.G., began to build up an extraordinarily wide and accurate knowledge of potholing—in this country, in France and in other parts of the world. He became a Life-member of the Club in 1967 and was elected an Honorary Member in 1968. He had the unenviable challenge of succeeding Ernest Roberts as editor of the Journal and for twenty years, from 1950 until his death at the end of February 1970, he carried out this task with a happy blend of quiet firmness, efficiency and invariable courtesy. It entailed a great deal of work, some of it tedious and time-consuming, which he did meticulously and willingly; nothing was too much trouble provided it maintained the reputation of the Club, of which he was immensely proud.

I.C.I. had transferred him to Belgium in 1951 and when he retired as Chairman and Managing Director of I.C.I. Belgium in 1963 he went to live in Gstaad in Switzerland His absence from England did not appear to cause any gap in his understanding and appreciation of the affairs of the Club or to limit his editorship of the Journal. Members always looked forward to meeting him at the A.G.M. and Dinner, and his speeches, regular at the first, and occasional at the second of these functions, were a delight to those present.

The occasional meets he was able to attend during these years gave him evident pleasure. He once spent a week-end at L.H.G. on his way back from Scourie, to choose photographs for the Journal and suggested going up Wetherlam because he had never been on it. He explained that his pace would be slow but he was equipped with three types of tablet to offset different intensities of pain. If he took any of them he did so unobtrusively and he was as pleased as a boy when he had reached the top. His doctor was equally pleased shortly afterwards at the state of his heart, until he discovered what treatment Tim had been using He went on gardening, walking and ski-ing, and died in the mountains close to Gstaad, ski-ing in company with his wife. It was a privilege to know him and a pleasure to work with him. His editorship was a great service to the Club.

A.B.C.

His lifelong friend and one-time colleague, Ernest Wood Johnson, has contributed the following:

Tim was a gentle man and this was felt by all who knew him. So, after he had made a typical speech at a recent Y.R.C. dinner, I said to my neighbour, "You'd never think Tim was a wartime saboteur, would you?" The surprise reply to me—who thought it was common knowledge—was "not OUR Tim, surely not." No, not our Tim, but one of the other Tims. He had many sides, but in the final analysis he was always our gentle Tim.

We were close colleagues in the same department of I.C.I. until 1939. We often went out on the same jobs together and began our association on the hills.

In 1939 he just disappeared. We knew he was in the services, but no

more. He was a civilian employed on the oil fields of Rumania with the secret job of preventing the oil wells, etc., falling intact into German hands. I think about this time he was ordered to take a load of explosives to a distant place and blow up something. The quickest way was to fly, but the only available aeroplane was to carry German secret service agents. However, he had already made friends with them-he spoke German from the age of five-so they helped him with his luggage into the aeroplane and out to the waiting car at the other end. That was typical of his disarming ways. Eventually the Rumanians turned pro-German and he had to get away quickly. He happened to be in Belgrade the day it was bombed without a declaration of war. He was driving a car when he saw a bomb fall in the street and roll into the gutter. He thought it was a dud, but stopped, and was getting out of the car when the bomb went off. When he woke up he was lying on the hospital floor, having had no attention, with the left lower side of his face blown off. His instinct was to flee: he was afraid he might fail under Gestapo torture. Going outside he found a bicycle and rode south as far as he was able. The injury sealed his mouth but he was kept alive by means of a rubber tube. pushed through a hole in his face, by people who helped him on the way. Some weeks later he was picked up on the south coast and taken to hospital in Cairo where a series of operations continued his pain and distress. He had a very rough time before he was well again.

Afterwards he took charge of a school for saboteurs in North Palestine where he did his parachute jumps and trained people in mountain warfare, etc. Bill Tilman passed through his hands. Later, and until the end of the war, he was in charge of the school for industrial saboteurs at Morar. The Norwegian heavy water boys were some of his pupils.

The first time I saw him, after the war, he turned up at our office at Alderley Edge on an old bike and wearing even older clothes—war and the S.O.E. seemed to be far away from him. He was the same old modest Tim with only a scarred face to remind us that he had ever been anything else.

He returned to work and made an extremely successful new department from nothing. His staff adored him. For some years we were again close colleagues—our departments were complementary—and companions in leisure. We continued our week-ends in the hills—brewing up midst the groughs of Kinder, or down Long Churn where he took me and my lame leg for shelter that snowy Hill Inn meet of 1947. He produced ex-army dehydrated shepherds pie and made a monster feed before nursing me through that blizzard to safety on the road south of Ribblehead, and then home. Or in the Lakes at Fell and Rock dinner meets climbing on Kern Knotts, or frying sausages under the crags of Borrowdale. About then I lent him a tent for a week-end at Gaping Gill. It was very wet and he recounted with glee that it was the only one weatherproof, and that an extraordinary number of Ramblers were crammed into it. He could not

resist the ridiculous. His own experience, his days on the hills, and his work, were all food for laughter. At home with us he would recount funny stories for hours, and in many dialects or broken foreign languages—his face altering to suit the characters he acted.

His interests were many—he rode to hounds, was fond of rough shooting, sailed boats. In his large garden at Styal he grew many kinds of uncommon flowers and tobacco, which he cured and gave to his friends in cigar-scented blocks. Astronomy, antiquities, esoteric subjects (particularly Ouspensky)—all were fascinating to his enquiring mind, with a kind of detached involvement. He enriched and gave meaning to the common things of life.

A few days after his retirement he and Kay stayed with us on their way to Scourie for the fishing. It was a happy pilgrimage for Tim. As a small boy pre-1914, he had travelled there from Cheshire in his Father's motor-car, Mam in large hat and veil and dustcoat of those days. He still used his father's rods, bought last century, and we overhauled them for the occasion. It was his father who called him 'Tim' from babyhood.

I have been his guest at so many Y.R.C. dinners, that when he was made an Honorary Member a year ago I felt one too!

One of our recent perfect days was cutting up Kilnshaw Chimney to the blue and white line above. Then lounging under a rock below the top of Red Screes drinking whisky-sloshed tea and watching the sun go down over the sea, waking "late amber shadows in the sleeping grass". A moment of quiet contentment.

On the Monday after the last Dinner Meet we went to Kentmere to see the Driscolls—but they were away. So we walked in the sunshine up the frozen valley. Tim was entranced and immediately began making plans to bring Kay to that delightful place. On returning home he solemnly greeted Anne with the empty sandwich box and said "There was no cake". There was no telling when or where the little monkey would escape! Next morning at Arnside station we waved him farewell.

"With a ticket through to Berne, and regarding his profession with a lordly unconcern".

That's our Tim.

ERNIE WOOD-JOHNSON.

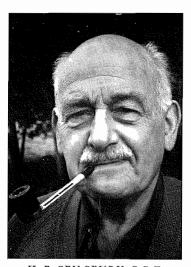


H. G. WATTS

B. E. Nicholson



DONOVAN SHAW



H. P. SPILSBURY, O.B.E.

D. P. Penfold

CLUB MEETS

1967/68. The beginning of the Club's 76th year was marred by a serious outbreak of foot-and-mouth disease which restricted all movement over a wide area in Northern England during November and December, 1967. As a result the after-Dinner Meet at Burnsall and the first Meet of the year at the White Lion, Cray, had to be cancelled. Twelve Meets were held, in addition to the Ladies' Evening and the Annual Dinner, and the average attendance was 24.

The 54th Annual Dinner took place on 18th November 1967 at the Cairn Hotel, Harrogate and marked the 75th Anniversary of the founding of the Yorkshire Ramblers' Club. The President, E. C. Downham was in the Chair, the Guest of Honour was Tom Patey and ten kindred Clubs were represented, seven of them by their Presidents and the Scottish Mountaineering Club by their Past President, Alex Harrison, whom his Club a fortnight later honoured by making him an Honorary President. The total number of Members and Guests was 157.

On—off, on—off and at the last moment very definitely ON. Despite the very short notice due to the sudden relaxing of the foot-and-mouth precautions, the Hill Inn Meet took place almost as usual, with 50 Members and Guests. Although the ban on walking had officially been lifted there was still some reluctance on the part of local farmers to allow access to their land so, on the advice of an official of the Lakes National Park, it was decided that the week-end's activities should be in the Lake District. Two parties set out on the Saturday, one for Patterdale and High Street, the other for Dunmail Raise and Dollywaggon Pike, whence they went on Helvellyn where they enjoyed a view rarely seen in the British Isles: most of the tops were capped in cloud while to the south-east cloud was pouring over St. Sunday Crag like a silent Niagara. After the excellent traditional dinner on Saturday evening the Club's long-standing friend Dr. Farrer gave an illustrated talk on the history of his family and on his trials and successes as Lord of the Manor of Ingleborough. Three members who decided to go pot-holing on Sunday found a queue at every hole but eventually, through the hospitality of the Leeds University Climbing Club, they were able to do the through trip Disappointment Pot—Bar Pot, an easier trip than usual as their hosts had done the rigging.

The road to Low Hall Garth is now signposted only "Unfit for Motor Cars". Undaunted, thirty two members and two prospectives battled up Little Langdale through heavy sleet to the February Meet, to the excellent catering of the Hut Warden and Mrs. Driscoll, to the deep philosophical discussion round the stove and to the hospitality of the Three Shires. A wily member early on took the two prospectives quietly on one side to tell them that it carried much weight with the Committee if they showed that they could wash up: no full Member needed to go near the sink throughout the Meet. Saturday

was fine, gullies in Deepdale presented hazardous conditions, soft snow on ice, skiers on Helvellyn found crust which showed up every deficiency in technique. Sunday, though misty below, was brilliant on the heights; the Horseshoe was done, as was Great Car Gully and rhythmic swings of an ice-axe forced a way through a cornice on Wetherlam. The skiers performed on the Kirkstone Pass with such elegance that a large photograph of them appeared in the Daily Telegraph next day. The two main events of the March Meet, at Sparth House, Malham, were the party who got themselves taken to the Hill Inn by car and took all the hills in their stride on the way back to Malham, and the Very Senior Member who attracted every sheep in the county by the mere act of putting on waterproof trousers.

Nineteen Members and Guests camped at the head of Loch Etive, a perfect camp site in which they enjoyed the finest Easter Scotland had had for very many years, gloriously sunny weather with all the snow-capped peaks showing up to perfection in the clear air. Ben Starav and the fine ridge between it and Glas Bheinn Mhòr received much attention; some Members added obscure Munros to their collection while others had themselves driven half way back to Yorkshire so that they could return to camp over the many splendid peaks. One of the several parties climbing on Buchaille Etive Mor had to help in the rescue of a fallen climber, a difficult operation involving a 300 ft. abseil off the rocks in the dark. Aonach Eagach (Stob Ghabhar) was traversed and the skiers took advantage of the snow on the ridges of Bidean nam Bian and the nearby lift. The mass of driftwood on the shore of the loch was made into a huge bon-fire whose glow as each day grew to a close was there to guide the weary homewards and whose warmth later in the evening encouraged discussion as to why several Scottish mountains have the same Gaelic name.

The Whitsuntide Meet was again in Scotland, at Loch Clair, Torridon, where 26 Members and Guests camped in a spot of such beauty that it had attracted a large proportion of Scotland's birds, which sang melodiously from 3.30 a.m. onwards, and nearly all its midges. The main activity was mountain walking; many climbed Beinn Alligin. Liathach and Beinn Eighe, others were on Slioch, Beinn Damh, Maol Chean-dearg, An Ruadh-stac, Beinn Dearg and Beinn Liath Mhòr, Some spirited fishing went on, much of it on lochans which involved a good day's walk as well. Several groups visited the famous garden of Inverewe House, started by Osgood Mackenzie nearly a century ago and containing an amazing variety of exotic and sub-tropical plants. The basis of the Midsummer Long Walk was the ascent of three of the highest tops in Lakeland, Coniston Old Man, 2,635 ft., Scafell Pike, 3,210 ft., Helvellyn, 3,118 ft. The distance was 33 miles, starting and finishing at Low Hall Garth, and it involved 11,000 feet of ascent. Saturday the 29th June, dawned clear and at 4 a.m., while 19 of the 20 walkers were devouring bacon and eggs, the 20th man arrived in a

dinner jacket from a dance on the other side of the Pennines. The start was at 5 o'clock by Prison Band to Swirl How and so along the ridge to the Old Man, then back along the ridge to the first feeding point at Cockley Beck, 8.30 a.m. The approach to Scafell was by Mosedale, Lingcove Beck and the higher reaches of Eskdale which was marshy—one bog-prone walker went in up to his thighs. A steep climb up Cam Spout, and Scafell was reached at 11.30; black clouds threatened after Esk Hause but the rain held off. Now came the slog from Angle Tarn over Stake Top and Greenup Edge, along the seemingly endless Wythburn Valley to the second feeding point just south of Thirlmere, 15.50. Here ten men decided to retire while the other ten carried on up Helvellyn, 17.50, past Dollywagon and Grisedale Tarn, to assuage their thirsts at the Travellers' Rest Inn and to be ferried back by the support party to Low Hall Garth for a sumptuous dinner, luscious wines and an evening's reminiscing. All were most impressed by the performance of a 14-year old guest, the son of a member; he and his father led the way over the full length of the walk.

With Y.R.C. Members scattered all over the Continent from the Alps to Beirut, attendance at the High Level Camp in July was limited to eight Members and a Guest. Nonetheless the excellent situation of the camp, in the cave on Dove Crag just above the top pitch of Hangover, the fine weather and the congenial company all contributed to make the week-end a memorable one. Assembly at the Brotherswater Hotel on the Friday evening was, as always, a drawnout procedure and it was midnight by the time most of the party staggered up the last steep five hundred feet. On Saturday there was climbing on Hutaple and on Eagle Crag in Grisedale and there was walking over the fells to Helvellyn. The President arrived for a late supper and the company, after several bottles of rather doubtful red wine, burst into song but were almost at once interrupted by the arrival of two strange Biblical figures, one with a grey patriarchal beard and the other carrying a shepherd's staff. They had they said, seen lights flashing from the cave in the form of the Alpine Distress Signal, there was a support party in the valley watching for a signal in case further help was needed. Very few of the Members were quite certain what the Alpine Signal was and it took time and coffee to persuade the would-be rescuers that the only lights they had seen were flashes to guide in and welcome the President. A black-out was ordered as supplies could not have coped with a whole Mountain Rescue Team: what headlines might have appeared in the Press: what hilarity there would have been among fellow climbing clubs! The holiday season being in full swing only three Club Members and two Guests attended the August Meet in South Wales to enjoy the hospitality of the South Wales Caving Club. Rain on Friday and again on Saturday caused the descent of Dan yr Ogof to be put off till Sunday but a combined party of Ramblers, S.W.C.C. and Craven Potholers did a through trip of the adjacent Tunnel Cave, starting at the top entrance and emerging a few yards from the Dan yr Ogof show cave. Sunday was a better day and the river comparatively low so the party made for Dan yr Ogof II by way of the Endless Crawl, thence, after a short pitch, on through the Grand Canyon and Monk Hall till they reached the Green Canal. Here a small group branched off through several large chambers and muddy crawls to dig at a boulder choke in the extension of Hanger Passage; the rest swam the Green Canal and carried on into the Far North series. Many magnificent formations were seen, especially in Monk Hall, Flabbergasm Chasm and the Flower Gardens.

The Lowstern Meet at the end of August was attended by the President, 9 Members and two Prospectives. As there was rain in the air and the Prospectives had little experience of potholing it was agreed to do nothing more difficult than the descent of Long Kin West, Marble Hole and Jockev Pot; several digs were examined and two Volkswagens, looking like giant beetles pushing through the long grass, saved some walking on the Allotment. Thirty six Ramblers took part in the Joint Meet at the Robertson Lamb Hut with the Wayfarers' and Rucksack Clubs; after weeks of fine weather the wind howled and the rain poured down, all around the fell-sides were streaked with becks in flood. A slight improvement on Saturday morning tempted climbers to Dow Crag and Bow Fell, walkers to Scafell Pike via Esk Hause and Sty Head and to Helvellyn while the President having missed his party which had gone up to Stickle Tarn. did a solo of the valley as far as Rosset Pike. Everywhere walking was most exhilarating, the strong wind every now and then tore the clouds apart to reveal thrilling glimpses of valleys lit by fleeting shafts of sunlight. All returned invigorated and ready to enjoy Harry Spilsbury's famous meal of soup, roast lamb and treacle pudding and a fraternal evening at the Old Dungeon Ghyll. Sunday flattered only to deceive and soon the rain was coming down in true Lakeland fashion. A climber in nails on Pavev Ark made older Members feel nostalgic, leading off Rake End Wall he made it look like an off day in summer on the Difficults of Tarn Crag. After an interval of several years the Club returned to Levisham for the October walking Meet. Apart from gentle strolling on the moors of Pickering and Levisham, a party succeeded in losing itself in a County Nature Reserve from which it had to be extricated by a lady of the Yorkshire National Trust who took the opportunity of presenting a questionnaire on possible improvements to the National Park.

1968/69. At the 1969 Annual General Meeting—surely the only one in the climbing world at which Dinner Jackets are worn—the Committee reported another satisfactory year, the Club's 77th. Fourteen Meets were held and two records broken, the average attendance was 27, three higher than in the previous year, and the number sitting down to dinner at the Hill Inn in January was 80. The only two disappointing Meets were the one at Easter in the Cairngorms, where only seven were present and the Meet at Deiniolen in North Wales in

August; only six turned up including the Local Member Denny Moorhouse, who acted as host. It was thought that this Meet should be either earlier or later in the year, when fewer Members are on holiday.

The 55th Annual Dinner was again at the Cairn Hotel, Harrogate and took place on the 16th of November 1968. The retiring President, Cliff Downham—upon whom the Club had just bestowed its highest award, Honorary Life Membership—was in the Chair and the Principal Guest was Peter Lloyd of the Alpine Club. Six kindred Clubs were represented and it was much regretted by all that Dr. Charles Evans, President of the Alpine Club and an Honorary Member of the Y.R.C. was at the last moment prevented from coming. The total number of Members and Guests was 146 and a fair proportion of these turned up next day at the Golden Lion, Horton-in-Ribblesdale to tramp on Pen-v-Ghent and Ingleborough or to abseil into Calf Holes.

The first Meet of the new Club Year was a welcome return to the White Lion, Cray, the same Meet a year earlier having been sadly cancelled owing to foot-and-mouth disease. Besides walking up nearly every peak in the district and exploring the fine new extensions to Birks Fell Cave—recently discovered by the Craven Pothole Club—40 Members and Guests toasted the new President, Edward Tregoning, in the traditional punch and enjoyed the overwhelming hospitality of Major and Mrs. Horner and the Christmas fare provided. At the Hill Inn in January action started at 6.30 a.m. on Saturday when a dozen men set off for the ritual assault on Whernside carried out in total darkness and almost Trappist silence: back to breakfast and out into icv wind and driving snow to complete the circuit of what were for most of them, the three lowest mountains in the world. The dinner was a masterpiece of catering by Mr. and Mrs. Harry Flint. the kitchen, though it had been feeding Ramblers for nigh on 70 years. was never designed for the influx, albeit expected, of 80 ravenous men; nobody was kept waiting and the food was excellent. Laddering of Barn Pot was carried out but owing to the rival attraction of two picture shows it did not receive the usual amount of ribald support. The Turkish and Lebanon potholing expeditions were vividly portrayed by the transparencies shown and by Tony Dunford's commentary while in another room some magnificent old slides, dug from the archives of the Club were shown and commented upon by Fred Booth and Jack Hilton. Many of these went back to the very beginnings of the Y.R.C. and showed some of the early potholers in Eton collars and Norfolk suits.

In spite of reports about blocked and icy roads none of the 33 Members and their Guests had any difficulty in getting to Low Hall Garth for the February Meet. A heavy fall of snow on Friday night gave skiers some wet running on Prison Band but better conditions on the Kirkstone Pass; some good ice-axe work was done in the gullies. Saturday night was claimed as the coldest night on record in Westmorland, minus 2°F; Sunday was bright and very cold, everybody

took advantage of the improvement, ski-ing, climbing and walking. Twenty two Members and Guests were, at different times, on and off the High Level Winter Camp at Dovedale early in March, some in caves or tents, others in the Brotherswater Hotel, the White Lion Hotel or Beetham Cottage. Three genuine campers carrying 50 lb. loads were pointed in the direction of Dove Crag at 11 p.m. on Friday, they had great difficulty kicking steps in the gully below the crag but by 2 a.m. they were safely in duvets and sleeping bags. On Saturday a party ascended a gully in Link Cove, others traversed Helvellyn by Swirral and Striding Edge, some were on the tops as far as Kilnshaw Chimney. All came together to spend a convivial evening in the valley and the President invited the Club's third oldest Member, W. Allsup, who joined in 1919, to come from his home in Patterdale. He appeared delighted with the invitation and told many interesting tales of the Club's early days. The campers were eventually pushed upwards, there was no moon and care had to be taken in the gully and on the snow and ice traverse to the cave. After a hard night's frost boots had to be thawed out and persuaded to accept reluctant feet. Parties dispersed to gullies on Hutaple and Dove Crags, the President's party traversed High Street. Later in March 22 men were at the Lowstern Meet, the object of which was the descent of Gingling Hole, first explored by the Y.R.C. in 1924. The first party to leave for the pot had some difficulty in reaching the shooting box on Fountain's Fell as snow was piled high on the Stainforth—Rainscar road; all praise to the Land Rover and its driver, they jumped a 4 ft. snowdrift on to the green track but on arrival found Gingling Hole under deep snow. Having no digging tackle they went on to Magnetometer Pot which they bottomed in spite of the danger of getting lost in a maze of low crawls. Sunday was a perfect day, craftsmen appeared with the tools of their trades to work on the hut whilst rougher men dug out Gingling Hole and went down as far as the head of the last pitch. at which point they ran out of ladder.

The Easter Meet was at Glen Slugain in the Cairngorms, by kind permission of the Invercauld Estates, on a riverside camp site at Altdourie, near Braemar. The weather was the best recorded in the area for over thirty years and it was a pity that only seven men were able to be there, three resident in Scotland and four from south of the Border. The Edinburgh Member arrived on Thursday by a traverse of the An Sòcach (3,059 ft.) ridge from Glen Baddoch and on Friday climbed Mount Keen (3,077 ft.) Meanwhile others arrived and established a high camp in the corries of Beinn a'Bhùird. On Saturday a traverse was made of Beinn a'Bhùird (3,924 ft.) and Ben Avon (3,843 ft.) and on Sunday the party made a circular tour of Glen Slugain and Glen Quoich. On a bright clear Monday they ploughed up the jungle mud-track to Derry Lodge in the Land Royer, made an epic and hilarious fording of the Dee and found a good line up a snow gully through the cliffs of Ben Bhrotain (3,795 ft.) One Member returned to camp by padding alone across a desolate moor to bag a remote Munro, Càrn Cloich-mhuilin (3,087 ft.) and the Edinburgh Member, on the way home on Tuesday, traversed Carn a'Gheoidh (3,194 ft.) For the first week-end in May the President and 21 men made a return to Edale, an area not visited by the Club, as far as records show, since 1957. A potholing party got all its members to the bottom of Nettle Pot—and back: climbers made a mass attack on Stanage and inspected all the V.S. routes. Walking parties were well spread over the Peak, one did a 'semi-valley' walk in the Derbyshire Dales, presumably, from the characters of its component units, a 20-mile trek over hill and dale; another traversed Kinder Low and South Head and a third visited Alport Dale and crossed to Dunford Bridge, getting wet on the way.

For the Whitsuntide Meet the Club again went back to an area not visited since the late 1950's, Inchnadamph in Sutherland. The pre-arranged camp site near Glenbain Cottage was flat and exposed: by Saturday evening it was a sorry sight. It is normal for Whit Meet tents to look rather like the dress for the Annual Dinner—some new, some hired, some pre-Mummery. There had been a wind: many tents were damaged and 'Grand Hotel' was flattened to the ground. The Elders went hunting the Factor, camp was struck and moved to a delightful site by a stream and looking down on to the ruins of Ardyreck Castle. The wind continued but little rain fell except in the evenings: more Members came back wet from their libations than wet from the hills. The local peaks, Quinag, Suilven and Canisp all made themselves feel higher than their O.S. heights indicated; an exchange of car keys made possible an approach to Suilven from the Kirkaig via Fionn Loch. There was much climbing on the broken ridges of Stac Polly: views from Cul Mor (2.786 ft.) and Cul Beag (2.523 ft.) of Loch Sionascaig and its ramifications prompted ideas of a camping/canoeing Meet at some future Whitsuntide. Members of the forthcoming Greenland Expedition were in camp for training but spent much time on administrative matters such as typing letters of thanks to suppliers of Scotch Whisky. Evenings were spent either round a camp fire on the shore of Loch Assynt or in the Inchnadamph Hotel, where on several occasions Members entertained the Estate Manager, Mr. Venters, a helpful and interesting character.

The Midsummer Long Walk took an unusual form, in a straight line from Wasdale Head to Wasdale Head over some hard walking country. By coincidence Wasdale Head Farm, Shap is almost on the 09 east/west grid reference line, ref: 543081, and the more famous Wasdale Head Hotel is on ref: 186089, twenty five miles to the west. The Walk throughout its length was almost entirely between the 08 and the 10 lines. At 5 a.m. on the morning of the Longest Day 15 Members and 4 Guests started the trek by flushing a red deer from the deserted farmhouse; for the first stage of the Walk mist and unfamiliar ground brought out an impressive array of compasses, the mist began to clear approaching Harter Fell and allowed glimpses of Long Sleddale and Haweswater. The first group reached the feeding point,

a green tent near the Kirkstone Inn, at 10 a.m., bacon, sausages and hot tea were most welcome. From here onwards the hills were free of cloud and the sun shone: Kilnshaw Chimney, Fairfield and a steep long descent of the Tongue Gill path led to the second feeding point on the Dunmail Raise road. By 2 p.m. the pioneers were climbing past Sour Milk Gill, a thunderstorm threatened but did not materialise; by 6 p.m. they were on Esk Hause having passed Thunacar Knott and the boggy path from the Stake to Angle Tarn; they reached the hotel at Wasdale Head at 7 p.m. and by 8.30 the bar was half filled by the 16 Ramblers who finished. The support party, who had not only manned the feeding points but had ferried the walkers' cars from Shap to Low Hall Garth, now turned up to ferry their owners back to the Club Cottage. A good paint-and-potholing Meet was held at Lowstern in mid-July. The painters painted the hut while on Saturday the potholers went down Bar Pot, into the South-East Passage and so to the Main Chamber in Gaping Gill, a new sight for several of those present. On Sunday one party scaled Twistleton Crags to finish at the Hill Inn while another went down Sunset Hole first and up Twistleton afterwards. For the North Wales Meet at Deiniolen, the first week-end of August, only 6 out of an anticipated 12 were able to turn up. A broken wheel bearing, mist which reduced visibility to 20 yards and the machine shop of Clogwyn Climbing Gear, inspected under the guidance of the Resident Member, Denny Moorhouse, delayed departure for the hills until noon, when it was agreed to head for Cwm Silin. The climb up the Great Slabs was tackled by two ropes. Wet rock, airy belays and mist which prevented more than 20 feet of the climb being seen at any one time, made progress up the 400 foot route rather slow and prompted the Club's host to expound upon mountain safety techniques with such eloquence and soundness that it was suggested his advice should be recorded for the Journal. Parting of the clouds as the summit was reached revealed the full extent of the Great Slab Route and made the party feel that they had made up in quality what the Meet lacked in quantity. The September Meet at Lowstern lacked nothing in quantity, being attended by 20 men. The presidential party walked over Crina Bottom to the Hill Inn, investigating various sink holes on the way and a large party bottomed and explored Sell Gill Holes.

The Joint Meet with the Wayfarers' and Rucksack Clubs at the Robertson Lamb Hut followed its usual happy course—Harry Spilsbury's excellent fare, almost equalled by that enjoyed by the Overflow Party at Low Hall Garth, the get-together at the Old Dungeon Ghyll Hotel, sadly the last time on a Club Meet that Sid Cross was 'Mine Host', and a fair measure of wind and rain. A power failure at L.H.G. caused a near panic on Friday evening but the spectre of a supperless bed was laid by the energy and resource of all present and by the unexpected restoration of electric current. There was climbing on Scout Crag, Tarn Crag, Pavey Ark, Bowfell Buttress Gimmer and Raven Crag; the President's party walked over the

Crinkles to Wrynose. Even on a wet and windy Sunday parties set out for Wetherlam, the Hodge Close Mines and the Halls of Silence. Once again it was disappointing that, although Y.R.C. representation was 33, only half a dozen Members of the Kindred Clubs were present. For the last Meet of the Club's year, again in the Lake District, there was a good turn-out, twenty-three, at the Rucksack Club's fine new hut 'High Moss', just above Seathwaite in the Duddon Valley. While Yorkshire was shrouded in mist, the Lakes had glorious weather throughout the week-end. On Saturday Members followed a 9-mile course involving map and compass work and including 9 check points. The course had been attractively laid out by a Member and at the best it took 4½ hours. A similar exercise with perhaps a somewhat harder course in closer country was suggested for some future Meet.

CLUB PROCEEDINGS

1968—The week-end meets were: January 19th—21st, The Hill Inn, Chapel-le-Dale; February 16th—18th, Low Hall Garth; March 15th—17th, Sparth House, Malham; Easter, April 11th—16th, Glen Etive; May 10th—12th, Lowstern Hut; Whitsun, June 1st—9th, Loch Clair, Torridon; June 28th—30th, Low Hall Garth, The Long Walk, Three Counties Summits; July 19th—21st, High Level Camp, Dovedale, Lake District; August 16th—18th, South Wales; August 31st—September 2nd, Lowstern Hut; September 27th—29th, Robertson Lamb Hut, Joint Meet with Wayfarers' and Rucksack Clubs; October 18th—20th, Levisham; December 7th—9th, The White Lion Hotel, Cray. Average attendance was 24 and total membership 193. The death was recorded of R. de Joly, Honorary Member since 1946.

The 76th Annual General Meeting was held at the Cairn Hotel, Harrogate on November 16th, 1968. The following were elected as Officers of the Club for the year 1968/69: President: E. M. TREGONING; Vice-Presidents: A. R. CHAPMAN, J. D. DRISCOLL; Hon Treasurer: S. MARSDEN; Hon Secretary: E. C. DOWNHAM; Hon. Asst. Secretary: F. D. SMITH; Hon Editor: H. G. WATTS; Hon. Asst. Editor and Librarian: A. B. CRAVEN; Hon Huts Secretary: W. A. LINFORD; Hon. Hut Wardens: Low Hall Garth, J. D. DRISCOLL, Lowstern, C. G. RENTON; Hon. Auditor: G. R. TURNER; Committee: W. WOODWARD, M. CHURCH, P. C. SWINDELLS, W. C. I. CROWTHER, D. J. HANDLEY, D. P. PENFOLD. Honorary Life Membership was conferred upon E. C. DOWNHAM, S. MARSDEN and H. G. WATTS, proposed by M. D. Bone and carried by acclamation.

The 55th Annual Dinner, also at the Cairn Hotel, followed the Meeting. The Principal Guest was Peter Lloyd of the Alpine Club, who in 1938 took part in the last attempt on Everest from the north and who, with the Bourdillons, devised the oxygen equipment used in successful ascent of 1953. The retiring President, E. C. Downham, was in the Chair and Kindred Clubs were represented by Dr. John Wilkinson, Fell and Rock Climbing Club; J. B. Rhodes, Rucksack Club; Stuart Wright, President, Wayfarers' Club; J. R. Wilson, Craven Pothole Club; E. Gudgeon, President, Gritstone Club. Dr. Charles Evans, President of the Alpine Club, was at the last moment prevented from being present. The Club was again happy to welcome Dr. J. A. Farrer, Lord of the Manor of Ingleborough. The total number of Members and Guests was 146; the after-dinner Meet was at The Golden Lion, Horton-in-Ribblesdale.

On April 24th, 1968, Y.R.C. Member T. H. Smith gave a lecture to the Club about his visit to the Everest region of the Himalaya in December 1967, the talk was illustrated by many excellent transparencies.

1969—Week-end Meets were: January 17th—19th, The Hill Inn, Chapel-le-Dale; February 14th—16th, Low Hall Garth; March 7th—9th, High Level Winter Camp, Dovedale, Lake District; March 21st—23rd, Lowstern Hut; Easter, April 4th—11th, Glen Slugain, Cairngorms; May 3rd—4th, The Church Hotel, Edale; Whitsun, May 23rd—June 1st, Inchnadamph, Sutherland; June 20th—22nd, The Long Walk, Shap to Wasdale; July 11th—13th, Lowstern Hut; August 1st—3rd, Deiniolen, North Wales; September 5th—7th, Lowstern Hut; September 26th—28th, Robertson Lamb Hut, Joint Meet with the Wayfarers' and Rucksack Clubs, October 17th—19th, High Moss, Seathwaite, Duddon Valley; December 5th—7th, The Grove, Kentmere. Average attendance at Meets was 27 and total membership at the end of October 195, including 162 ordinary, 25 life, 1 junior, 5 honorary life and 2 honorary members. The deaths were recorded in 1969 of W. Allsup and D. Shaw.

The 77th Annual General Meeting took place at the Majestic Hotel, Harrogate, on November 15th, 1969. The Officers elected for the year 1969/70, again under the Presidency of E. M. TREGONING, were the same as for the preceding year. The Committee's Annual Report for 1969 was read and in it special mention was made of three important matters:

- The extent to which Members attending Meets are indebted to those who arrange communal catering, especially to the Hon. Hut Wardens and their assistants.
- 2. The concern of the Committee to keep Club Membership within bounds and to prevent the Club from becoming merely a large association; although there was no limiting figure, the present one of just below 200 was, from every point of view, satisfactory.
- 3. The valuable improvements made during the year to the Club Huts, especially Low Hall Garth with the new drying room.

The 56th Annual Dinner, once again at the Majestic after a lapse of five years, followed the meeting. To the Club's great delight the Principal Guest was Sir Charles Evans, President of the Alpine Club and Honorary Member of the Y.R.C. since 1955, who had so regrettably been prevented from representing the A.C. the previous year. On the Menu Card was a photograph of Kangcheniunga. "The Untrodden Peak", to which all but the last six feet, Sir Charles led the successful 1955 Expedition. The President, E. M. Tregoning, was in the Chair and Kindred Clubs were represented by A. C. Cousins. Scottish Mountaineering Club; D. Thomas, Climbers' Club; D. Smithies, Rucksack Club; A. J. Allen, Wayfarers' Club; F. Falkingham, Gritstone Club; A. Mitchell, President, Craven Pothole Club; R. Edlington, Midland Association of Mountaineers; J. Ackroyd, President, Bradford Pothole Club; P. Gardiner, Oread Mountaineering Club. Members and Guests present numbered 135; the after-dinner Meet was at Malham.

On February 27th 1969 Len Cook lectured to 70 members of the Club and their guests on potholing, ranging from Yorkshire through France to Spain, illustrated by excellent photographs.

On 20th March Paul Nunn gave a talk on his joint Anglo-German climbing expedition to the Bavarian Alps, which included the Gonda Diedre, one of the hardest limestone free-climbing routes in the Alps.

NEW MEMBERS SINCE JOURNAL No. 34

1969

D. H. B. Andrews. V. Bugg. G. E. Griffiths. R. W. Hobson. M. Huggup.

1970

J. T. M. Teesdale. I. G. Laing. K. Renton.

RESIGNATIONS

1968

D. C. Spray.

1969

A. White.

DEATHS

1969

D. Shaw. R. de Joly. W. Allsup.

1970

A. L. Middleton. H. G. Watts. H. P. Spilsbury.