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EDITED BY ERNEST E. ROBERTS.

CONTENTS.

		PAGE
Memories	J. W. SWITHINBANK	1
Novel Tactics on the Central Buttress, Scawfell ...	C. D. FRANKLAND	9
Memories of a Side-show—Macedonia, 1918 ...	A. M. WOODWARD	20
Mountain and Sea, II.	M. BOTTERILL	28
Snow on the Fells	J. F. SEAMAN	37
The Mountain Ramparts of Saas	... THE EDITOR	42
Swildon's Hole and the Mendips	A. BONNER, F.S.A.	51
Gaping Ghyll by the Main Shaft Again ...	... ...	57
The Leck Fell Pot-holes	... ...	60
Goyden Pot, Nidderdale	... ...	65
Chippings	... ...	68
On the Hills	... ...	72
Cave Exploration—I. New Discoveries, II. Other Expeditions	...	73
Club Meets	... ...	76
Club Proceedings	... ...	78
Reviews	... ...	79

PHOTOGRAPHS.

Penyghent	Frontispiece
The Flake Crack, Scawfell	To face page 16
Off Eilean Rarsaidh...	" " 32
Snow-filled Corries of Knoydart	" " 32
From the Lenzspitze to the Nadelhorn ...	" " 44
Rimpfischhorn—Great Gendarme	" " 45
Swildon's Hole, White Way, Barnes' Loop	" " 52
Swildon's Hole, Crystal Pool in Barnes' Loop	" " 56
Gaping Ghyll Main Chamber	" " 57
Ready to Descend and Leaving the Bottom, Gaping Ghyll	" " 58
The Camp by Gaping Ghyll	" " 72

PLANS.

Sketch Map, Leck Fell Pots	Page 61
Goyden Pot, Labyrinth	To face page 65

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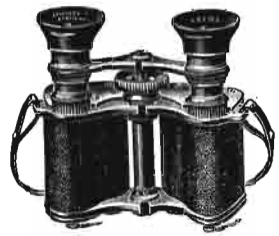

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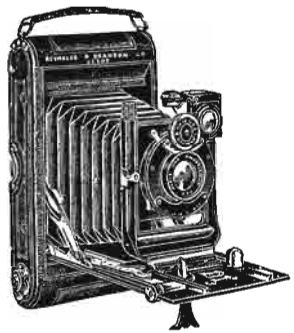

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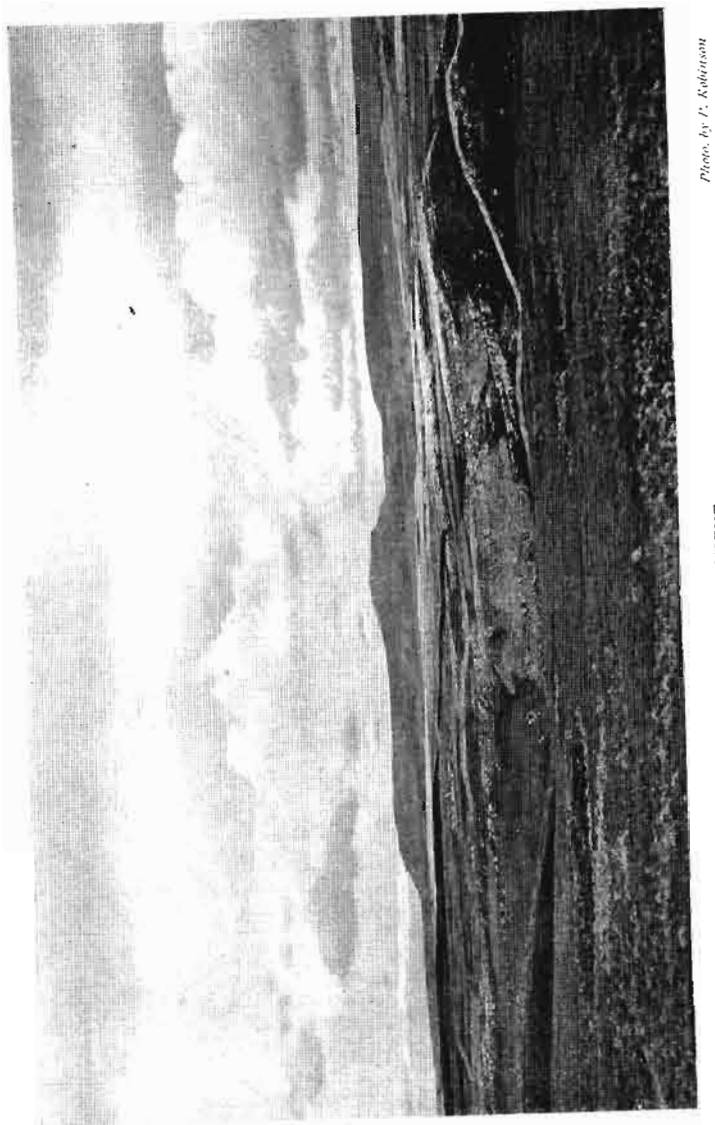


Photo. by T. Robinson

PENYGHENT.

THE

Yorkshire Ramblers' Club Journal

VOL. V. 1922. NO. 15.

MEMORIES.

By J. W. SWITHINBANK.

In the evening of one's life, gazing through the firelight into the past with its myriads of pictures, events and incidents jumbled and in broken periods at first, gradually resolve themselves into sequence and order. Reviews of the past may be a mixture of pain and pleasure, yet, even so, it is well to look. Treasures will be found that give delight to the present and will continue to do so while memory remains.

Amongst the many treasures I possess are not a few associated with pot-holes; trivial incidents in themselves, perhaps, but they are the key-notes to much that gives me real pleasure in the recalling. Leck Fell and its pot-holes are amongst my favourite mental excursions and it is possible now to remember almost with a pleasurable sensation the grinding of dear old Pidge's heavily nailed boots into my shoulders.

A kettle, cork and broken telephone line seem to have little connection with each other, but they are in my mind inseparably associated with Charlie Scriven and Rowten Pot. It was on the occasion of our actually reaching the bottom of the Pot after several abortive attempts. The rope ladders, making connection between "The Bridge" and the 250 ft. level, had been lowered and paid out into the depths below; this break in the climbable connection with "The Bridge" rendered of vital importance the telephone circuit installed as a means of communication between these two points. It is difficult to understand why a telephone line always breaks down when it is most required, but the inevitable occurred on this occasion. When the time came for hauling on the main ladder lines at "The Bridge" to restore a climbable means of communication

with that point, the telephone refused to work. Feeble tinklings of the bells were evidence of our anxiety to get into touch, but the line refused to "talk." Whistling and shouting were tried but anyone familiar with the Pot and the 250 ft. level will readily appreciate how utterly impossible it was that such means would be successful. We were indeed in a sad predicament; as a last resource a message was written on a scrap of paper and tied to a light halliard that had been used for the conveyance of refreshment, hoping that sooner or later someone on "The Bridge" would haul it up. We had not long to wait; the line, with its vital message, suddenly disappeared up the chasm, to our infinite satisfaction and delight. Everything that goes up or down Rowten Pot main chasm does so in the heavy waterfall for something like 150 ft., yet we hoped that message would land. It had, as we subsequently learnt, met with a watery grave, but Charlie "sensed" the situation and sent the halliard down with a tin kettle, having a cork in the spout, tied to the end. One doesn't find much opportunity for a hearty laugh in pot-holes as a rule, but when Charlie's kettle with its corked spout appeared we had one of the finest reasons for hilarity that ever came our way below ground.

Death's Head Pot is very beautiful, so far as the surface and the upper portion of the chasm are concerned, but the bottom has an evil reputation. Parsons and myself were the first two men to descend this pot many years ago, and on that occasion a rock fell from the brink with a thunderous noise to the bottom of the chasm, covering us with fragments of rock, a harmless baptism accompanied by an evil smell of sulphur. In 1918 we both stood on the floor of the chasm for the second time, and the incident repeated itself in all its details, with the slight addition that the rock cut into two pieces an ash rung of a rope ladder at our feet. An uncanny pot-hole.

Fairies' Workshop is a pretty name for a pretty pot (also called Rumbling Hole), and there is reason in the name—to lie on the brink of this pot on a still summer's day is distinctly to hear the fairies at work below. The sweet tinkling of the

fairy hammers and the ring of the anvils are the most delightful sounds one can ever expect to listen to. To investigate that fairy home was undoubtedly an act of intrusion and we should deserve all we got at fairies' hands. But it had to be done; 200 ft. of rope ladder was sent hurtling down the chasm, promptly followed by rude, uncouth "humans." As might be expected, the little fairies had ceased to work and disappeared. It seems almost brutal to explain that we found the charming fairy notes were caused by little drops of water falling from the roof of the cavern at the bottom, on to musical stones scattered about on the floor. It's a beautiful fairy tale—and true.

Hell Hole, although not in the same area, now creeps into the picture. Charlie will remember entertaining an irate and aggressive farmer who resented our presence on his land without permission. Charlie being specially good at entertaining, we left him, together with the commissariat, to make peace. It was a wise thing to do, because we found them, when we returned to daylight many hours later, the very best of friends. Hell Hole will always be famous for its 15 in. "Fat Man's Misery," and a spike. The "Fat Man's Misery" concerned us all, but the spike is peculiar to Booth. It was most unfortunate that in lowering him down the final chamber in a bowline, he should meet the business end of a sharp spike coming up. Those who have the pleasure of Tom's intimate acquaintance will be able to understand his description of the men on the rope who continued to lower, contrary to his instructions.

Ghosts are not usually associated with pot-holes, but it is impossible to think of Lost John's without remembering the horrible sight Booth and I once saw in the last watercourse leading to the final chamber. Representing the vanguard, and lightly loaded with tackle, we were well in advance of the main party who were bringing along the heavier stuff; a halt was called for refreshment, and it was during this "watch below" the strange and horrifying incident occurred. Sitting together eating sandwiches, surrounded by Stygian blackness, made more intense by the feeble rays of a tallow candle, we became conscious that something was wrong in front; the

passage was becoming luminous, a soft glow at first, but increasing in intensity until the whole passage became one glowing mass of light. This lasted for a very short time and then the luminosity appeared to concentrate in the centre of the passage and take vague shape. By this time I was badly scared; it was my first real ghost and I had no precedent to guide me. "Absence of body is better than presence of mind" flashed through my mind only to be dismissed; scared as I was, I knew enough of Lost John's to realise that any display of speed would probably end in something worse than the ghost. The luminous form now began to approach, slowly, but still decreasing the distance between us—it was appalling; common sense and reason gave place to unreason, Shakespeare was vindicated, there *were* more things in heaven and earth than were dreamt of in Horatio's philosophy. Here, in the very heart of Lost John's, was the spirit of the cave resenting our intrusion. By this time I knew what having "cold feet" meant. Fortunately the tension was relieved; the ghost, still approaching, began to smell and I recognised the smell.

The explanation is very simple. After deciding to halt for refreshment, I had detached the candle from my hat and stuck it on the passage side in order that by its light the tackle could be stacked up clear of the water running down the passage and, having done this, we had retreated some distance to find more comfortable quarters than were possible at the point where the tackle was laid, the small piece of candle being left to burn out.

The stage was set for a spectacular effect in surroundings that lent themselves to realism; it only needed the candle to fall from the wall on to the tackle below, set fire to the inflammable material which composed the covering of the spare length of telephone circuit, to create the "Ghost of Lost John's." I have investigated spiritualism seriously and from every angle of view since, and it is my considered judgment that the very best the mediums could show me was tawdry and cheap compared with the ghost I saw in Lost John's.

Two other incidents are connected with Lost John's. Parsons and myself were on one occasion the last to leave, and before making a start on the home journey were warned by telephone that the weather was ominous and a deluge might be expected at any moment. It was left to our discretion whether an attempt should be made to negotiate the stretch of "misery" before the storm broke, or seek higher ground and wait for events. Deciding to take the risk of meeting the flood in the tight place, special effort was made to emerge from that bottle-neck in time. Notwithstanding our strenuous exertions, and almost within sight of success, the flood struck us; we were both prone at the time, working our way at full length when the water came, and with such volume and force that it washed Parsons' pipe from his mouth. Watery experiences of this kind are not usual, but the interesting part of this incident is found in the sequel. Some weeks afterwards Parsons was leading an expedition down the pot and unthinkingly turning over a stone in the water sink at the extreme corner of the final chamber, saw, with the utmost astonishment, a portion of his pipe. Search for the rest was successful, and the pipe, now adorned with silver bands, enjoys a place in his collection of curios.

The other incident concerns an aneroid. Some years ago Parsons had been taking levels in Lost John's and, unfortunately, the aneroid he had been using in the pot was either lost there or forgotten. Crossing the fell a few years afterwards, Parsons overtook a complete stranger, and after exchanging courtesies, entered into conversation, with the curious result that the stranger supplied the name and address of a gentleman who had found an aneroid in Lost John's. Correspondence with the finder ended in its restoration to the rightful owner.

The pipe incident in Lost John's recalls to mind another pipe incident in Bull Pot. Booth and myself were leading a small party down this some years ago when a point was reached where additional tackle was advisable. It was decided that Booth and myself should remain where we were and the rest of the party work their way back to the entrance for it. In the circumstances of the considerable period of inactivity before

us, and both being lovers of "My Lady Nicotine," it is not surprising we should look forward with pleasure to a long smoke and chat. We possessed three pipes, an ample supply of tobacco, and plenty of waterproof matches. After settling down, it was something of a shock to find the first pipe produced broken beyond use, but after all, it was not a matter of much moment since we had other two pipes left. When, however, the second pipe was found to be also broken, anxiety as to the condition of the third and last pipe became intense. It is impossible to express in words the sense of relief when it was found the last pipe was sound and workable. Some unwritten law of camaraderie immediately decided that the pipe was common property, and the only difficulty was how long should each be allowed possession of it. That point needed careful consideration. It was finally agreed that each smoker should fill the pipe with tobacco and light it, but having once started the pipe no further lighting was permissible. Should the smoker be unable to show smoke, the pipe passed. Neither had practised the art of keeping a pipe going with a minimum consumption of tobacco, or realised that to remove a going pipe from the mouth in order to enjoy a joke is just about long enough for a pipe to go out. It was a useful experience.

"Sammy of the Green Sack" always treated pot-holing seriously, as became a man who undertook the scientific side of our excursions. Yet there were times when he "took a hand in the game." During one of our early experiences on the road, Booth, Sammy and I were bedded in a room containing a full-sized bed and a single bed. The usual application of the Law of Chances gave me possession of the single bed, which I proceeded to occupy with almost indecent haste and wondering how the choice of "outside berth" in the double bed would turn out. Sammy put a period to all doubt a few minutes later by removing his glasses and intimating with a merry twinkle in his eyes that he would occupy the outside berth. Tom was ever a man of trial and achievement, and when he realised that the coveted outside berth was not to be the subject of a sporting chance, proceeded to argue the matter

in his own particular way. The argument developed and spread with alarming rapidity all over the room; nothing movable escaped its influence. The damage to property became more serious as time went on, but it was of small consequence when compared with the question—"To whom should the outside berth be given?" For two hours Tom tried every hold known to science without result. It was impossible to hold Sammy. After one round lasting two hours the truth was forced on Tom, that nothing living could hold Sammy when he warmed to his work. I should mention that Sammy did not wear pyjamas and the night was hot.

Anything approaching a practical joke with pot-holers is not a thing to undertake lightly.

On one of our Ingleton trips I happened to be leading a small party down a very disagreeable watercourse, when I arrived at what I thought was a large round stone partially submerged in the stream and apparently blocking further progress. On attempting to negotiate this obstacle I was disgusted to find my left arm had penetrated a dead sheep. It was my duty of course to warn those behind me of the nature and character of the big stone partially submerged in the stream, but, alas, I fell—and waited quietly at the other side for events. They occurred all right and I fully enjoyed the joke—and forgot it—that was my mistake. Early next morning, when I was moving about the bedroom in the hotel, in a condition that might be described as "stripped for gym.," I was hustled by some of the boys into joining in an alleged raid on Sammy's room. That was another mistake, because I suddenly found myself in the hotel corridor quite alone, every bedroom door locked and every bedroom bell pealing and clamouring for the immediate appearance of the staff. IT DOESN'T PAY to be funny with speleologists!

I should like to take this opportunity of introducing an incident which occurred in the early days and point a moral for the benefit of future generations of pot-holers. Parsons and I had suddenly decided to investigate Marble Steps Pot without tackle of any sort except the inevitable life-line.

The expedition was immediately carried out and most successful in every respect, but we had committed the very grave crime of descending an entirely strange and unknown pot-hole without informing a living soul of our destination and intention. It needs little imagination to picture a tragedy in such circumstances. The moral is obvious: never undertake an expedition without leaving sufficient particulars of your destination to enable a rescue party to take prompt and timely action. Parsons will forgive me for introducing this incident, because I know how strongly he will support the moral.

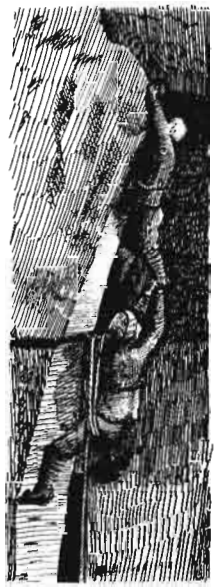
A priceless memory is the faith and trust in each other that is born of pot-holing. I wonder how many men outside the climbing world know what safety and confidence can be found in a single hand-clasp, when that clasp is the only link between safety and death. In the early days of pot-holing, when tackle was not so commonly used, it was no unusual experience to hear the words, "Right, now swing clear." That hand-clasp was symbolic of the purest system of ethics ever thought out by mankind.

The best side of pot-hole excursions is invariably associated with "Lewis" and "Connie." The quiet good-natured witticism of the one, and the spontaneous good humour of the other, made for unity and smoothed rough places.

I raise my hat to all the Pioneer Pot-Holers.

NOVEL TACTICS ON THE CENTRAL BUTTRESS, SCAWFELL.

By C. D. FRANKLAND.



Many years ago there was kept at Wastdale, in the hotel, a large manuscript book, in which new climbs could be entered. This valuable collection of information was freely used, and the volume has long since been filled from cover to cover. Its popularity has occasioned its undoing. Whole pages have mysteriously vanished, the most valuable being the first to go. The depredations of collectors only ceased when the proprietor wisely put away the battered, time-stained remains in his office. There is still a book, but it is only available to members of a kindred club. Should the suggested affiliation of clubs be brought about, one of its advantages might be in the pooling of records in a book open to all. Then there would be less excuse for not keeping up to date with the latest developments of our art, even for such as myself and others, who are not members of the club-with-the-book. And such a question as—"What is this Central Buttress?" would not be asked. I felt some indignation at the lack of interest in recent exploration revealed by the question, until I remembered that a very few months ago I was ignorant that the crag east of Moss Ghyll had been so named.

The first reference to the Central Buttress in the private book is brief. It runs—"Attempt on C.B. ('nuff said)" and occurs between two very fine achievements—Scawfell Pinnacle from Lord's Rake, by Hopkinson's Gully to Hopkinson's Cairn (first ascent G.S.S.), and Girdle Traverse of Scawfell (second time). In order to explain the middle, cryptic entry it may be expanded into—"An attempt on the Central Buttress,

Scawfell, was frustrated by the unspeakable difficulties encountered." Then its true relation to the other notes will be appreciated, and it will be a fair inference that something unusual in the way of severity is to be expected on the Central Buttress. The next reference, verbose in comparison, is dated 20th April, 1914. It reads—"Scawfell Central Buttress, First Ascent, S. W. Herford, G. S. Sansom, H. B. Gibson, C. F. Holland." The *Journal of the Fell and Rock Climbing Club* (Vol. 3, No. 2) contains the thrilling story. Three strenuous days were needed to work out the details of the route, but the whole, direct ascent in one expedition was not accomplished as had been hoped. War broke out in the summer.

There are some things that even the War did not change, and one is the crag of Scawfell, where, in 1921, the great buttress still challenged the climbers to repeat the ascent of 1914. The new school of experts has concentrated its accumulated skill upon rock faces. Many startling routes have been forced up various astoundingly holdless walls. Meanwhile our old guide books are rapidly receding into "back numbers." The muscular methods of Owen Glynne Jones are discussed with a tolerant smile. The human ladder of his time finds no place in the tactics of to-day. Like Jones, our experts climb without boots, but out of respect for present-day social amenities, they hide their socks inside rubber shoes. Perhaps the tendency is to specialise too much on smooth faces to maintain the old skill of attack in what have been called "the less important things of modern rock climbing," such as chimneys and cracks. For the particular difficulty, which has defied the assaults of the new school, is one of these "less important things," a comparatively small crack. It is gratifying to be able to say that our modern experts have resisted the temptation to follow the precedent established under similar conditions in Moss Ghyll.

At Wastdale in the summer, an after-supper stroll down by the lake is a popular feature of the daily programme, and, arrived at the head of Wastwater, we find an antidote for the unfortunate effect of the discordant concrete bridge in the purple

and gold harmony of the distant Scawfell Crag, where any harshness is veiled in the blue atmospheric depth. A similar, soft effect is to be observed when returning after a day on the fells in the late afternoon, especially on one of those showery days which produce the rich colours peculiar to our climate. By this time the sun is well round in the west. The rocks are freshly wet with rain, and, if one turns on Brown Tongue to look back at the familiar face of the crags, the sunlight will be seen to be reflected brightly from the sheer, smooth wall about the middle. One gleaming patch shines with all the radiance of a silver hatchment. This is the Flake of the Central Buttress. When approached in the morning all the effects assume a grimness in perfect keeping with the notorious defences which this buttress presents against attack.

These towering crags have been the stage whereon have been played a little tragedy, much comedy and a farce. The side entrances are by Mickledore and Lord's Rake. But for the initiated the great rock face between responds to the "open sesame" of their skill. The ridges leap out into bold relief; the hollows sink back into ever more gloomy recesses. These buttresses and bays resolve themselves into a dozen hidden staircases, all different and all delightful. But, when the last has yielded up its secrets, a sense of loss drives the curious climber to seek out a new way, which shall be worth all the rest. Such is the Central Buttress, towards which I set out about 9 o'clock one August morning (1921), accompanied by Mr. Bentley Beetham, of the Fell and Rock Climbing Club.

As we pounded along past the little school, over the footbridge and the clattering stiles, around the foot of Lingmell and up Brown Tongue, we hoped to be the only party bound for Scawfell. It was a fine, warm morning, and the trudge seemed less tedious than usual. We discussed the many hundreds of feet of very fair climbing, up and down, that had been squeezed into the two days' practice necessary to put us into condition. At last when the effort of scrambling up the talus ejected from Lord's Rake put an end to conversation, we stole occasional glimpses at the broad precipice of the Central

Buttress, marked off by Moss Ghyll on one side and Botterill's Slab on the other. By the time we had reached the little level patch of gravel at the foot of the Pinnacle Low Man I was eagerly pointing out the redoubtable Crack. From the lunch place, where we stood, the famous Flake looks very small and distant, whilst the Crack appears hopelessly inaccessible. Seeing that this was our first halt, I felt justified in exercising great deliberation in the act of changing into rubbers, and frequently paused to point out what were, very likely, invisible features of the course. The result was that Beetham was kept waiting while I slowly struggled into a tight jersey. The appearance of a large party topping the mound of Brown Tongue drove us off hurriedly to stake our claim at the foot of the Central Buttress, a few yards east beyond Moss Ghyll.

We were not clear in our minds exactly where the new first pitch began, but familiarity with the regular structure of the rocks forming this precipice convinced us that the subsidiary buttress, which confronted us, could be climbed. Here, as elsewhere on the crag, the divisional joints are roughly at right angles to each other. The altered volcanic ashes weather very conveniently into quadrangular blocks and columnar ribs presenting usually three faces. The two sides are not quite vertical. They tilt slightly to the south and east respectively, and the upper face dips accordingly. On Keswick Brothers' route this causes the repeated westward traverses to present difficulties in the form of ledges sloping the wrong way, and faces which overhang. When the climber faces east, as on the slabs of the Collie Exit of Moss Ghyll, the climbing is much easier if steeper. Every pitch on the Central Buttress bears out the principle that the holds are good or bad according to whether the climber faces east or west. Especially is this the case throughout the first two pitches.

The fact that we had brought along two ropes showed that we had not entered too lightheartedly upon our ambitious enterprise, though I for one should have been at a loss to answer, had I been asked, how I intended to use them. Perhaps the

fact that two ropes are stronger than one indicated a fear of catastrophe on the Flake. Now that we had brought the spare length of 50 feet, Beetham volunteered to carry it with us, and we tied on the 80 feet. Starting up a corner between a rib and the main wall, I realised that another factor enters into the consideration of the going besides the quality of the little ledges. Their quantity is a telling factor. The place reminded one of the big adjacent slab. The holds were small, few and far between, and at 30 feet up they failed altogether. A one-step traverse had to be negotiated with great care. The next corner on the left was now occupied and followed without much difficulty. Ledges increased finally into platforms, and when the rope ran out I was able to settle down comfortably upon a grassy bank to admire Beetham's remarkably speedy climbing.

This was very fine, but unfortunately it led us too far to the left. The foot of the Flake now lay off to the right some 50 feet higher. The only means of access was a staircase, whose risers averaged 12 feet, and the treads rather less. The whole system was of course tilted to our disadvantage when attacked from this direction. Moreover, the overflow of the buttress water system maintained a steady supply over the stairway to the obvious satisfaction of succulent lichen, and to the trials due to tilt was added the slipperiness of slime. As usual, the first step was the most trying. To reach it at all, one had to move out and up along dwindling ledges until, when poised over deep space, the sloping top could be reached. Discretion would surely have proved the better part of valour had not a helpful little recess come to hand, which made the squirm upon the jellied surface tolerably safe. Then throwing aside all pretence of style I shuffled on puttees and breeches to the second step. When safely arrived on the landing, I found to my chagrin that Beetham was coming upstairs in a perfectly sober manner, instead of behaving like an inebriated Gulliver after a wet day in Brobdingnag.

The occurrence of a slimy pitch may be expected beneath such a ledge as the one we had now reached. The absorbent

loam seems capable of storing up large quantities of moisture, which slowly sipes over the pitch below even after days of dry weather.

This grassy ledge lies about 150 feet above the Rake's Progress, and we could walk about and enjoy the airiness of the situation in comfort. The immense sweep of Botterill's Slab was really impressive. Very fine, too, was Moss Ghyll, teeming with associations dear to climbers. The two pitches, which we had just passed, emphasised the depth and steepness of the downward prospect. Upward, and most impressive of all, soared the vast expanse of the smooth wall of the buttress—and the Flake.

The ledge is called the Oval. It is, as its name implies, bigger than Tennis Court Ledge. It forms part of a terrace which peters out at its extremities, on the east within an exasperatingly short distance of Botterill's Slab, and on the west about as far from the top of the third pitch of Moss Ghyll. It will be remembered that it was discovered by the party who designed the Girdle Traverse. The feature that claimed our attention was the Flake, which springs up in a vertical sweep of 70 feet from the neglected turf of the Oval. The Flake is a thin leaf of rock which the frosts are peeling off the great smooth face of the Buttress, leaving more than a crack but less than a chimney, a fissure too wide for wedging, yet too narrow to enter. The right-hand side of a capital K represents the outline of the margin of the Flake seen in profile. This accords with the rule stated above; the first 30 feet are easy, up and to the left, while the chimney, or crack proper, is all but impossible, up to the right. In the second part, 40 feet high, the difficulty is due to the overhang, which becomes pronounced above a chockstone, lodged 12 feet or so from the top. One may search far before one finds a prettier climbing problem than the Flake Crack.

Beetham thought it would go and said so. I did neither. Both ropes were brought into use. The first 30 feet of rock were soon scaled to a ledge 9 inches wide. We took the precaution to thread a rope at once. Looking up we saw that

two pronounced bulges precede the overhang. I climbed around and stood upon the first, while Beetham squeezed himself as securely as possible into his awkward corner. When he was firm I attacked the second more interesting bulge. Its mildness was a little disappointing, but the next 15 feet of smooth wall compensated adequately. By the time I had reached two holds, which are destined to be well-known by reason of their rarity, the left one on the edge of the Flake and the right one upon the wall itself, I had begun thoroughly to enjoy myself. The rock was sound and the climbing simple. It is true that it was extremely strenuous going, but it was just as hard work to remain still, and there was always the splendid flat top of the tall, narrow chock to justify any slight "overdraft" on reserves. As soon as I could, I hitched one rope across the top and dropped my arms to rest. While threading the other rope on the Flake side of the jammed block I found a short, blackened fragment of old rope, firmly wedged. It is still there, its suggestion of mythical legend perhaps accentuated by the harsh croaking of ravens, wheeling over Mickledore.

On Beetham's advice I made loops around my hitch, which could not possibly slip, and sat in them. So comfortable did I feel in this quaint resting place, gripping the chockstone with my knees, that I was tempted to see what I could make of the last 10 feet, and must have annoyed Beetham immensely by various very foolish and utterly useless antics on and around the chock, before I came down upon ropes to which the term "double-double" applied. Then, not being in the least hungry, but greatly nonplussed, we achieved the obvious by adjourning for lunch.

We were not, after all, alone on the crags. Two friends were keenly interested in our doings, because they themselves had designs upon the Flake Crack, and had lugged up a pot-holing life-line, known to many of our members, with the idea of studying the pitch from above. They reached the top of the Flake by way of the summit, and we reported progress, agreeing with their remark that our climbing was yet to begin.

They did not accept our suggestion that they should "come through" us, but queued it up above. I, for one, felt somewhat in the way, and we did not keep them waiting long before returning to the ropes left hanging, one threaded and the other from the hitch.

Little did any of us think that within five minutes the pitch would be successfully, even comfortably, climbed. But so it was, and it may be of interest to describe in detail the novel tactics brought into play to avoid defeat, to which the peculiar flagstone shape of the chock was vital. This time Beetham volunteered to lead as far as the chock. He tied himself on the hitched rope, the slack of which I drew in as he walked quickly up the wall, using both sections of the threaded rope for pulling. At the chock he seated himself in loops of his own rope passed over the rock and tied, and with feet firmly planted on either side of the chockstone, found that his hands could be freed without impairing his security. Then my turn came. At the cost of considerable hemp, but of little effort, I hauled myself up in the manner I have seen adopted by steeplejacks on a church spire, lacking only the counterpoise, the pulley, and the seat, and soon arrived at the rendezvous. Here we went into committee. Beetham invited me to use him as freely as I would any jammed boulder, and I tried to grace my compunction in grating over his frame by calling attention to my rubber shoes. Without more ado Beetham trussed his near side leg with both hands and made a fine stirrup from which I mounted to his equally firm shoulders. It was fortunate my friend was staunch, as he sat dangling in the loops, or our escapade would have been March madness. Both hands were needed to maintain a very unstable balance as I straightened my knees on each side of a steady head. The grip of the hands upon the tapering edges of the Flake was enough to prevent a backward crash, but the sharp, hollowed crest was still out of reach. Beetham offered his head. This improved matters in one direction. Still I craved support for the left foot, which simply would not grip on the smooth wall, and it was promptly impounded and jammed hard. Agitation immediately gave way

THE FLAKE CRACK, SCAWFELL.

to complacency. Very carefully, very confidently, the left hand slid up the outside face of the Flake until the fingers curled over and hooked the sharp crest. Then, with feelings unbecoming of expression to a man who has reached my side of middle age, I enjoyed the luxury of lusty hauling, which was sheer joy with such a hold and such space below to spur one's efforts.

The Flake Crack was vanquished for the second time, and the pleasure we derived from the successful accomplishment of our scheme was due as much to the safety of the moves as to any originality of the methods. Stirred by impatience and some curiosity, perhaps, one of our friends was crawling at this moment carefully along the knife-edge of the crest of the Flake, and drew near the end, when we met literally face to face. The situation was ludicrously unexpected, and the exclamation "They're up!" was accepted as an intimation of surprise, and a quaint form of congratulation. It was only a half-truth, however, Beetham was still playing the part of Prometheus on the face of the crag out of sight below. I hauled in my rope and threw the end down to my partner, so that he could tie on properly. After casting off his moorings from the chock, Beetham found no difficulty in joining me astride the knife-edge.

Pictures of the crest of the Flake, wonderful as they are, hardly do justice to the situation. The sense of height is absent in a photographic impression. The 50 feet of jagged edge, "so thin as to be perforated in places," are foreshortened disproportionately, and the smooth, inhospitable wall, sweeping upwards into the blue above, does not appear on the print. With a guide's air of appropriation I turned to Beetham—"What do you think of this for a traverse, Beetham?" Beetham duly appraised the vertical walls and the undulating margin of the crest between—"Just the place for a hand-traverse!" ejaculated the epicure.

I crawled along the edge, and scaled the upward sweep of 15 feet to a pillar at the far end, before I could look back to pay attention to the rope. There was Beetham approaching calmly

upright upon the edge, and with pointed toes and right shoulder against the rock wall—walking, while calmly coiling the spare rope!

We joined Kelly and Bower, and made up a party of four to finish the climb according to the directions on the printed sheet carried by one of them. Our route was now indicated by a huge rift, the Bayonet-shaped Crack. To reach its foot the smooth wall had to be recrossed at higher level by a course roughly parallel to the top of the Flake. A jutting piece of rock marked the place and served as an anchorage. All agreed that the next traverse was "steep." For about 15 feet the climber depends entirely upon his footing, and this is hard to find and keep. At the end across a small gap the Overhanging Buttress must be climbed for another 20 feet, with Hollow Stones peeping up through the window of the Flake Crack between the feet. From the top of the buttress I enjoyed acting the part of spectator in a skilful game played by experts, whose well-known skill was "all out" upon a traverse, which had the qualities of an "exceptionally severe," steepness, absence of holds, and exposure, with the edge of the Flake below like the huge, upturned blade of a bill-hook, the sword of Damocles inverted.

Leaving Beetham to bring up the others I turned to admire at close quarters the so-called Crack. This striking feature of Scawfell Crag was obviously named from its aspect from a distance. It is about as big as Walker's Gully, and of more interest to botanists than to climbers. Judging from its steepness it is very unlikely that it would detain either enthusiast long enough to do more than collect a few chance specimens, with which he would descend. The floor has been removed. We preferred the buttress, and rounded the notch, crossed the V Ledge, and arrived at a most fascinating corner.

Some day I hope to return to this pleasantly secluded eyrie and smoke a pipe in the sunshine there. It is at the very top of the lofty grooves on the east of Moss Ghyll, which have been attempted in the less discreet assaults upon the Central Buttress. The view down these will always stir the imagination

of a climber. The most disturbing fact is that one looks down to the third pitch of the Ghyll only to plot out a route up again, where every hold is plainly visible, and—how can I describe it?—it only just goes. The nervous strain drives one to shut out the shuddering exposure, and gaze around at the broader, beautiful landscape, tranquil, soft, and restful.

To-day was all hustle and hurry. Once I should have enjoyed the remaining 200 feet of climbing up the west of the Bayonet-shaped Crack, across it at the crook, then up the east side to the summit, and it would still be interesting under conditions of snow and ice. But just now the feeling of regret that the game was ended was somewhat depressing after the buoyancy that had brought one so far. The slope gradually eased off and four hours from the start we unroped on the summit. The time was not long, and there is every hope that on another occasion we may be able to spin it out even more.

Beetham agrees that we never extracted more enjoyment from scrambling anywhere together than we did from our introductory visit to Herford's Buttress. "It was great, man!" writes Beetham. I hope it will not be considered out of place to express admiration for the work of the enterprising explorers, whose exceptional skill and daring placed at our disposal a course unrivalled in fantastic rock-scenery, in intricate route-finding, and in scope for skilful climbing.

MEMORIES OF A SIDE-SHOW—MACEDONIA, 1918.

By A. M. WOODWARD.

" Have you heard the news, sir ? " said John, the waiter, as he brought me my lunch; " I don't know if it's official, but the corporal heard it from a man in the Y.M.C.A., who had it from a transport man down on the dump. The Serbs have attacked near Monastir and gained a lot of ground and taken 3,000 prisoners." Seldom had good news reached me through such an unconvincing channel, but true it was, and it was soon confirmed in an official version.

The date was, I fancy, September 15th, 1918, and I was away, recuperating after sand-fly fever, in a charming little country hotel built by the enterprising staff of a certain gallant division among the hills behind the central sector of the British front in Macedonia.

An unwonted air of movement and preparation prevailed at the time, all due in one way or another to the " push " which I knew, vaguely as far as all details were concerned, to be forthcoming before the late Balkan summer ended. But none of the passing visitors knew that already the first page of the last chapter of the long drawn-out story of the Salonika Force had been written in that brilliant break-through between Sokol and Vetrenik which the Serbs had effected in the early morning of September 15th.

When I got back to duty at Divisional H.Q. on the afternoon of the 17th, signs of liveliness were clearly visible. The " P " Ridge and Grand Couronné and the lesser spurs which run down from the main ridge towards Lake Doiran were smoking like volcanoes with many craters under our bombardment, but the enemy artillery seemed to be making but little reply. We kept it up most of that night with varying intensity, and on the 18th at about dawn the infantry attack was launched.

Students of war will, I fancy, debate the strategy of this attack for many years to come, unless their attention is entirely absorbed with the epic deeds on the Western Front, and any detailed criticism would be presumption on my part.

One must, however, not overlook the following facts—

(1) It was of vital importance to detain all possible Bulgar reserves where they could not be drawn on to check the successful advance of the Serbs, French and Greeks west of the Vardar.

(2) There was the chance of surprise effecting success in the British sector, for we were for the first time in the Balkans bombarding with gas shells. The Bulgars' gas masks were known to be old, and might be useless, and his anti-gas drill might break down.

Moreover, if all went well in our attack, and the heights were taken and held, the whole sector from Lake Doiran to the Vardar would have to be abandoned, and the way would lie clear for us to turn the right flank of the division holding the Belashitza. And, further, this retirement would uncover the enemy railhead at Cestovo, and the main aerodrome at Hudova, for it was known that the Bulgar had no retired line on which to fall back.

" *L'homme propose, mais . . .* " On the right of the attack all went well. A Greek Division proved—if proof were needed—that the Greeks' capture of the Srka di Legen in May, 1918, had been no fluke, by seizing and holding the " O " trenches which had twice resisted the utmost efforts of a British Division in 1917. In justice to the latter it must be said that 16 months of bombardment had made the defences less formidable, and better lines of approach had been recognised and were now made use of. But it was, none the less, a feat showing that Greek infantry, when well trained and led, are past masters in attack.

On the left all went well at first; good progress was made up the " P " Ridge and on its lower eastern buttresses. But nests of machine guns in emplacements too strong for our artillery to demolish, and labyrinthine dugouts of concrete enabled the Bulgar to hold on, and the crest could not be won. A further effort on the following day took us for the moment nearer the objective, but the limit of human endeavour had been reached, and the most impregnable position attacked

frontally by any force during the war remained indisputably in the enemy's hands.

Our losses were, needless to say, heavy in proportion to the numbers engaged, but the Bulgar had lost heavily too.

In the afternoon of the 19th the battle died away. All had not been in vain, one believed and hoped, for the progress west of the Vardar continued unabated, but it still remained doubtful as far as the Doiran-Vardar sector was concerned, whether we might not, after all, settle down to another winter of the same warfare of positions.

Friday left us still wondering, but before nightfall on Saturday all doubt was set at rest. Saturday, September 21st, was a memorable day, and, for a recent invalid, a strenuous one. After standing by early in the morning with some of "Q" staff to watch the arrival and settling in of the H.Q. of a hastily brought up Hellenic Division, where luckily no complications arose to strain the resources of my modern Greek vocabulary, I motored to H.Q. of our left brigade, nearest the Vardar, to assist or impede Brigade Intelligence Officer in interrogating some deserters who had come in from the Bulgars the previous evening. They knew but vaguely of the Allies' continued progress on the other side of the river, and had heard of our failure to gain the "P" Ridge and approximately knew of their losses in prisoners on that front. But of their own intentions not a word was vouchsafed, and I believe they told all they knew. More important than mere words were other noises heard during this same morning from far behind the enemy lines, followed by great jets of black smoke that rose and spread like giant stone pines outlined against the sky.

This phenomenon, new to us on the Balkan Front, was at once recognised as due to the enemy blowing up his dumps, and left no doubt that he was preparing for immediate retirement. These explosions continued till after sunset, and the sky to the northward was full of smoke and an unaccustomed, lurid glow.

On my return to D.H.Q. I found orders awaiting me to call at once on the Commander of the Hellenic Division whom

I had seen that morning, and take him his instructions for the immediate future; and finally, in view of later developments, I visited him again about midnight to cancel all my messages of the afternoon. He was now to be prepared to move forward at the shortest possible notice, and it was not surprising that this warning reconciled him to the unsuitability of his H.Q. camp, about which he had commented at some length when I saw him in the afternoon. . . . . And so back to report to G.S.O. 1 and to bed. That same evening patrols had gone forward and found the Bulgar front-line trenches unoccupied and their forward battery positions evacuated, and by Sunday morning, 22nd, preparations for a general advance were well in hand.

Thirty-four months of waiting were at length to have their reward, and long accumulations of personal kit and office files were ruthlessly weeded out.

Before we finally moved forward I had an opportunity of investigating some of the enemy dugouts in and behind the main line. Boyau Hill yielded nothing of interest beyond striking evidence of the accuracy of our artillery fire, though several of the big characteristic double-entranced dugouts were still undamaged; and we marvelled here, as in every dugout we examined, at the excellence and abundance of the timber employed in their construction. Battery dugouts, Battalion and Regimental H.Q. all showed the same care in construction. Six inch by six inch timber must have been plentiful, and matchboarding an "issue." Everything showed that the Bulgar had left in haste; the cook-house at Regimental H.Q. was littered with half burnt maps, but the unconsumed portion yielded some valuable salvage. Except for a single long-range gun in Boar Ravine all the guns had been got away from their positions, but shells lay in hundreds in and around the pits. Fortunately, with one or two exceptions, perhaps due to German ingenuity, there were no land-mines or booby-traps left, and the water-supplies were not contaminated or even put out of order.

The night of September 25th we spent at Bogdanci, in the abandoned billet of a German Machine Gun Company. I

hope that the former occupants of my room were harassed no less than I was by the local fauna. From mosquitoes I was protected by my net, but the combined assault of sand-fly and—I suspect—other minor horrors kept me awake most of the night.

Bogdanci showed us the minor horrors, but the next day was to show us the major horrors in profusion. The heat was intense, and an ammunition shed in the big dump at Cestovo provided welcome shade through the heat of the afternoon. Cestovo dump had been successfully bombed by our machines in the spring and many thousands of rounds of ammunition had gone up, but a few empty sheds were still standing. Later in the afternoon we started in our untiring Ford to cover the last stage up to our camp for the night on Costurino ridge, north of the village. The road leading up to the ridge had been the Bulgars' *via dolorosa*, and for many miles it was littered with the *débris* of the enemy retreat. Here our machines had had the most "sitting" of targets all the previous Saturday and Sunday. The German planes did not even show above the horizon (many had been captured intact at Hudova, the rest had fled for home), the "Archies" were hastening northward with the rest of the fleeing army, and only the clouds of dust arising from the road prevented perfect shooting. The traffic congestion must have been appalling. The infantry, artillery and all other units of the Ninth Bulgarian Division pouring down from the Furka ridge and across the Cestovo Valley had been met at right angles at the foot of the Costurino ridge by a disordered stream of traffic from the Fifth Division, which had crossed the Vardar below Hudova and was making for the same road over the pass. The scene on the 26th was one of indescribable horror. Clouds of fine white dust and the smell of putrefying flesh that had lain for days under a Balkan summer sun permeated the air. Both sides of the road were lined with abandoned guns, wrecked and burnt lorries and light cars, limbers and native carts, dead horses and oxen, shells of all calibres, packs and equipment, uniform, rifles, and in general a miscellaneous jetsam baffling the imagination.

Fewer dead were to be seen than might have been expected, but many were subsequently found among the scrub and in ravines below the road, where they had been left unburied—or, badly wounded, had crawled to die.

Close to our camp north of the village were further signs of the hasty retreat. A German artillery camp had been abandoned almost intact, with wagons parked and tents still standing, and not even all the guns had been got away. Indeed that very morning an enemy field battery covering the retreat had come into action a few hundred yards further along the road and had been knocked out at short range by our Divisional artillery; the guns were still standing in their hastily dug emplacements where they had been abandoned. A touch of light relief is associated, by the way, with the abandoned camp, for here were found many giant jars of honey, one of which quickly found its way to the General's mess. The rumour spread before long that their honey had been infected with cholera germs, and two other messes, which had also acquired jars, determined to destroy them, one by pouring the honey into the gutter, and the other still more conscientiously by burning it with petrol.

The next day we camped beside the road near Popcevo, a few miles short of Strumnitza, and I spent many hours interrogating prisoners and stragglers. Little could be gleaned with regard to the Bulgars' intentions except that they were going back towards old Bulgaria and were not likely to make a stand in the Strumnitza Valley, and that the retreat by the Costurino road had been a mere *sauve qui peut*, which the officers had been powerless to restrain. A German warrant officer, who was captured dead beat by our cavalry in Strumnitza the previous day, was unfortunately too exhausted to be interrogated at length, for he had come from the west of Vardar and had had 72 hours, without sleep, in the saddle.

Interest was further aroused by the arrival in a powerful limousine with a white flag, of the Secretary of the American Legation at Sofia, with a Bulgarian major from Headquarters. They were, I fancy, carrying a duplicate of the message brought

by the Parlementaire who came into our lines on the 26th, as stated in General Milne's despatch. (*Gazette*, January 22nd *Times*, January 23rd, 1919.)

Next morning, 29th, I rode early into Strumnitza, where some 200 stragglers from the Bulgar Army had given themselves up to our cavalry when they entered the town, and many more sick and wounded were found abandoned in a hospital. That night we camped in a picturesque orchard west of Strumnitza, and the next day after further interrogatories of the stragglers in the town, I rode on towards Hamzali, the village fixed as our camp for that night, close under the hills forming the north wall of the Strumnitza Valley. Hamzali, however, we were not destined to reach, and halted at Petralic, a poor hamlet 2½ miles to the south, whence we saw the enemy shelling with their mountain guns and howitzers the road between us and Hamzali. A stubborn rearguard action was in progress, and Brigade Headquarters close to the outskirts of Hamzali were not feeling too comfortable, in the scanty cover given by a wide-spaced orchard.

Meanwhile the Hellenic Divisions on our right, who had come up at a splendid pace, were likewise faced with the prospect of a rearguard action in and about the village of Yeni-Keui, and artillery fire was lively till late into the night. But neither our attack nor that of the Greeks was destined to be pushed home, for, as some of us knew before midnight, and the remainder early next morning, the convention had been signed by which hostilities were to cease at noon the next day, September 30th.

After a few days' halt at Petralic we turned eastwards down the Strumnitza Valley, then north by the fine high road which runs beside the Struma. We were, however, ordered to turn eastwards before reaching Sofia, and struck up and across the northern spurs of the great Rila massif, past Samakov, where a visit to the American Agricultural School and Missionary College revealed a pleasant oasis of civilisation, and thence through a magnificent pine forest in which were dotted many *nouveau art* chalets of the plutocracy of Sofia, down to Kostenets,

on the Sofia-Constantinople railway. Three more long days' trek by road, of which the most interesting feature was a halt in Philippopolis and a night spent in the barracks there, recently vacated by our British officer prisoners, brought us to Mustafa Pasha, on the Maritza, where our Division, which had come round through Sofia by train, was assembled for its threat to Adrianople. Within a day or two of my arrival there came news of the armistice with Turkey, and before we left, for the Danube by rail, hostilities with Austria and then with Germany had terminated.

The cessation of hostilities on our front did not mean that the duties of an intelligence officer had ceased. Evidence of enemy identifications was still needed, especially regarding the German units attached to the Bulgarian Army. Documents and shoulder-straps, limbers and lorries might all yield valuable information as to the German units which had shed them in their retreat. A single post-card, or even a temperature chart from a dismantled field hospital might, and I fancy often did, actually solve questions as to the presence on the Macedonian front of a unit presumed, but never previously confirmed as present.

Of course one's search was often comparatively or even entirely fruitless. Some abandoned lorries yielded nothing at all, and one promising-looking heap of correspondence, which I toiled a long way to examine, proved to belong to the sanitary section attached to the non-combatant company in charge of the Bulgar Ninth Divisional Gardens—not a very formidable unit! But on the whole the interest continued all the time during which we followed the route of the enemy retreat, and I am left with the impression that intelligence officers have a good deal in common in their methods, on the one hand with rag-pickers, and on the other with archæological explorers.

MOUNTAIN AND SEA.

By MATTHEW BOTTERILL.

II.

" Sail largely into harbour or keep the seas with God."
—EMERSON.

Not for me the thrills of big game shooting, of Arctic exploration, or the altitudes of Everest, for the combination of yachting and mountaineering exercises such a lure that one cannot readily tear oneself away from it.

One wants mountain and sea in close proximity, a requirement which is satisfied on the west coast of Scotland to a greater degree than elsewhere. For is not the summit of Garsven but ¾ mile from Scavaig on the map? If the route were level it would be a quarter of an hour's walk.

For years my great ambition has been to go to Scavaig in a yacht of my own. A former article (see *Y.R.C. Journal* for 1921) records last year's failure through bad weather. This year I have been there four times—but let us proceed with the Log.

1921. APRIL 26TH.—Arrived aboard *Molly* with cook (A.B.) and steward (F.F.), having travelled by car from Ben Rhydding. We retired at 10 o'clock and had not then finished stowing all the provisions and tackle.

APRIL 27TH.—Further provisions arrive; shall we ever get everything stowed? We leave Tarbert, Loch Fyne, at 2.15 to try the engine. It goes all right, so we carry on to Ardrishaig and get into the canal. We pass four locks, then *Molly* sniffs out a tiny breeze which we cannot feel, and we drift and enjoy the charming evening with music on deck. When darkness falls we tie up to some trees in a pretty spot.

APRIL 28TH.—We reach Crinan at 2.45, thankful to be clear of the locks, and in half an hour *Molly* is under weigh, with a fine following wind. After passing through the tide race of Dorus Mohr, which was running strongly, up goes the mainsail and a fast run with favourable wind and tide soon gets us clear of the dangerous navigation by the Slate Isles.

APRIL 29TH.—Slacking and further provisioning at Oban whilst awaiting the mate. He turns up earlier than expected, so we leave for the wilds at 4.30 and spend the night in Loch Aline.

APRIL 30TH.—Loch Aline in the early morning light is surely the most lovely stretch of water there is, and the mountains of Mull are truly a fitting background. Under way at 7 a.m. (summer time). Skipper and mate sail *Molly*, whilst cook and steward prepare breakfast. Our cook is one of the few who take a pride in their preparations, and is a treasure downstairs, for he can cook bacon and eggs, prepare coffee and toast and keep *Molly's* engine running at the same time. This serving of meals under way (save in stormy weather) is a great time-saver, and when the meal is ready we heave to and all eat together, or take turns at the tiller. We put into Tobermory (Mull) and then proceed round Ardnamurchan—the most westerly point of the mainland—a dismal spot indeed and best described as a geological dump. We anchor off the Island of Eigg at 8 p.m.

MAY 1ST.—From our anchorage the curiously-shaped Scuir of Eigg offers great temptation to rock-climbers, but we resist it and proceed at 10 a.m. towards Skye. Having reached the nearest point of Garsven, we take in sail and proceed under power into that " Prison of shrieking little whirlwinds," Loch Scavaig. *Molly's* crew has spent much of its spare time reading of the dangers of Loch Scavaig, its dreadful climate, inhospitable boggy shores, and rocky ridges; judge then of our surprise. It was a perfect day and could scarcely have been better for entering a strange place. Anchor was let go in a flat calm at 5.15, and hardly had the chain ceased to rattle when a weird unearthly cry came from the shore. It was ominous, as though Scavaig had lured us in and the wraith of some former victim was anxious to warn us away. Possibly a bull seal!

Scavaig was wonderfully still, and the peaks so clear that they appeared to hang over and shut us in like the walls of a prison. After tea we stroll on the impressive shores of Loch Coruisk and find everything unusually dry.

MAY 2ND.—Skye weather begins in the small hours. By daylight the Mad Burn is once more a series of fine cascades. By 10 o'clock the heavy rain squalls and gusts of wind cease sufficiently to allow skipper and mate to be landed, but the steward, on attempting to regain the yacht, is caught broadside by a fierce gust and whipped over to Eilean Glas, where he is unceremoniously tippled out. When we on shore can again stand up we perceive the steward is safe and has recovered boat and oars, so we proceed with our climb. The route up Garsven has often been done and needs no description. The last 200 feet consists of small scree upheld by outcrops of very rotten rock, thus achieving an angle which is incredible for such a decrepit face. On this occasion it was all frozen up, or I would certainly have tried some other route.

The northerly wind is piercingly cold, though not violent, and in sheltered places we enjoy warm sunshine, and with such a clear atmosphere the views are naturally attractive. *Molly* lies in the black little loch seemingly at our feet. The loch is marked with white streaks, which at times develop into a surface of milk as the fiercer gusts below whip up the spray. On descending we find our poor steward still marooned on his island, where he had been kept prisoner by the fierce gusts for eight hours, without food or a smoke and with no means of communicating with the yacht; seals his sole company. He is now an authority on seals. We await a lull, then steward drifts to the shore, and with joint efforts we regain *Molly*, where is provided a meal worthy of the occasion. Sitting in the snug cabin with pipe and glass we enjoy in retrospect the adventures of the day.

Scavaig having now justified its reputation, the next day sees us dragged out of our berths at 5.30 by the cook, who once upon a time saw Scavaig in a south-westerly gale and is genuinely anxious to get away, so we creep out of the little anchorage at 6.15, like guilty burglars, before it wakes up. During breakfast we clear Rudha nan Easgainne (pronounced on *Molly* as "Ruddy Gas-engine"). A word of apology now for taking liberties with the Gaelic. When you realise that

Camus Ffhionairidh is pronounced Camusunary, you will perceive that our Mollyfied method is probably no further off than any honest Saxon attempt would be, and our versions have the inestimable advantage of being easy to remember. On rounding the Point of Sleat we take a last glance back at Scavaig and see that a snowstorm is in full progress. When crossing the Sound of Sleat we solemnly commit to the deep the remains of a duck which had become "high." By reversing the only stiff collar on board *Molly* we create the Rev. W.P.I., who reads the burial service from the sailing directions. Meanwhile the storm over Skye is in hot pursuit and has already enwrapped Rum, and we reach Mallaig at noon just as it breaks there.

We must now cut out detail; how the mate was dared to walk the streets of Mallaig in a dreadful tammy and did it, how we played billiards when all on shore (including the table) appeared to be rocking, and all scores were from opponents' misses, how the mate refused coffee and tea in favour of Instant Postum, which from being nicknamed "Insane Custom" ultimately became known on *Molly* as "Constant Piston," in honour of our auxiliary engine's untiring efforts; these and other things must be cut.

On the 4th we enter Loch Hourn (the Loch of Hell) in a double reefer with hail—things get adrift in the cabin, the rice pudding is found careering on the floor. The cook, economical soul, saved a lot and served it later as *sauté de riz*. Above 1,000 feet the mountains are clothed in snow, part in black cloud and part in vivid sunshine, affording views which defy description.

MAY 5TH.—If in later recollection one day should stand out more than another surely it will be this one. We leave our anchorage by Eilean Rarsaidh at 7 a.m. in bright sunshine, astern the snow-tipped serrations of the Coolins, to port the fine sweeps of Ben Scriol, on the starboard hand the snow-filled corries of Knoydart stretching away ahead to Laoar Bheinn, whose thousand foot rocky precipices stand out darkly against the gleaming snow gullies, beneath us the lightly rippled surface of blue water. And all this on a hot summer-like day

which tempts one to swim. I have made a note of Laoar Bheinn as a suitable hill on which to climb.

As this glorious day wanes, we turn into Loch Nevis (the Loch of Heaven), anchoring by Glaschoill as the weather turns "sick" and we are soon in for a dirty night. In the Loch of Hell it was heavenly, but in the Loch of Heaven it rains like —like it does rain in Scotland. A day or two later we are in Rum, noting the fine rocky ridge which leads to the summit of Askival. We round Ardnamurchan once more without undue anxiety, for though the Atlantic roll is 50 or 60 yards across, it is easier to deal with than the shorter steeper seas of the lochs. As a result of much discussion, Ben Nevis is our next objective, and we accomplish a record sail from Tobermory, shooting the Corran Narrows when the spring tides are running their hardest. We have a commanding wind and are ejected at the other end like a pea from a pea-shooter, but even with the strong favourable wind it is no easy matter to keep *Molly* on her course through the whirlpools and eddies.

MAY 10TH.—We remain in our charming little anchorage opposite Fort William until the rain ceases at 11 a.m., and then go ashore for lunch, which proves more expensive than satisfying. We leave the little town at 2 p.m., and under the misguidance of the cook waste some time on the wrong side of the Glen Nevis stream looking for a bridge which is no longer there. The stream was in spate, and its crossing ultimately cost us a wetting. He then led us up the tourist track, as we had started too late for tackling a long ridge climb, and a very wearisome track it proved, for it seems to have been planned to miss all the impressive views the mountain undoubtedly affords. What a grind! It was 7 p.m. before we reached the Observatory, and only the roof of it was showing, the rest being lost in drifts. The summit was so heavily corniced that I am sure we could not have fought our way up any of the climbs without ice-axes. For a few moments before descending the mists cleared and afforded a really remarkable view. Hundreds of mountain summits were visible and all the giants among them marked out with snow.

OFF EILEAN RARSAIDH. *Photo by M. Botterill*

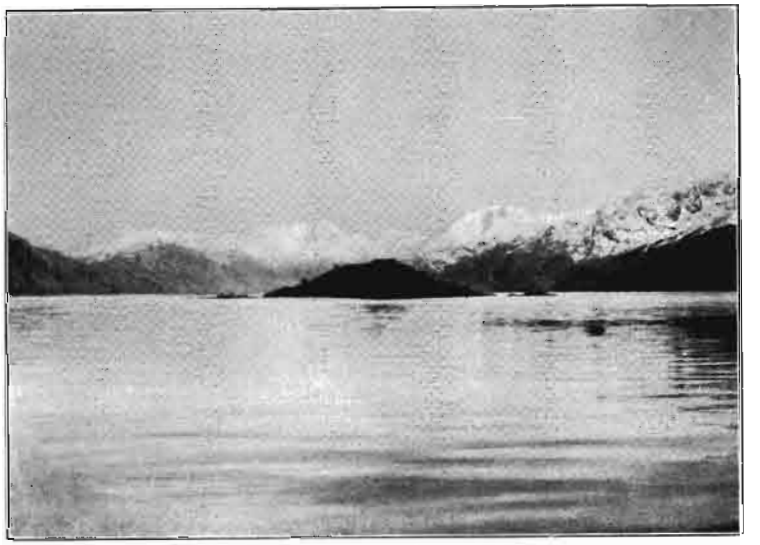


Photo by M. Botterill

SNOW-FILLED CORRIES OF KNOYDART.

June finds us again in these northern waters. There is not space to describe *Molly's* circumnavigation of Skye. The mountains of Storr and the Quiraing may not offer such excellent climbing as the Coolin, but I am sure they would provide most interesting rambling.

Exciting adventures must be dismissed with the mere mention. We enter Portree under close reefs, and at a critical moment the Primus flares and sets cabin curtains alight, we pass Floddigay all lichen-covered, half in pale green and half in vivid orange, we round the northern headlands in tide-races and pass close to the queer-shaped rocks of Fladdachuan, and once we find ourselves adrift from our anchorage and ultimately come aground. Nor can I do justice to the magnificent cliff scenery, the caves and outlying islets, all of which exercise savage fascination rather than charm.

In a forsaken bay on the west coast of Skye we fill up our census return, on the same form that is supplied to a liner, with space for a few hundred names. It seems an impertinence to spoil such lavish stationery with a modest total of three names.

The longest day is marked by an attempt on the south face of the Scuir of Eigg (see below), and *Molly's* fourth passage round Ardnamurchan is in a south-wester, a dead beat, with all landmarks obscured by rain and spray.

Many pages of the Log follow, devoted to charming exploration of lochs and islands, of a peep at Glencoe, of experiences with seals, of a rope ascent to an eagle's nest, of a whale which " blew " alongside *Molly*. " Why don't you carry a harpoon ? " asks my fourteen-year-old crew, though what we could have done towing, or being towed by a 30-feet whale I don't know. The final cruise (September) is the most exciting of all, for we enjoy a unique day on the highest summit of Rum, a week-end of struggle in a gale in Loch Scavaig, during which *Molly* saves another yacht from the rocks and is presented with a sextant, and we successfully weather Cantyre in a distressing tide-rip (112 knots in 21 hours), without any relief from constant pitching. That last sail brings us to Tarbert, Loch Fyne, and *Molly* commences her long hibernation.

* * *

THE SCUIR OF EIGG.—As we breasted the slopes of the Scuir two eagles could be seen circling the summit. Reached the rocky cliff which overhangs on its east face. The south face is almost vertical, and is undercut above the talus. Across the face a little less than half-way up there runs a shelf almost horizontally. One or two chimneys cut deeply into the cliff being continuous above and below the "Shelf."

We traversed . . . to a wide fern-clad gully, which cuts the precipice diagonally. Up to the shelf it was a beautiful rock-garden, but in spite of apparent ease it required the rope. At the shelf, the gully resolved into three chimneys. We tackled the first on the left hand and found it very stiff; a 10-feet pitch two-thirds of the way up had to be turned on the right buttress. Within 30 feet of the top the final pitch stumped us. I tried to traverse the right buttress and get into chimney No. 2 which, at this elevation, presented no further difficulties. The key to this traverse, the only available hold, was a small projection which proved loose, so we had perforce to descend, using the double rope on two pitches. Meanwhile bad weather had overtaken us, and we hastily retreated to the yacht and played chess all evening. I can face this beating philosophically, for does not the true joy of life consist in the honest effort to achieve rather than in achievement?

ASKIVAL, ISLE OF RUM.—A party of three (M.B., with Messrs. C. O'Brien and J. Wells) walked to the col between Alival and Askival. After lunch we proceeded up the ridge to the summit, and it proved a most interesting and varied climb. A partial clearance of the mist revealed a fine crag face, which one does not suspect when seeing the summit from seawards. One should be prepared to make first descents as well as ascents, so we took for our line a thin crack which seamed the most prominent buttress. Mist made some of the pitches greasy and rendered the doubled rope a useful help to the last man. I am sure it will go as an ascent, with an occasional shoulder from the second man.

Traversing along the scree we came to a great rock couloir and had tea on a perched slab. Skipper (leading) was assisted on to a sort of mantelshelf, whence commenced a climb of great severity. Forty feet up one comes to the foot of a sloping chimney, a replica in miniature of that in Slanting Gully, Lliwedd. It has the greasy crack and the alternative slabs and is about half the length of its Snowdonian pattern. The holds were like a well-fatted frying pan, and though the leader got up the crack, the others wisely took to the slabs.

Above this we were confronted with an ugly place, the chimney being crossed diagonally by a layer of decrepit trap (?) rock. After 30 minutes' vain effort this was turned by an awkward traverse to the left, leading us above the difficulty and showing us what a treacherous place it was. It was now an easy walk to the summit again. To the uninitiated to be on the summit is the reward for much otherwise useless labour. The climber soon learns to do without such stimulus; finding his pleasure on the way up, he can dispense with the view, which is so frequently denied him by mists. We had had a splendid day and accomplished good pioneer work, so that we asked nothing more of fate, and fate chose to be generous.

From the summit the masses of cumulus below were much broken, revealing the Outer Hebrides, the mountains of the mainland, and those numerous islands that dot the surrounding seas. The distant mainland was a peculiar luminous green. As we looked at the mists obscuring the seas below us there formed the Brocken Spectre, one's shadow encircled in a prismatic halo.

It was not a scientific phenomenon, but a spiritual experience. Our talk was hushed, for what is man in the great creation? The earth itself is but a speck of dust in a star-strewn heaven. . . . For a brief instant we trod the peaks with the Creator . . . The shadow faded, the luminous green changed to pink, and from deeper rose to purple. . . . It was quite dark before we once more reached the shore.

NOTE ON PRONUNCIATION.

Gaelic or Erse spelling appears to have been devised by someone with much too fine an ear for phonetics, and in the search for light on

pronunciation one is continually reminded of peculiarities which have been also retained in English spelling. To the simple phonetic Welsh spelling Gaelic bears somewhat the same relation as English does to German. Scotsmen, as a rule, take no interest in the pronunciation of Gaelic names, and the difficulty of obtaining information is so great that the following attempts are given as the best the Author and Editor can do, rather than ignore the matter. A grave difficulty with English and Scottish spelling is that the commonest vowels in the language cannot be represented with certainty in print.

Eilean Glas, Ellen Glass.
Rudha nan Easgainne, Ru-a nan Essgann' or Runa Essgann'.
Eilean Rarsaidh, Ellen Rarsy or Ellen Rarsee.
Ben Scriol, Ben Screel, probably almost two syllables, Scree-ol.
Laoar Bheinn, somewhere between Lur-ar Vane and Lur Venn. Scottish name is Larven.
Glaschoill, Glasscholl (Scottish ch).
Eigg, Egg.
Mhor, Vore.
Scavaig and *Mallaig*, Scavag and Mallag, unless these names are a Scottish version of the Gaelic.

Near Leyburn.

SNOW ON THE FELLS.

By J. Fred Seaman.

Snow had fallen heavily during the early part of the week, and there was every indication of a continuance of cold weather. We had often discussed the possibility of crossing the fells at the heads of the Yorkshire dales in snow, and now the opportunity presented itself, our only doubt was that there might be too great a depth in the drifts to permit of the project being accomplished in the time at our disposal.

Our idea was to stay the first night at Litton, and to proceed to Bainbridge by way of Horse Head Moor, Oughtershaw and Fleet Moss on the first day. From thence we would set our course as weather permitted and expediency directed.

As we arrived at Grassington station late in the afternoon, we boarded the up-dale mail 'bus, which would take us the first four miles on the way to Litton. Even this short journey to Skirfare Bridge, where Littondale joins Wharfedale, was not without its adventures, for we were compelled to stop several times until the horses could be coaxed to face the snowdrifts which lay across the road in a succession of ridges. However, when we left the 'bus at the commencement of the Littondale road and commenced our trudge to Litton, we were agreeably surprised to find that the drifts were neither so deep nor so plentiful in this sheltered valley as they were in Wharfedale. The going was not easy, for there was a strong frost and the snow was dry and powdery. Those last six miles provided nearly three hours of strenuous exercise.

A little more snow fell during the night, and when we started the next morning the air was bright and clear. We took to the fells at once, and made for the boundary wall which runs along the top of the ridge dividing Wharfedale from Littondale, following this wall until we could drop straight down the hill-side to Beckermonds. This being the northward slope of the hill, the snow was fairly firm on the surface, and we were able to sit down and glissade considerable distances, a very pleasant experience after our struggle amongst the drifts on the top.

At Beckermonds, we were told by a farmer who expressed great surprise at seeing us, that the hamlet had been completely isolated for three days, and that the snowfall was the deepest experienced in those parts for 20 years. It is well known to all frequent visitors to the up-dales that every considerable snowstorm is described as the "worst in 20 years," and that if one is curious enough to enquire about the "classical" snowstorm of 20 years ago, you may elicit reminiscences of not only that storm but earlier ones, when drifts were 30 feet deep and whole hamlets were "overblown." These extreme cases usually occurred during the lifetime of some ancestor, and the narrative usually begins—"I've heard my gron'feyther tell, when he wor a lad." For many people tradition of the past holds more wonders than the future may unfold, and in addition, the people who dwell in these remote parts are usually superstitious to a remarkable degree. They will tell you that these great storms and strange happenings in the past have always been foretold in some uncanny way.

Leaving Beckermonds we pushed on to Oughtershaw, sometimes on the road, but more often in the pastures at the side, where the road was full of snow from wall to wall. But the *pièce de resistance* of our day's march really commenced when we finally left the road just beyond the hamlet of Oughtershaw, and struck out a line north eastward, making for the highest point of the ridge (1,937 feet), for we knew that from it we should get the direction of Semmerwater and Bainbridge, and that we should also have fairly smooth country to walk over without risk of snow cornices overhanging scars, which we should be sure to encounter on the downward grade if we diverged in the direction of either col. It was now about 1 p.m., and the sun had made the snow soft and wet on the southward face of the ridge which we were now ascending. The gradient was very severe—a rise of over 700 feet in under a mile—consisting of the series of enormous shelving ledges characteristic of the district. These ledges were all filled up with snow, which presented a remarkably smooth and even surface, with the result that we were alternately stepping on a

firm surface and floundering in snow several feet deep. The warmth of the sun was considerable, and our rucksacks gained apparent weight in a remarkable way.

But when we reached the ridge we met with our reward. The view of the snow-covered fells stretching away in every direction was one of the finest we had ever experienced. To the northward, Wether Fell and the view across Wensleydale—eastwards, the huge mass of the Stake—southwards, the Horse Head, and as one turned westward, Penyghent, Ingleborough, and Whernside, all glistening in the sunshine like enormous iced cakes.

There were signs of a change in the weather, however, so we were soon plodding steadily down the ridge of the tongue which runs N.E., and longing for a couple of pairs of ski, which would have turned our toilsome progress into a glorious rush. As we passed through Marsett, we were met by a blizzard which continued for the remainder of the day, so it was with a feeling of profound satisfaction that we entered the hospitable doors of the inn at Bainbridge.

We decided to make for Kirkby Stephen the next day, if the blizzard ceased, and hoped to be able to find the old drovers' track over the fells at the east side of Mallerstang. This track, which follows the fell tops sometimes on the east and sometimes on the west side of the ridges, may still be found almost throughout its entire length from Lancashire, over the Yorkshire and Durham Fells and onwards into the Lowlands of Scotland. Although it has not been used regularly for some scores of years, it is still plainly marked in long stretches, and may be readily recognised by the shorter and finer grass and vegetation with which it is covered. This has been caused by the grazing of cattle on the route between England and Scotland during the centuries when this track was the principal highway for the transit of farm-stock between the two countries, and when the drover's occupation was not only distinctly adventurous but highly lucrative.

Leaving Bainbridge the next morning at about 9.30, in dull and milder weather, we were pleased to notice that there had

been a strong thaw during the night, and that the snow had decreased rapidly.

We took the road at the north side of the River Ure to Hardrow, where we deviated from our way to take a look at the Force under such exceptional conditions. The waterfall presented a magnificent spectacle, as the thaw had swelled the volume of water which came roaring down amongst a mass of snow and shattered ice-blocks. Like the celebrated Falls of Lodore, Hardrow Force is only a considerable waterfall in the winter or after very heavy rains.

Two miles beyond Hardrow village we left the road and took a N.W. course up the long spur of Ure Head, reaching the cairn (2,186 feet) at about 1.30 p.m. This cairn, under good weather conditions, is a very fine view-point, as it overlooks the heads of Yoredale, Garsdale and Edendale, but on this visit our range of vision was very limited by the dull grey clouds, which gave us an occasional sprinkling of rain. Owing to the great depth of snow in every hollow in the ground, progress now became very slow, and all our efforts to find the drovers' track for the first half hour after leaving the cairn were unsuccessful, as the snow covered all traces of vegetation by which we could recognise it. Fortunately my companion had plotted this track out on his map on a previous visit during the summer, so eventually, after taking many compass bearings on vague and ill-defined landmarks in the mist, we found ourselves on smoother ground, and were able to follow the track in a vague sort of way until we struck the road from the head of Swaledale into Nateby just at dusk. We followed this road to Nateby and Kirkby Stephen, returning home by train the next day, after spending a very strenuous week-end in the snow.

We were much impressed by the fact that the route of the drovers' track had not only been selected for the smoothness and firmness of the route over the fells, but so that it was comparatively free from snowdrifts, and carefully avoided proximity to scars which would be dangerous to cattle. It is of course beyond the scope of this article to enter into historical

detail regarding this ancient highway, but the writer can certainly recommend anyone desiring a walk with antiquarian interest attached, to spend a few days finding out and following this track throughout its total length of over a hundred miles.

Lake District walkers appear to have a formula for calculating "approximate miles," which they add to the total map-mileage of their walks to compensate for feet ascended and descended. After many experiences of walking in snow, we often wonder if there is any formula for allotting "approximate miles" in proportion to the number of inches of snow covering the ground to be traversed.

THE MOUNTAIN RAMPARTS OF SAAS.

By The Editor.

Beetham and I left London last summer on Tuesday, 26th July, hoping to meet Somervell and Bishop at Saas Fee at the end of the week. A delightful walk up from Visp, on a very hot day, brought us there on the Thursday.

The fame of the Supersaxos and of the Hotel Glacier had gone through the length and breadth of the land. For the first time since the war the English were swarming out to Switzerland, and the climbers to the Hotel Glacier. I hope the Supersaxos had a good season, and the first of many.

Friday was filled up with a delightful loaf. Beetham was disgusted and wanted to start for a hut. However, in the appalling heat of Saturday's grind to the Weissmies Hotel he thought perhaps there was something in it from my point of view. At the jolly little hotel (9,000 feet) we came across Lamb, Prior, and O'Malley, and heard the views of one of them on grinding up from Visp after a night in the train.

The whole line of the mighty Saasgrat is in full view, and in the middle the great peaks forming the amazing rampart which towers above the ice-falls of Fee, the Lenzspitze, Dom, Täschhorn, and Alphubel. Behind you runs another glorious rampart, the Fletschhorn, Laquinhorn, and Weissmies.

I had often wondered why no one went over the Laquinhorn south ridge, or the Weissmies north ridge, and my intention of climbing the former was partly decided by a Swiss writer in *Alpina*, who appeared to regret having chosen the Weissmies north ridge.

We left at 3.45 and reached the pass between them, mostly over glacier, at 6.10. We were feeling pretty fit, but it was a queer sort of morning, with much cloud drifting about, thunder threatening, and in the air a total absence of the wonderful Alpine tang. Of the long ridge of our desire the details have faded. Progress was easy enough for a good time until we reached a magnificent steep part, a sort of narrow face. From the eastern edge we enjoyed a wonderful view

of the Simplon side, but crosssing to the west we made our way up with only one serious difficulty. There were no bits of snow to help us on, nothing but rock and stones on a loose and narrow ridge, and as we climbed towards the first summit we knew too well that there was no wind, the day was hot, and the sun torrid. At last we were on this, and saw a long ridge curving round and up to the middle summit, itself 300 feet below the top, a ridge much foreshortened in the view from Saas, and one with gendarmes and unwelcome descents on it. From the middle summit, said the book, the top is 500 metres distant.

Refreshed by jam and bread—we could eat nothing else—we found the descents from two jolly gendarmes really not so bad, and reached the second point at 11.30. Another rest, and we began that 500 metres with two bits of snow in queer condition—no help, but restful to the feet. The Laquinhorn (13,140 feet) was reached at 12.50 and we stayed till 2.0. The surrounding peaks were mostly covered with cloud, and at first we were quite sure our sufferings in the tropical atmosphere were to be ended by a good bath, but as time wore on and the lingering drops grew no more frequent, we lost hope. The weird effects of cloud and light were only threats.

In ordinary summers, the ridge towards Saas is a mere snow run, now it looked troublesome. The snow slope was much shrunken and horribly icy. Fortunately the angle is not severe, and after some careful going, we found rocks on the left could be made use of and the step-cutting dodged. Here Beetham declared he could see Somervell not far off. So he was, and by a route from rock to rock we joined him. He had only reached Fee late the night before with a bag of some 15 peaks in a season of miracles. Yet here he was high up the Laquinhorn, a most useful guide over the endless stony ridge down to the hotel (2½ hours). The march to Fee after tea was as hot as ever.

Monday was a typical day of this glorious summer, but the extraordinary warmth made heavy going up the steep 5,000 feet to the Mischabel hut. We did not realise till long after

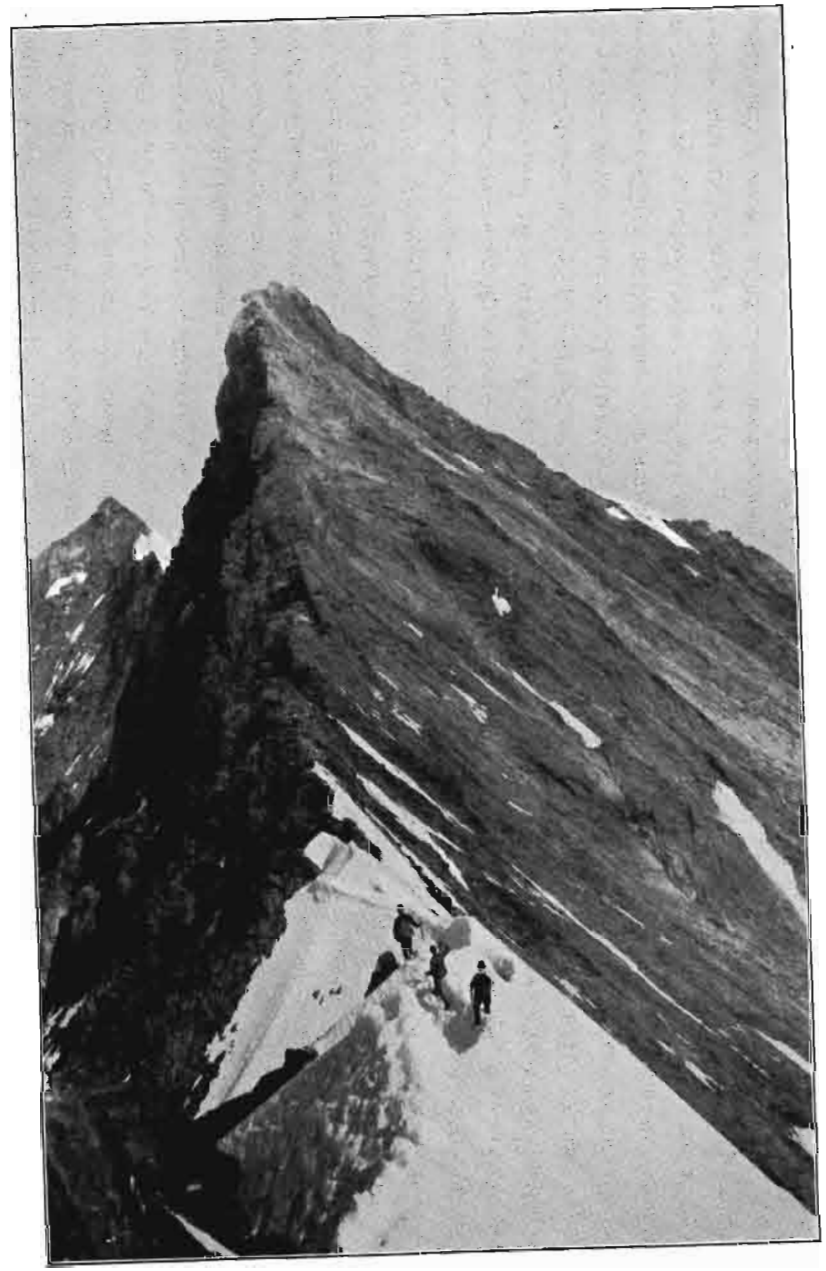
that a storm in the previous autumn had swept away almost every bridge in the Saasthal. Therefore the old path above the village led us to a bridgeless torrent. Beetham and Somervell dared a desperate leap, I, after some wanderings, was compelled to wade, and discovered that a glacier torrent can sometimes be a fraud.

On Tuesday we climbed the Lenzspitze (or Sudlenzspitze) in 4½ hours, Somervell leading, a grand climb. The lower part is up a very nice snow ridge, on which one seems to gain a much greater height than is actually the case. The principal difficulty is in starting the ascent of a great step in the ridge. As we found it, the place was clear of snow and ice, the rock inclined to be rotten, but easier and more rotten as we rose. The final stage was taken largely up a patch of loose rock, but in a normal season this part is probably utterly different.

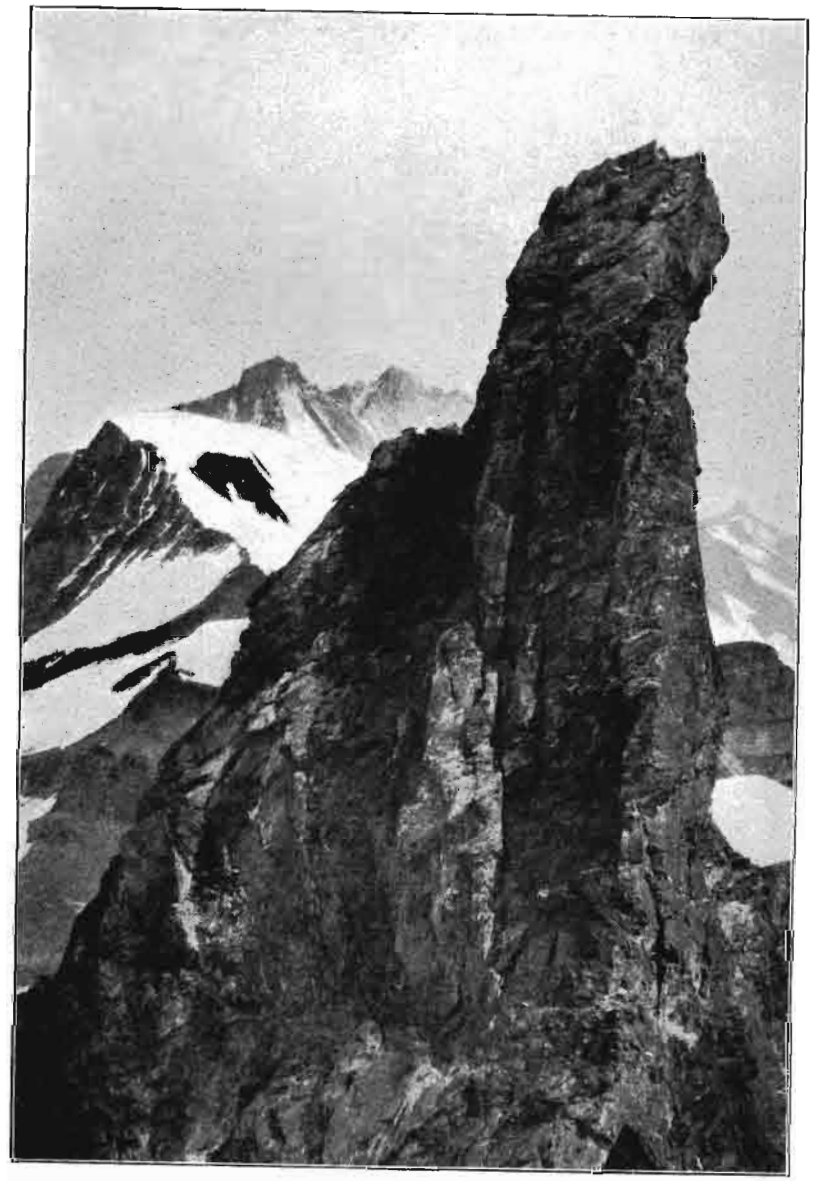
Our stay on top (14,107 feet) was pleasant, but hot, and again there was nothing of mountain freshness in the air. The view of the snow-clad Dom and the Saasgrat was wonderful. On the Lenzspitze the whole of the steep crag towards the Dom was bare, but the edge of the ridge towards the Nadelhorn retained all the beautiful form of a snow wave. At 9.40 we left and to my relief found the ice not too near the surface as we descended the horns of the snow crest, though care was only too obviously necessary. Up the rocks of the Nadelhorn was hot work, and we were much cheered each time the back of a gendarme meant only a little descent.

Soon we found a disgusted tourist surveying a very sick guide who had sat up the night before, the Swiss National Fête. We offered the two sober men all sorts of suggestions, but in the end had to leave them.

Half-past eleven saw us on the Nadelhorn (14,219 feet) and we sat about an hour. To the Windjoch we had to go down very steadily, owing to the thinness of good snow over the hard icy stuff. On the glacier, below the great walls whose skyline we had followed from end to end, the snow was deep and soft, but good to look at. We reached Fee about 5.0, making a long and annoying detour to find a bridge. The



FROM THE LENZSPITZE TO THE NADELHORN. *Photo. by R. Beetham*



RIMPFISCHHORN—GREAT GENDARME. *Photo. by R. Beetham*

best course is to keep the old path and wade the torrent not far above the broken bridge.

Bishop now joined us and the three proceeded to the Britannia hut on Wednesday, while I used a day's leisure for some necessary correspondence. Both this and the following day were cloudy, but not stormy enough to prevent their successful ascent of the Allalinhorn (13,235 feet).

The walk to the Britannia, beyond the little inn on the Plattje, seen high up above Saas Fee, greatly impressed me with its beauty, the path for two hours running along the steep slopes of the Egginer.

During the night the wind howled ominously, and the cold was really refreshing and welcome. Friday morning saw the whole crowd of 20 or so crossing a very crevassed glacier, bound for the Allalin Pass. From the pass was a most wonderful view. Roping up after breakfast in twos, we mounted rapidly up a long easy snow slope towards the Rimpfischhorn, with the tiny, tiny figures of the other parties crawling up the Allalinhorn at our backs. Up and up till we were almost at summit height. Here Somervell and Beetham waited for us, and Bishop and I went on up the bit of rock till the view along the north ridge of the Rimpfischhorn burst on us. We were on a great tower, really the north peak, and from it plunged the crag spoken of in the guide book as the Great Gendarme.

Somervell came last with great skill down the very sensational ridge, without using a doubled rope. The last bit is the hardest, and the whole was much the stiffest climb so far. It took 1¼ hours and is quite 150 feet high. After that, the rest of the ridge, delightful and entertaining, seemed quite straightforward and not so rotten as expected. The finish was up a chimney in quite the Lakeland style on to the top (13,789 feet) at noon. We had been 4½ hours from the Pass, 7½ hours from the Britannia hut, and probably found the ridge at its easiest, simply bare rock.

The view was superb. We could see the blue of the Swiss plain, much of Italy, portions of the lakes and so on. One of us thought the day the finest he had ever been out on.

As in 1908, I thought the descent to Zermatt very long. On the snow slope below the rocks, there was the same chop, chop, for quite a time at an angle on which one fidgeted to glissade and daren't. However, that came to an end, the party broke in two, and the leaders pushed on to secure rooms at the Hotel du Parc, if possible. After the running down ceased, there came a stretch of deep snow in the afternoon sun, and later that most exasperating wilderness of mighty blocks immediately one leaves the ridge for the slope above the Findelen glacier down to the Fluh Alp. Anyhow we reached the little inn at quarter past five, the other men having left before five. No one was in, and no one else had been up the Rimpfischhorn that day. Bishop had felt out of sorts on the way down, and decided to stop the night there, so I completed alone the last lap of 80 minutes to the Hotel du Parc, and such a dinner as one can only have in places where they leave the " plats " about.

We had to get our shopping done quickly on Saturday, and left by the 12.50 for Randa. Bishop, seen in the distance strolling down the street, was brought in at the last moment by shouts. He went down to St. Niklaus, walked up to Grächen, an hour or so above, and speaks highly of his stay there, and of his walk over a pass into the Saastal. As for us, we had heard of the fiery slopes above Randa, and we found them. Five thousand feet to the Dom hut we climbed in short stages; and I think we should have enjoyed all the five hours, but oh ! horror ! as we loafed half way, one, two, three —eighteen overloaded people—Swiss weekenders—a section—hut reserved ! Somervell left at the pace of perfect condition. Beetham and I got up and pushed on. When they halted we halted, and the halt was so prolonged we decided it was as we had hoped, the Swiss were having a much worse time than we were, and we were in no danger of being overtaken.

Luckily only one storey was reserved and we were very comfortable, although it was very warm in the night. The Swiss were very pleasant. Once more I was astounded at

the weights they were carrying. All had crampons, we had none, having as yet seen no possibility of any advantage from them. Several men were carrying as much as the three of us.

Late at night a guided party came in, which I understood had come up the Teufelsgrat of the Täschhorn and over the Dom, a tremendous effort.

The hutkeeper was very insistent that we must start for the Dom-Täschhorn traverse at one. I have since found that Dr. O. K. Williamson had done the traverse to Zermatt on this day and no doubt he started at one. For us it was impossible. Even at 3.30 (7th August) it was pitch dark and we only just had light enough to take us over the bad moraine on to the bad bit of the Festi glacier. It was rather interesting to find we had done this bad bit before the Swiss parties had got on their crampons. There was much less dodging among the crevasses of the icefall than we expected, and we pushed on steadily to the Festijoch on the Dom north-west ridge, where we halted, 5.50–6.30. Conditions were of the best. Magnificent weather, with a strong, cool west wind, which greatly refreshed us and kept us going all day. What a contrast to the stifling heat on the Laquinhorn and the Lenzspitze and what a view !

The north-west ridge offered no difficulty; at first we were able to vary the snow by stretches of easy rock, then it settled into a slope smashed up by the descending party of the night before, which saved us labour in cutting and kicking. At 9.10 we were up and stayed one hour. Dom (14,941 feet.) Away to Monte Viso, far south of Dauphiné, we saw the main chain of the Alps, then turned and saw it reach peak beyond peak to the Bernina and Disgrazia. Over in the Oberland we could see every peak we had ever climbed. Closer at hand the peaks and ridges of the last week. Lucky mountains, unlucky mountains, mountains we meant to do, mountains we would do again, traverses, ridges, passes—we could have stopped all day, sitting in the sun on the sheltered side of the ridge with the fresh wind tearing over the top, and the green meadows of Fee far down below.

The Täschhorn looked splendid. The only uncomfortable thought in contemplating the day's finish was—what of finding the way, many hours hence, down the rocks from the upper glacier on the Mischabeljoch to the lower glacier?

At 10.15 I led off down the rocks to the Domjoch. The first part of the journey was pleasant, and the rocks reasonably firm. Looking down the east slope, it seemed possible, apart from the danger of stonefalls, to ascend in several ways, but goodness knows what the face is like out of sight. Then the rocks steadily deteriorated, and climbing down the sides of the rotten gendarmes was most unpleasant. The final steps were for the last man worst of all, though his party were on better ground. Now we were close to the Domjoch, on to it and past it was a jolly bit of snow ridge. Two hours down—a quarter of an hour's halt. Beetham was rewarded for his patience as middleman by being given the lead. Some remnants of steps in a snow slope help us up to the rocks, and then he races over splendid firm slabs on a fairly narrow ridge to the top of Täschhorn (14,626 feet), 53 minutes instead of the appointed hour. What matter the time and the distance, in weather like this we can stand a bivouac if we get hung up!

So till 2.30 we loaf and gaze and gaze. Bit by bit, all round the horizon and back again. On again, down the long, long ridge from the Täschhorn to the Mischabeljoch, a ridge often looked at and now to be tried. The troublesome part was on the actual peak. First we went down easy rotten rock, and then over snow, alternating with stretches of the vilest stuff, on which we had to be careful not to kill one another. When fairly launched on the ridge, it proved to be, for a long way, snow with a rock edge sticking out on the west side. The snow was no highway, probably icy underneath, so we kept mostly to the rock edge. All the way down, the wavy ridge rising to the snowy mass of the Alphubel was a glorious sight, tempting us to continue over the top of it.

Somervell leading, we went on and on till we reached some gendarmes about 5 o'clock. Personally I was tiring, and as the col seemed some distance we considered a stupid plan of

descending on to the glacier by a slope of *débris*. It did not look nice, tons of rock cannonaded down, the descent became a traverse, the traverse curved up on to the top of the gendarmes, we climbed along, and were forced on to the east slope, hundreds of feet seemingly above the pass, a short descent, the snow close to the joch is in full sight and we realise it is only a couple of rope lengths away. Once more a brief discussion—the broad easy way (long enough too) to Zermatt or the gamblers' road to Saas.

Somervell is full of confidence. On to Saas!

The steep slope down to the bergschrund demanded care, but a bridge is hit with little trouble and crossed about 6 p.m. No one ever seems to cross the Mischabeljoch now and there are no old traces to help. Close to the edge which marks for us the striking face of rocks running down from the Alphubel and cutting off the lower from the upper glacier, the upper ice was very badly crevassed and we were glad to be able to gain the edge of the rocks without loss of much time. The sight of the rifted ice stretching incredible distances towards Saas had been amazing, and we knew that any prolonged exploration along the edge was out of the question and meant a bivouac. The view down the rock wall, perhaps 1,000 feet, was most impressive, and the adventure there most desperate. The route up the wall is badly described in the guide books and the description is of no assistance descending. So all we could do was to descend to a point on the edge from which we had a good view.

From this there descended a marvellous slab of rock, say 40°, its plane being at right angles to the main run of the face, and therefore forming an edge to the right and a sloping corner far to the left. To me it looked too smooth to be climbed all the way down, and I was very doubtful whether it would not break off into steeper glaciated slabs at the bottom. Somervell was very confident that he could see the connection with the glacier, and so as one or two places could be seen where a bivouac was possible, we set off. The top part was pretty stiff, but after two rope lengths an easier climb followed

to some great boulders in cracks, and then it became possible to walk on the slab where it bulged. Under these conditions we made ground rapidly and traversing to the left in a curious combination of sitting, walking and crawling, got into the corner where water raced down the slabs. This bit was wet, but the further the easier. The snow beds of the glacier proved continuous up to the slabs and at 7.40 a glissade brought us on to the glacier, a little above the head of the Langenfluh, all in broad daylight, with the sun on the peaks. It is possible our great rock slab is the snow couloir of the guide books, anything may happen in a season like 1921.

Having had a good view of the crevasses, 8 o'clock saw us on the Langenfluh. At 8.20 we started, lost the path, picked it up, and pounded on towards the lights of Saas, in the sure and certain hope of bed, for was not Bishop playing courier? An hour later I was last and turned off a broad path down to the bridge, a mile from Fee, wondering what the other fellows had done. It was gone! Confound that storm! Trying to think out what it meant, I took the broad path. Some minutes later, Somervell, a match and a map among the bushes, and consternation. I suggested sleeping there till daybreak, but the coffee was pronounced too good to miss, even though there was a long round and a plug uphill before we could draw nearer to Saas. There are not too many stones on that path in the daytime, in fact it is quite a nice path, but we did not like it because we reached Fee only at 10.

So we finished the Dom-Täschhorn traverse in 18½ hours to Saas Fee. I do not know whether it has ever been done before to Fee, parties generally going to Zermatt. Not the least impressive part of the day is the descent from the Mischabeljoch, down the mountain rampart of Saas.

SWILDON'S HOLE AND THE MENDIPS.

By Arthur Bonner, F.S.A.

Speleological work among the Mendip Hills is conducted by two Societies—(1) The Mendip Nature Research Committee of the Wells Natural History and Antiquarian Society, with Mr. H. E. Balch—speleologist, geologist, and "prehistoric" archæologist—at its head; and (2) The Bristol University Speleological Society, of which Mr. E. K. Tratman is the active Hon. Secretary and Organiser. The present writer's membership of both these Societies is an excuse for this contribution to the *Journal*. By agreement, the second—and junior—Society concentrates on the caves on the northern section of the range.

For the senior Society the year 1921, with its record drought, has been rendered specially notable by the completion of the exploration of Swildon's Hole. This cave has been known since 1901, when Messrs. H. E. Balch and R. D. R. Troup took the leading part in opening it up. Until 1914, exploration was not carried beyond a point about 170 yards from the entrance and some 120 feet below it, where a waterfall proved a barrier. In that year—as our Editor has stated (*Y.R.C.J.*, IV., pp. 273–4)—he and three others descended this fall and penetrated considerably beyond it. Messrs. Roberts' and Baker's turning point on that occasion—at the twin pot-holes—was not again reached until 23rd July, 1921, although in the interval several attempts were made, in which the present writer took a minor part.

On one of these occasions, in 1915, a wooden "boom"—an ingenious idea of Mr. R. H. Chandler's—was carried in in pieces and erected over the waterfall, and the rope ladder was suspended from its end, in the hope that explorers descending would be clear of the stream; but this hope proved illusory.

On 23rd July, 1921, Dr. E. A. Baker, with his son and cousin and Mr. R. H. Chandler, got over 100 yards beyond the fall, and Dr. Baker went on alone to a point 210 yards beyond it,

where he raised a small cairn. On this, as on some other occasions, the party suffered from insufficient numbers and equipment.

On 1st August, 1921, a well-equipped party of 15, led by Messrs. H. E. Balch, R. D. R. Troup, E. E. Barnes, and J. H. Savory, of Bristol, reached the extreme point of the cave, some 267 yards beyond "Baker's Cairn," where, at a narrow flue, the water touched the roof, and progress was effectually barred. At this point, the aneroid registered 460 feet* below the entrance; and the distance therefrom is about 647 yards.

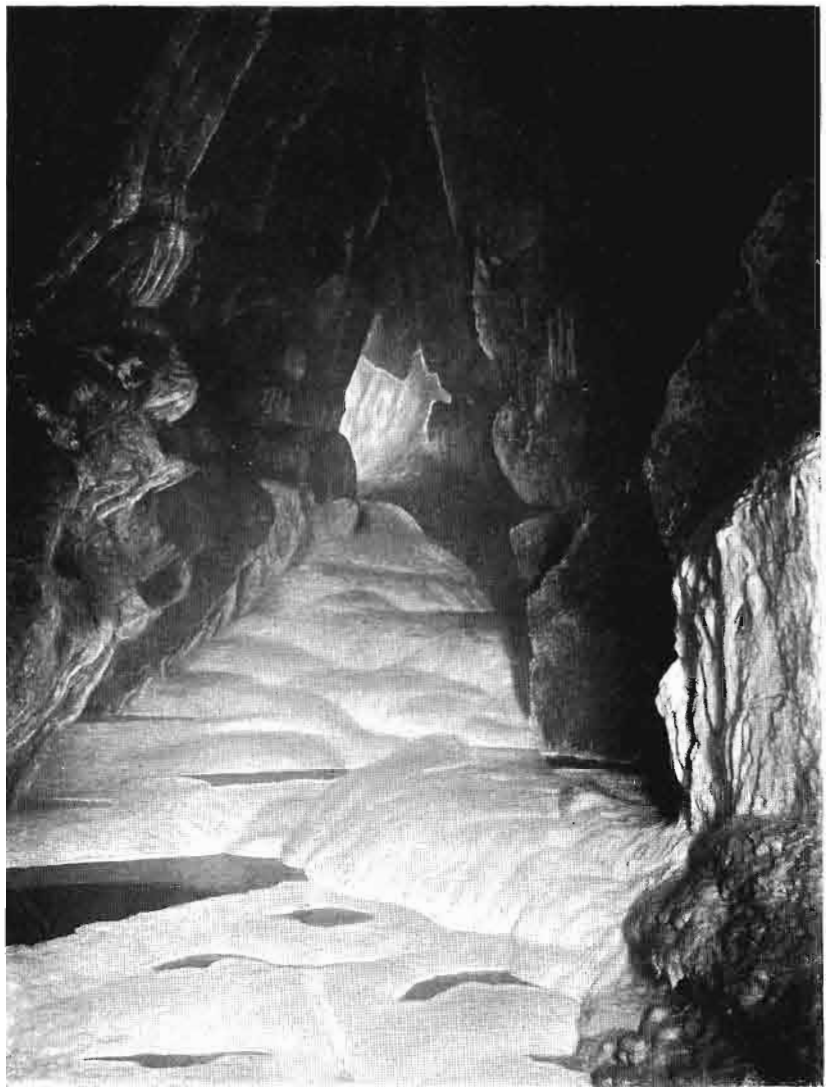
On 1st October a second strong party, 20 in number, under the same leaders again reached this choke; Mr. Balch took a number of photographs, and Mr. Troup and another carried out a rapid survey.

On 12th November a third and last visit was made for purposes of photographing; and an additional chamber was discovered.

The first and best known part of the cave, while presenting no difficulty to the practised explorer, yet gives him some good sport and exercise, and it is notable for its beautiful stalactites and stalagmites and for its many remarkable specimens of eccentric developments of these phenomena. The first 20 yards affords quite a nice little study in wriggling and screwing; for the next 50 or 60 yards a wet route may be taken by those who desire; and a few yards short of the 40 feet fall there is a squeeze, in an ascending crawl of about 12 feet through a small tunnel in a stalagmite barrier, which may be specially commended to girthy explorers—as our Editor has hinted (p. 274, Vol. IV.). This last, however, could be avoided last summer by a crawl along the water channel beneath: a muddy alternative, despite the plank which was laid down.

The "new" sections reached last summer and autumn proved to be of much interest, and to contain features of exceptional beauty. The drought had reduced the stream to vanishing point, with a mere sprinkle at the waterfalls, and the

* This figure is one to be received with caution; it represents a fall of about 250 feet in the last 350 yards, and is therefore probably too great.—EDITOR.



Copyright *Photo. by J. H. Savory*

THE WHITE WAY, BARNES' LOOP (SWILDON'S HOLE).

pools in the pot-holes beneath these were but some 12 to 18 inches deep. A little beyond the first fall, the limestone is considerably contorted or folded; the calcareous deposits are good; beyond the second fall (the " second pitch " mentioned on p. 274, Vol. IV., about 20 feet) the twin pot-holes, with their deep pools and fine scenery, are impressive; and the scenery generally is attractive. The twin pot-holes, by-the-bye, appear to have more than 6 feet depth of water, and they are climbed into and round by the aid of a taut rope. One of the August party got a sousing there.

At 390 yards from the entrance, and ten yards beyond " Baker's Cairn," lies the entrance to " Barnes' Loop," the most striking of the discoveries of the August party. It is a branch from the waterway, entered by a narrow and irregular sloping ledge of stalagmite, which rises some 15 or 20 feet as it merges in a grotto-tunnel which soon descends and finally curves back to rejoin the waterway after a detour of 49 yards. Throughout its length, floor, walls, and roof are covered by calcareous deposit, its roof richly pendant with stalactites of very varied character and calibre, from the " straw " to masses with curtain or shawl attachments. The floor has many pools whose bottoms and sides are covered with coral-like "branched" forms, and whose clear water in several cases is, as Mr. Balch has expresssed it, nearly frozen over with crystals, leaving an opening in the middle through which the lovely interior is seen. The colour is uniformly white; the crystalline surface gleams and sparkles; and the whole grotto—or rather succession of grottoes—is of a loveliness so exquisite that one despairs of adequately describing it. Mr. E. E. Barnes was the first to enter this little paradise; hence its christening. Mr. Savory, of Bristol, an active member of the M.N.R.C., and an accomplished artist in photography, has taken some excellent photographs, some of which he courteously allows us to reproduce here.

The present writer, who was one of the October party, did not go beyond " Barnes' Loop." The information respecting the further portion is gained from Messrs. Balch and Barnes. Mr. Troup has provided the measurements throughout.

Beyond the Loop the waterway is not much decorated with stalactite, but is otherwise interesting, with pools and pot-holes and a chamber or two, boulder-strewn. A deposit of river sand and a tributary stream occur near the final mud choke. Some likely openings were observed hereabouts, including a chimney of some 80 feet height (Mr. Balch's estimate). On November 12th—the third visit—while Messrs. Balch and Savory were photographing, a party led by Mr. Tratman gave attention to these and discovered another chamber, which proved to connect with this chimney. Mr. Balch has favoured me with the following note upon it—

" This place Mr. Tratman had succeeded in reaching, by climbing up on the south wall of the water channel. The climb was precarious and the slope in places rotten, but after a climb of about 30 feet, a good ledge marked the entrance of the new grotto. Entirely blocking the approach is a vast boss of stalagmite, so large that one does not realise at first that it is a boss of stalagmite at all, and indeed we debated for some minutes whether it were so or no. I think it may incorporate a bank of boulders in its mass, which is certainly 30 to 40 feet through its base. It is possible to pass round this to right or left, and on the left the approach is divided into an upper and a lower way, the latter partly blocked by stalagmite pillars and so far not passed.

" Passing through the upper one the grotto is entered and before you a lovely group of pillars appear. They stand all round, some on the great boss already referred to, some on the left wall, and a large number away in the background. The surface of the great boss is covered with very fine branched stalagmite, and this also covers every one of thousands of fallen pencils and stalactites which carpet the floor in great profusion. Dropping down steeply, this floor is reached and it is seen that it drains from every direction towards a pit in the floor, from which a vertical drop of 80 feet occurs to the waterway below, from which, as before mentioned, it is visible. Standing in the middle of this chamber, to whichever way one turns, most beautiful stalactites and pillars appear.

" From immediately overhanging the pit, a passage is visible, which can be reached without risk, and passing some very fine pillars, we entered it. Here are some strange and grotesque human resemblances, and from here one of the finest photographs was obtained. The floor ascends at a gentle gradient and is formed of dried and cracked cave earth. The floor was smooth and level and it reached upwards for about 50 feet or rather more. The termination is a pretty little archway looking into a grotto which has not been passed, as it is entirely filled with beautiful stalactites which would be destroyed in passing.

" I estimate the total length of the grotto is about 70 feet, and its maximum width is slightly more than the great boss before referred to. It is very lovely, richer in pillars and stalactites than any other part of Swildon's Hole, but entirely lacking the glorious whiteness which is the special virtue of Barnes' Loop. The carpet of fallen pencils suggests to me that it is of great age and that on rare occasions of enormous flood a gale of wind must rage round the grotto and bring them down. It stands just at the right place for such a thing and I cannot otherwise account for it."

The main stream at Swildon's has now resumed its normal conditions, and when I saw it this Easter it seemed a little fuller than usual. When Barnes' Loop and the Tratman Grotto will again be accessible no one can tell.

Elsewhere in the Wells area the main activity has been at Hill Grove, about three miles from the little city, where a " swallet " or swallow-hole has been for some years an object of interest. It lies in a wooded hollow rather less than 800 feet above sea. Mr. J. H. Savory has been a leading worker in clearing and excavating the swallet in the hope of gaining access to negotiable fissures etc. by which the stream makes its way down to join the waters from Swildon's Hole and Eastwater Caverns to form the River Axe in Wookey Hole. Work here culminated in a special effort this Easter (1922), after which it was reluctantly decided to abandon the scheme—for the present at least. At Easter, 1921, Messrs. Bird and Bonner

discovered a small cave in the cliff above and near Wookey Hole, which seems to be worth investigating. It is a simple rift of some 50 feet length, tapering in width from 3 feet at bottom to nothing, and 30 to 60 feet (?) height, with an earth-flooring of considerable thickness, which may repay digging for archæological finds.

The Bristol University Speleological Society exhibits the natural vigour of youth and maintains excellent activity. Its members are largely medicos, and women are admitted. Their most extensive operation, the discovery, opening up, exploration, and surveying of the Keltic Cavern, has been alluded to in this *Journal* (p. 267, Vol. IV.). A later and supplementary explanation of this cave is that it was a great rock shelter, inhabited, the roof of which fell and choked the sloping floor with boulders. The boulders are notable: one of them—supported at each end and called "The Bridge"—is exceptionally huge and must weigh some scores of tons. There is much calcareous deposition, and the stalactites include some interesting "eccentrics." At the suggestion of the Ordnance Survey Department, the name "Read's" is being substituted for "Keltic" Cavern. The Society is busily engaged on digging out the deep earth floor of a prehistoric habitation cave near Rowberrow, at the north-west corner of the range, at the junction of two hollows, near the well-known Dolebury Camp; and on similar excavations at Aveline's Hole in Burrington Combe.

CRYSTAL POOL IN BARNES' LOOP (SWILDON'S HOLE). *Photo. by F. H. Savory*

GAPING GHYLL MAIN CHAMBER. *Photo. by B. Holden*

GAPING GHYLL BY THE MAIN SHAFT AGAIN.

An early May Whitsuntide, and on the whole once more a fine one. The feature of the Meet of 1921 was the creation, by the devoted labours of the Sub-committee, during four or five very strenuous week-ends, of an entirely new line of descent in the far corner of the Main Shaft, suggested and largely worked out by the two Burrows.

The plate shows the whole apparatus very clearly, the key to the position being a crack in the corner breaking through a ledge which supported the beams and, when cleared of grass and earth, made a highway to the corner.

The " victim " walked along the ledge secured by a rope over a pulley above, descended a few steps on the ladder in the crack with his back against the rock, stepped into the chair, and secured his belt to it before releasing the rope. Landing on return was particularly convenient—people could be actually pulled up to the level of the beam—and in full daylight. The views on the journey were even more superb than along the line from the Jib Tunnel. The first man down and the last up have not the advantage of the guy-line, and the wire rope then touches the rock in several places.

An event we must not fail to notice, and with regret, is the removal of that staunch supporter of the Club, Mr. William Metcalfe, from Clapdale Hall. Hence the moving spirit of these expeditions, J. H. Buckley, met with enormous difficulties in arranging the sledge transport, and we are afraid the Y.R.C. does not wholly realise the extent of his triumphant success. A number of men reached camp on Friday, 13th May, An early party of three descended Car Pot, and later in the evening the next little pot-hole, Nettle Pot, a very amusing problem. It is rumoured that in July another party found themselves too massive to enter Car Pot.

Saturday's operations were delayed by the necessity of removing some large loose blocks close above the beams, and Seaman's successful performances with a sledge hammer from the shaky stance of a ladder rung were a great delight. That

these had not been noticed and removed is put down to their being solid enough a week before and to the accident of the earthquake. Heavy rain in the afternoon caused all traffic to be suspended after two trips to fix telephone and guy-lines.

On Sunday, Jack Buckley and E. E. Roberts repeated the Booth-Parsons crawl of 1903 from the East to the South Passage (*Y.R.C.J.*, Vol. II., p. 50). Time, one hour and a quarter from the telephone *via* East Passage to a candle placed at the junction with the South. The entrance is obvious, five yards to the right of where one scrambles into the East Passage, more obvious than the main route. First you climb down through boulders to a stiff 15 feet pitch into a small chamber, from which lead two parallel passages, right—a flat crawl, left—a hands and knees tunnel. In 10 yards a cross-over tunnel is useful, as the left-hand man cannot continue beyond the point at which he can see his comrade to the right. All the way the old string and the marks in dry silt of 18 years ago remain perfect. This passage is in fact that entered by Calvert, Booth, and Gray in 1896, the first tried in Gaping Ghyll (see *Y.R.C. Journal*, Vol. I., p. 126), and the parallel passages are indicated in their plan.

The rest of the journey is an amazingly flat crawl with hopeless prospects, and the question arises—if Booth and Parsons had the determination to push on, at how many points have their successors missed discoveries, and turned back through lack of the same determination ?

Later the West Chamber was visited; the descent is overhanging but only about 10 feet deep. No exit could be found, though the statement has undoubtedly been made that a way was once found to the canal in the Pool Chamber. The next visitors should make a more thorough examination of certain holes high up at the far end. There is any amount of choice, along the sides, of chances for the digger.

On Monday, Hudson, Ellis and Roberts laddered the Mud Chamber and went to the end of the East Passage. The impression that one can walk or climb into the Mud Chamber is wrong. The place is still as described in *Y.R.C. Journal*,

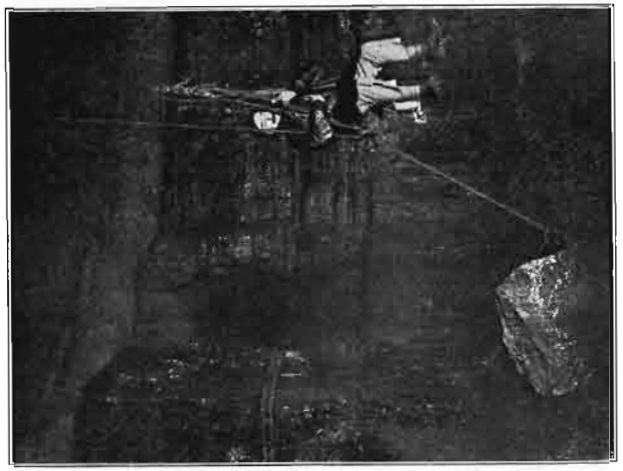


Photo. by F. Seaman

LEAVING THE BOTTOM.

GAPING GHYLL.

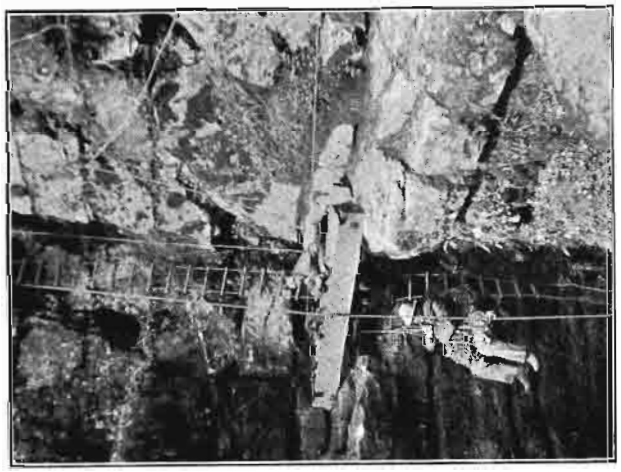


Photo. by S. Gay

READY TO DESCEND.

Vol. I., viz.—A mud traverse and short climb to a mud ridge between a very deep hole and the main Mud Chamber. This traverse, unroped, is no longer safe. Below the ridge is a dry mud slope finishing in a vertical drop (one ladder) to the head of the scree slope in the Chamber. Steadied by the ladder line, it is easily possible for the last man to come down and hold his men from the top of the ladder.

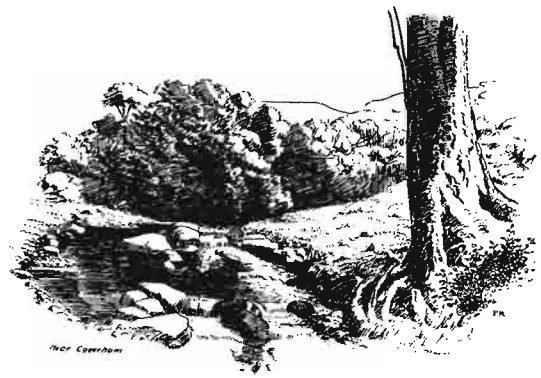
The ascent of 130 feet up the opposite scree slope is extremely impressive, and the further reaches of the passage are very remarkable, particularly the startlingly abrupt finish. The next party should carry plenty of rope, so as to be able to explore the second big chamber, which is passed high up on the side. Very obvious things could easily have been missed in such a place, and may await some happy explorer.

Most parts of the South Passages were also visited, and the Belfry at the head of the Stream Passage into the Stream Chamber again reached. There appears to be a prospect that another exploration in the lowest part of Stream Chamber may open out fresh ground.

Thirty members and friends were in camp, 44 descents were made in two days, and camp cleared on Tuesday.

Nick Pot was descended on that day and proved to be very wet, with a ladder pitch of not more than 25 feet.

E. E. R.



THE LECK FELL POT-HOLES.

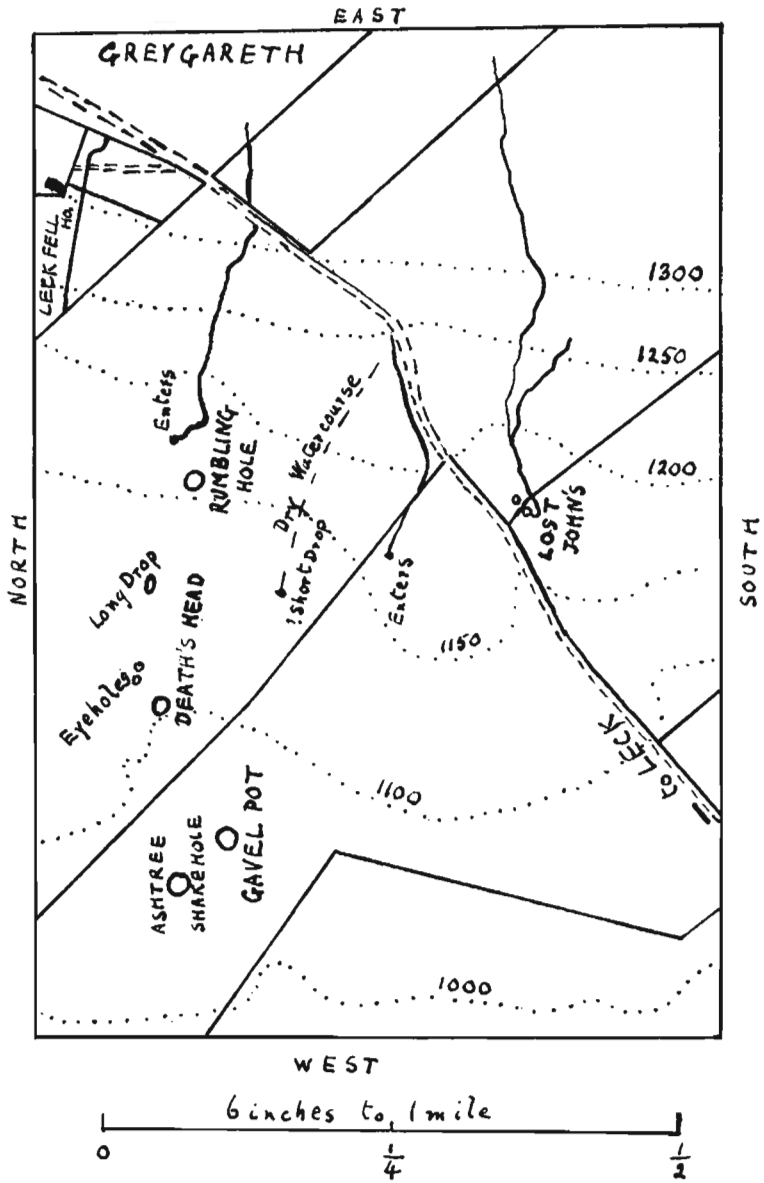
The group of chasms called the Leck Fell Pots is not in Yorkshire, but in a curious projection of Lancashire, which covers the west side of Gragreth between the ridge and Easegill, as far as a point on the ridge not a quarter of a mile from the summit above Dent.

Follow the fell road from Leck and after a steady climb up to the iron hut and half a mile past it, you reach a gate from which you see Leck Fell House on the far side of a great pasture. To the left and north in this pasture lie the Leck Fell Pots. Just behind you on the right, over the wall, you have passed a couple of sinks which contain the entrances to Lost John's Cave, and the beck which enters is the nearest water to the iron hut.

With one exception the pot-holes are all in a line, and are easily found by walking along the road nearly up to the next gate till you meet the stream from near Leck Fell House. It crosses the road and falls rapidly to the north. Where it is swallowed, an entrance looks possible, but very low. Slightly to the left is Rumbling Hole, fenced, and with trees growing from it, while straight on in the dry hollow you come to the long and narrow Long Drop Sink with the cave at the far end, a 10 foot passage leading to Long Drop itself, a perfect round dry shaft, 25 feet deep. There is no exit.

The dry hollow now tends to the left, and you find Eyeholes, fenced and with its tree too. It is possible to climb this, 30 feet at most, quite easy with a fixed rope, starting of course down a chimney into the shallower hole. A little further is Death's Head Pot, also fenced and with trees. Further on still, you cross a wall and on the left there is obvious the great chasm of Gavel Pot, with its wealth of trees, unfenced, while on the right is conspicuous the top of an ash tree, which grows from the bottom of a deep sink, called, I suppose, Ash Tree Sink.

Short Drop Cave I believe to be the swallow hole of another watercourse half way between the hollow you follow and the



SKETCH MAP—LECK FELL POT-HOLES.

wall you pass at the first gate, and which is climbed over to go to Gavel Pot. Short Drop is connected with Gavel Pot.

LOST JOHN'S is a very interesting cave, even without passing the first pitch, and about two hours are required to explore this portion alone. Balderston (*Ingleton : Bygone and Present*) appears to have used the dry entrance, but the obvious way in and out is by the beck. After one or two pools and a few trifling obstacles you reach a T junction and join another stream. Upstream you soon reach another fork; the left branch is short, the right much longer. Both appear to terminate below surface sinks, and it is possible that the longer comes from a fine pot-hole, 200 yards east of Lost John's, which can be descended without much difficulty, and is named Lost Pot by Cuttriss. Down stream you have a climb which the stream has luckily left dry, and next the first pitch which has to be passed by the formidable Roof Traverse.

The rest of Lost John's is well described in the *Y.R.C. Journal*, Vol. II., pp. 28–34.

The following notes on the first explorations of Death's Head, Rumbling Hole, and Short Drop are extracted from Mr. S. W. Cuttriss's papers, which he has generously placed at the disposal of the Club.

RUMBLING HOLE (May 21st, 1899, W. Parsons, J. W. Swithinbank, G. T. Lowe, H. Woodhouse, and S. W. Cuttriss).—Under normal conditions there is no water entering this pot-hole, which will probably therefore be practically dry. Owing to the prevailing wet weather, the ground was thoroughly soaked and a stream of water entered the pot at the east end, about 30 feet from the surface.

The chasm was descended from the west end, where the rope ladders were quite clear of the waterfall. At about 100 feet down there is a shelving floor covered with fallen stones. The chasm has the appearance of a fissure at this level, about 40 feet from east to west (approx.), by 6 to 8 feet wide (these from memory). The east end only appears to be much water-worn. The remainder of the descent can be accomplished by climbing down the bare rock to the base of the water-

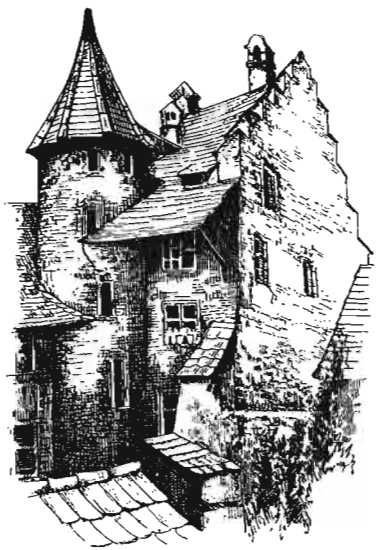
fall, at the expense of a good wetting. At this point candles have to be lit and the descent continued by climbing to a total depth of about 160 feet from the surface—following the water. Further progress is then stopped by the lowering of the roof to the surface of the water. Parsons and Swithinbank only descended lower than the 100 feet level. I remained at the 100 feet level for the purpose of obtaining photographs. A few stalactites were reported in the lower portion, but none elsewhere. The water channel was said to trend in an easterly direction.—S. W. CUTTRISS.

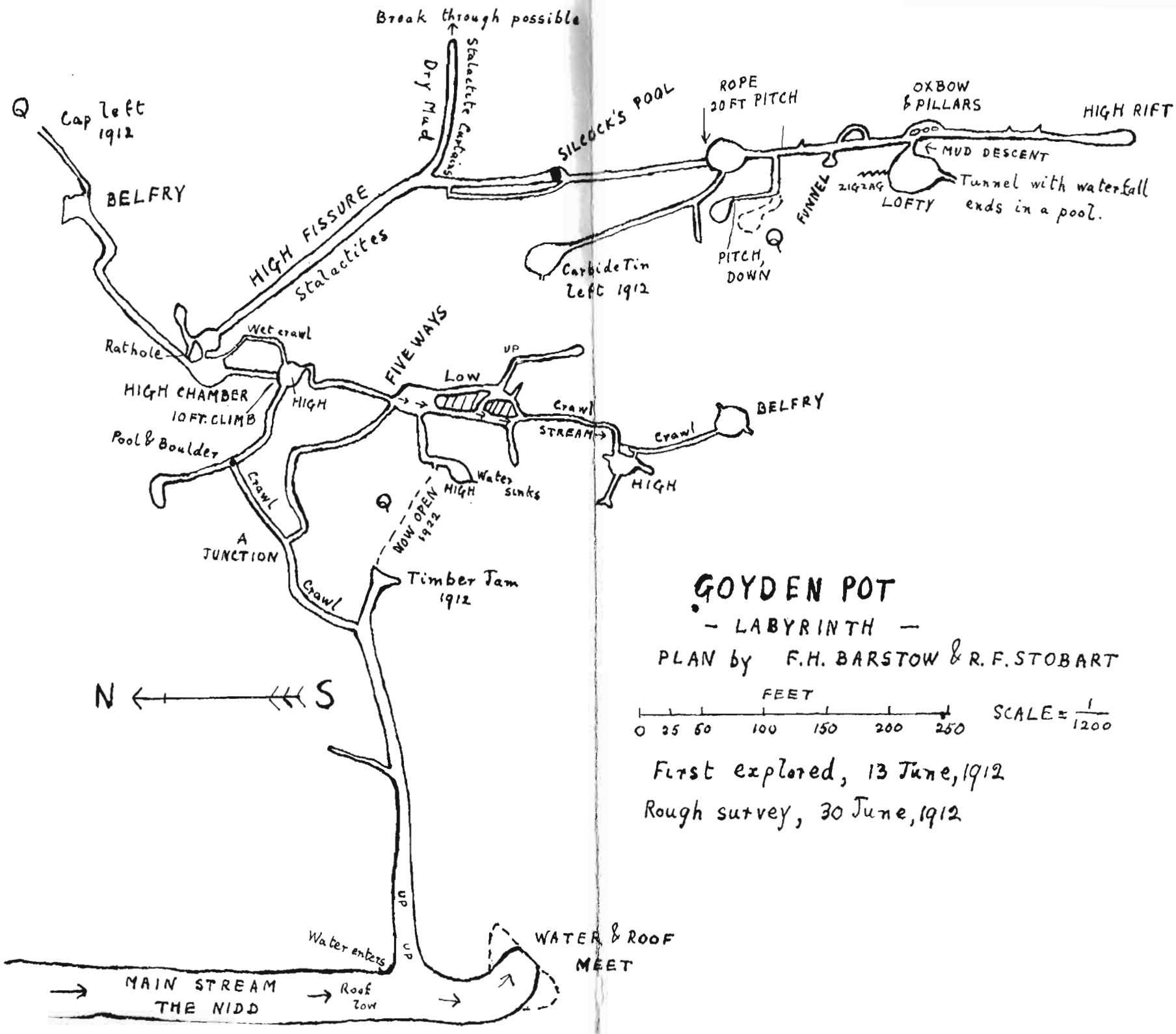
DEATH'S HEAD POT (Whitsuntide, 1898, W. Parsons and J. W. Swithinbank).—This pot-hole appears to be one of a series resulting from a main fracture in the limestone. The depth to the bottom of the main shaft is 200 feet sheer. Parsons and Swithinbank report the ladder climb very trying. Beyond the bottom of the main hole is a steep stone slope (dangerous) and then a difficult rock climb to a total depth from the surface of about 260 feet. [268 feet.—ED.] It ends in a rather fine chamber with a small waterfall at one end. These notes are from memory 18 months afterwards, I having lost my note book.—S. W. C., 1900.

SHORT DROP CAVE (July 21st, 1898).—J. W. Swithinbank, J. H. Buckley, and self investigated this cave and, as I had already surmised, it was found to lead to the stalactite chamber in the passage communicating with Gavel Pot, so there is a continuous route from one to the other. About 150 feet from the entrance the passage is very low and can only be negotiated by lying at full length in the water and can only be passed when the water is dead low. This appears to be the place where the channel passes from one bed of limestone to a lower one. About 20 feet further on it gradually opens out from the sinking of the floor and continues to increase in height steadily all the way until at the stalactite chamber it may be 30 or 40 feet high. The roof appears to be the flat underside of the bed of limestone. In places the passage is not more than about 10 inches wide, at other times perhaps 6 or 8 feet. At about three-quarters of the way in there is a bridge of fallen

rock, which should make an interesting photograph. I only know of one similar case and that is in Douk Cave near Kettlewell. The passage is cut through a black bed of limestone and extreme caution should be observed in walking when past the bridge, as it is impossible to distinguish the stalactite chamber at first, and a false step might be made over the brink to the bottom of the chamber, 12 or more feet below. —S. W. C.

No description of Gavel Pot is available yet.





GOYDEN POT

– LABYRINTH –

PLAN by F.H. BARSTOW & R.F. STOBART

FEET

0 25 50 100 150 200 250

SCALE = 1/1200

First explored, 13 June, 1912

Rough survey, 30 June, 1912

GOYDEN POT, NIDDERDALE.

The Club Meet at Middlesmoor, on 8th and 9th October, 1921, led to the invasion, by at least 15 people, of the labyrinth discovered by Barstow and Stobart in 1912.

The interest aroused in this now very remarkable cave decided the Editor to publish the plan of the labyrinth, and a description of the cave. The original explorers have, however, shown no literary enthusiasm and he has been left to do the text himself.

The completest description so far is G. T. Lowe's. in Bogg's *Eden Vale to the Plains of York,* which takes one as far as the end of the River Passage and describes the cave as containing much mud. The mud has now gone and the climb along the rapid descent of the river is easier, no rope being needed. The Editor understood that the cave is regularly flushed by the discharge of masses of compensation water from the Angram reservoirs higher up the Nidd, and that it is by no means a place to venture into without careful enquiry. To these floods is probably to be ascribed the removal of the mud spoken of in earlier descriptions.

A citizen of Bradford having interviewed the Lord Mayor, and the Lord Mayor having ordered restraint of the waters, the Club is duly grateful for the safety and pleasure of their day below, in the otherwise dangerous area.

First, let us destroy the fable that Goyden Pot is only a mile from Middlesmoor.

Next, let it be understood that Goyden Pot is the big cave-mouth, into which in wet wintry weather the whole River Nidd rages. In drier times, when the river disappears higher up, it is to be seen in Manchester Hole, a cave 20 yards from the bank, on its way to Goyden Pot.

At such times one travels into Goyden along a dry wide passage to the first turning on the right, and a short distance along this into the River Chamber, down the side of which one scrambles to where the Manchester Hole water, i.e., the Nidd, emerges.

To complete the exploration of the upper level, a few steps forward from the turn to the River Chamber there are two openings on the left which are simply the ends of a big ox-bow. Opposite them is the big window looking down into the River Chamber. Further on the main passage bends left, and finishes in a chamber which, in October, 1921, had three plugged exits. Seaman states that these were once clear and led to other chambers.

In the River Chamber, the Nidd descends rapidly and then flows along a fine stream cave. This is gained by a fairly difficult scramble down big clean rocks, finishing by a tricky little traverse above a pool. On the way the roof descends, and forms a bridge with wide upper passage. Seaman reports 30 yards of it plus other passages.

On the River, after a sharp turn, wading is necessary, and it cannot be followed further than a wide bedding plane, partly choked with timber, in which the water seems to meet the roof.

On the left, a little before the end, is very obvious the mouth of the Labyrinth, and, not so obvious, the inflow of a tributary. So far we have walked upright, the rest must be assumed to be crawling, unless the context shows otherwise. Barstow and Stobart first explored the new passages 13th June, 1912, and made a rough survey on 30th June, 1912. Their plan was found by the 1922 parties to be a remarkably accurate piece of work, though only done by pacing and compass, especially for the time taken, said to be four hours. It is reproduced with some verbal additions only, and two points have been marked Q where additions may be made, and one where it is doubtful. A future expedition should aim at checking these points and at putting in the exact course of the little stream in the most intricate part near the Five Ways.

It would have been interesting to know whether the first explorers found the entrance as clean as did the 1922 parties. At the first fork, Burrow's party went straight on and came to the Five Ways. Hence the Timber Jam of 1912 must have gone.

The Editor's party crawled past the "A" Junction, the pool with boulder, to the Ten-Foot Climb, which is the best landmark in the labyrinth. Once up this comes some walking. "The Cap Tunnel" from the Belfry, marked Q, has been followed many painful yards without reaching the end. It has *not* been paced.

The next portion, a high fissure, feels like a broad highway. It contains some fine stalactites etc. and a singular beehive mass. Like other "beehives," this beautiful formation appears to be solid, but proves instead to be a mere shell, and actual beehive shape. It has clearly been formed over mud, which is now being washed away. There are several signs that changes are taking place in the mud deposits here, and the place deserves a careful examination.

Beyond the pot-hole with the 20-feet descent, where a rope may be left, the furthest reaches of the cave are most interesting and well worth the crawling to visit. The extreme end and the side pot-hole are both very lofty and very fine. It looks possible to climb a long way up the curious funnel or chimney opening on the west of the passage. Almost every characteristic of water action on limestone can be studied in this area.

Six and a half hours were spent underground.

The question ever present in the minds of all who enter the Goyden Pot Labyrinth is, to what extent is the place flooded during the discharge of compensation water?

The Editor's opinion, given for what it is worth, is that last October the low clean passages extending from the Ten-Foot Climb and the Five Ways to the Nidd had been filled very recently, and the high passage with stalactites had been invaded. Beyond there were no signs of flooding, and in fact there was a passage with dry mud to crawl over, a much appreciated change.

E. E. R.

CHIPPINGS.

ADVISORY COUNCIL.—The Club has given its adhesion to a Council formed by the various mountaineering clubs, with the object of making united and weighty resistance to attempts to damage the hill country and to interfere with access to it.

MEMORIAL TO NORSK SEAMEN.—In September, 1921, Mr. W. Cecil Slingsby unveiled at Bergen a bronze memorial tablet to commemorate the bravery of the hundreds of Norwegian sailors done to death by the methods of marine assassination practised by the Boche.

THE ALPS IN 1920 AND 1921.—There has been no difficulty in visiting France, the existence of passports delaying the traveller only a minute or two. A host of British climbers went to the French Alps in 1920, and was mostly diverted to Switzerland in 1921.

There was some inconvenience in leaving Switzerland in 1920, and a great deal in crossing Switzerland from Italy. Swiss conditions were much improved in 1921, but there was, at some points, much delay at the Italian frontier railway stations. The frontier Alpine passes were closed.

In 1921 the direct route to Switzerland was reopened, a train being run to Bâle three times per week out and home, *via* Laon and Rheims, somewhat of a feat at express speed over such a badly wrecked permanent way.

The season of 1921 was brilliantly fine and warm up till 10th August, and the uniform success of expeditions might almost be described as "summit slaughter." After that the weather became as consistently bad, and the missing snow was rapidly replaced.

UNFRIENDLY ITALY.—The Editor and his companions were greatly surprised on the afternoon of 10th August, 1921, at being held up on the Monte Moro Pass by Italian guards and turned back into Switzerland, although provided with proper passports and visas. They were told to go round to Macugnaga, the Italian mountain village under Monte Rosa, by Domodossola on the Simplon, about as useful advice as directions to Wastdale Head from Langdale by high road.

The incident was the more annoying as it afterwards appeared the Swiss-Italian mountain passes were closed in 1920, and the fact had not been made widely known.

There is no difficulty whatever on the French-Italian frontier, and by crossing the little-used passes which do not lead to huts, it is obviously possible to get over into Italy from Switzerland. What the penalties are if some gendarme begins to make inquiries and finds your passports without an official stamp, we do not know, but judging from our own regulations, we imagine it might be most unpleasantly difficult to escape a court of law.

The attitude of the Italians towards British mountaineers is greatly to the advantage of the Swiss. The Italian valleys were too little visited by Englishmen before the war, and the effect of the two seasons' stoppage is only too likely to confirm the habit of sticking to the Swiss side.

The Alpine Club is endeavouring to obtain a modification of the regulations and the Monte Moro Pass (Saas to Macugnaga) is known to have been opened in consequence.

METRES AND FEET.—The ease with which men climbing abroad can convert map heights into feet deserves to be better known. Taking the metre as 40 inches, or $3\frac{1}{3}$ feet, (in other words, add 0 and divide by 3) means in the Alps a result 100 to 240 feet too big. Subtract one-twentieth of the metres and you are near enough for mountaineering purposes.

If you want to be right not only to a foot but to an inch, work out the above and further subtract one-fourhundredth of the metres number.

Reason.—39·370113 inches = 1metre,
but 39·37 inches = $3\frac{1}{3}$ ft. $-\frac{1}{20}$ ft. $-\frac{1}{400}$ ft.

LITERATURE OF CAVE EXPLORING.—Those of our numerous new members who seek information as to the position of caves and accounts of what has been done, will find what they want from comparatively few sources besides this *Journal.*

Proceedings of the Yorkshire Geological Society—
Vols. XIII., XIV., XV. Underground Waters Report (Malham and Ingleborough).
Vol. XIII. Notes on Caves (S. W. Cuttriss).

BALDERSTON, *Ingleton: Bygone and Present.* (Ingleborough, Kingsdale, Leck.)

BOGG, *Border Country.* Chapter on High Ribblesdale by Lewis Moore.

BOGG, *Eden Vale to the Plains of York.* Chapter 16, Nidderdale, by G. T. Lowe.

SPEIGHT, *Craven and N.W. Yorkshire Highlands.*

SPEIGHT, *Tramps and Drives in Craven Highlands.*

MARTEL, *Irlande and les Cavernes Anglaises.*

BAKER, *Moors, Crags, and Caves of the High Peak.*

BAKER AND BALCH, *Netherworld of Mendip.*

MARTEL, article on British Caves and Speleology in *Geogr. Journal,* X., 1897, pp. 500–511.

Encyclopædia of Sport, article Mountaineering, sub-head Cave Exploration, by J. A. Green.

For Martel's work abroad consult *Les Cevennes et Region des Causses* (1890) and *Les Abimes,* a magnificent tome in the Club Library, describing the exploration of the great French caves and the Adelsberg.

THE OUTFLOW OF HULL AND HUNT POTS.—It is stated in the books and even in the Underground Waters Report, that Hull Pot water emerges at Horton-in-Ribblesdale at Douk Gill, and so flows to the Ribble past the church, while Hunt Pot water emerges at Brans Gill, further north, and so enters the Ribble at the bridge by the Crown Inn. This statement is now difficult to overtake, appearing even on the

Six-inch Ordnance Map, but it has not been true for many years past, if indeed it ever was, and the idea of crossing waters must be given up.

Brans Gill is a permanent stream, Douk Gill is often dry. Above, Hull Pot Beck is permanent, Hunt Pot is constantly dry or feeble. High Hull Pot receives more water by far than Hunt Pot.

Whatever the precise truth may be, any dry period shows that Hull Pot water does *not* come out at Douk Gill.

SNOWDON.—The huts on Snowdon summit are a national disgrace. From the west they are even more conspicuous than from Capel Curig way, and now they have been painted there is no chance of mistaking them for rocks.

Who owns them ? It is high time public opinion was brought to bear to have the huts on top pulled down. There is plenty of room below the station for an inconspicuous stone building.

The railway is now an unalterable evil. From the crags of Clogwyn dur Arddu it is an intolerable eyesore.

THE HIGH MOORS BY NIGHT.—It is painful to certain Ramblers to think that while they sat in comfort at Edale last New Year's Day, Mr. H. F. Martin faced on Kinder Scout the consequence of being without, or unable to see, a compass and perished, separated only by easy ground from the valley tracks.

Simple though a crossing of the great moorland plateaux of the Pennines may be from a mountaineering point of view, they must not be despised. The moors can punish recklessness and blunders as severely as the great peaks. To those who adventure ill equipped I doubt if the moors would allow the grace the fells allow, that of descent into the wrong valley. Moreover, there is less possibility of useful progress by movement in the dark, and in winter therefore the lantern *must* be carried.

NORTH CLIMB, PILLAR.—Leeds members count themselves fortunate in having Almescliff Crag within easy distance for a Sunday climb, but until July 22nd this year, it does not seem to have been proved that it is quite practicable to climb the Pillar from Leeds as headquarters. Commonsense, perhaps, has prevailed.

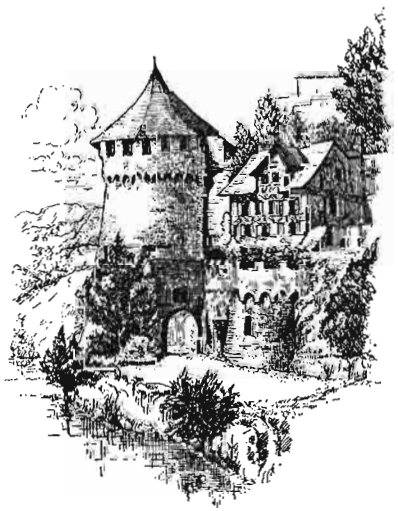
This year three Y.R.C. men, D. B., J. B. and C. E. B., left Leeds at 10 p.m. Saturday, and motoring by way of Ripon, Brough and Appleby, reached Keswick at daybreak; thence over the Whinlatter to a point about a mile above Ennerdale Lake, where the motor car was left, and breakfast made at about 6.15 a.m. Sunday.

The start for the Pillar was made about 7.30 and the summit of the Pillar Rock was reached via the North Climb at mid-day. Descending by The Slab and Notch route, the party returned to the motor car at 1.30 p.m. After lunch had been cooked and eaten the return journey was started and home reached at 9.10 p.m.

This clearly demonstrates that the North Climb can now be included in an (easy) day's ramble from Leeds. Anybody wishing to spend a quiet Sunday in this manner is warned against getting his car bogged more than three times at four o'clock in the morning. It is popularly supposed that vitality is low at this hour and after extricating their car for the third time the party were inclined to support this contention.

LES EAUX SOUTERRAINS.—M. Martel has presented to the Club a copy of the profound work, *Les Eaux Souterrains*, in which he sums up the results of years of exploration. It is intended in the next *Journal* to give some indication of the main principles arrived at.

TAIL PIECES.—Our thanks are due to Mr. Eric Greenwood for the excellent pen and ink sketches of Italian scenery used in No. 14, and to Mr. P. Robinson for those of Yorkshire in this number.



ON THE HILLS.

SNOWDON, CLOGWYN DUR ARDDU.—The Editor admits that he had never seen these magnificent crags, and strongly recommends every climber not to miss them. They can be seen on days when Snowdon top is reached from Penygwryd, by descending the Llanberis path, and the return made by Cwm Glas without adding much to the day.

Nine days in September, 1921, were spent at Rhyd-ddu by F. S. Smythe and E. E. Roberts. The entertainment by Mrs. Owen at the Quellyn Arms was of the best. Three days were given to the great crag.

With the exception of the West Wall of the West Buttress, all the climbing appeared to have been done on the Far West Buttress. They were able to add a nice climb up a conspicuous rake, below and parallel to the Western Terrace, named Giant's Trod, perhaps absurdly, from its resemblance to a broken-down Giant's Crawl (Dow Crag). It is a long run out for the leader, 80 feet, the whole of a 100 feet rope being used. Also Smythe climbed alone a steep portion east of the Slanting Chimney fissure, and girdled the Far West Buttress on grass ledges.

The other buttresses are extraordinary places, narrow, undeveloped cracks between holdless slabs being the only breaks in the vertical walls. A traverse by grass ledges across the East Buttress was found at about two-thirds of its height, rather difficult close to the East Terrace.

The Far East Buttress is almost cut in two by a wide fairly easy rake, which was followed down to the finish above an overhang. An attempt was then made from below to reach ledges leading up to the rake, but the first wall afforded only holds of too doubtful a type to trust. Further east at the end of the crag the slabs were more broken up and better rock led to grass bands, which could also be reached on the level from the scree. These were traversed to the foot of a tower, across which it was possible to get up to the rake. A chimney, however, ran up behind and to the east of the tower. The middle part did not go, but a climb on grass led above it. To our intense surprise the top 20 feet were feasible, though in his excitement the leader did not hesitate to lasso a pinnacle to make sure. This is apparently the first climb on the Far East Buttress, and the fact that there are holds in the crack caused it to be labelled Nonsuch Chimney.

The West Wall climb was found excellent sport. The route taken was by a sensational and difficult traverse to a stance close to the gully (whence Messrs. Abrahams seem to have gone straight up), and then up a short steep bit of rock into it. Above, the gully shrank to a narrow chimney with a chockstone, and the only route was reminiscent of caving work. A short stiff traverse then led into a crack to the left, with a good stance below, and a strenuous climb with a landing on a dangerous load of stones finished the difficult part by reaching the wide and deep cut gully. There is a delightful chimney in the right-hand branch and a nice wall climb above. Would there were more climbs like this on Clogwyn dur Arddu!

Emphatically, exploration on the crag must be done in nailed boots, owing to the amount of vegetation. Rubbers may be suitable on parts of the Far West Buttress.

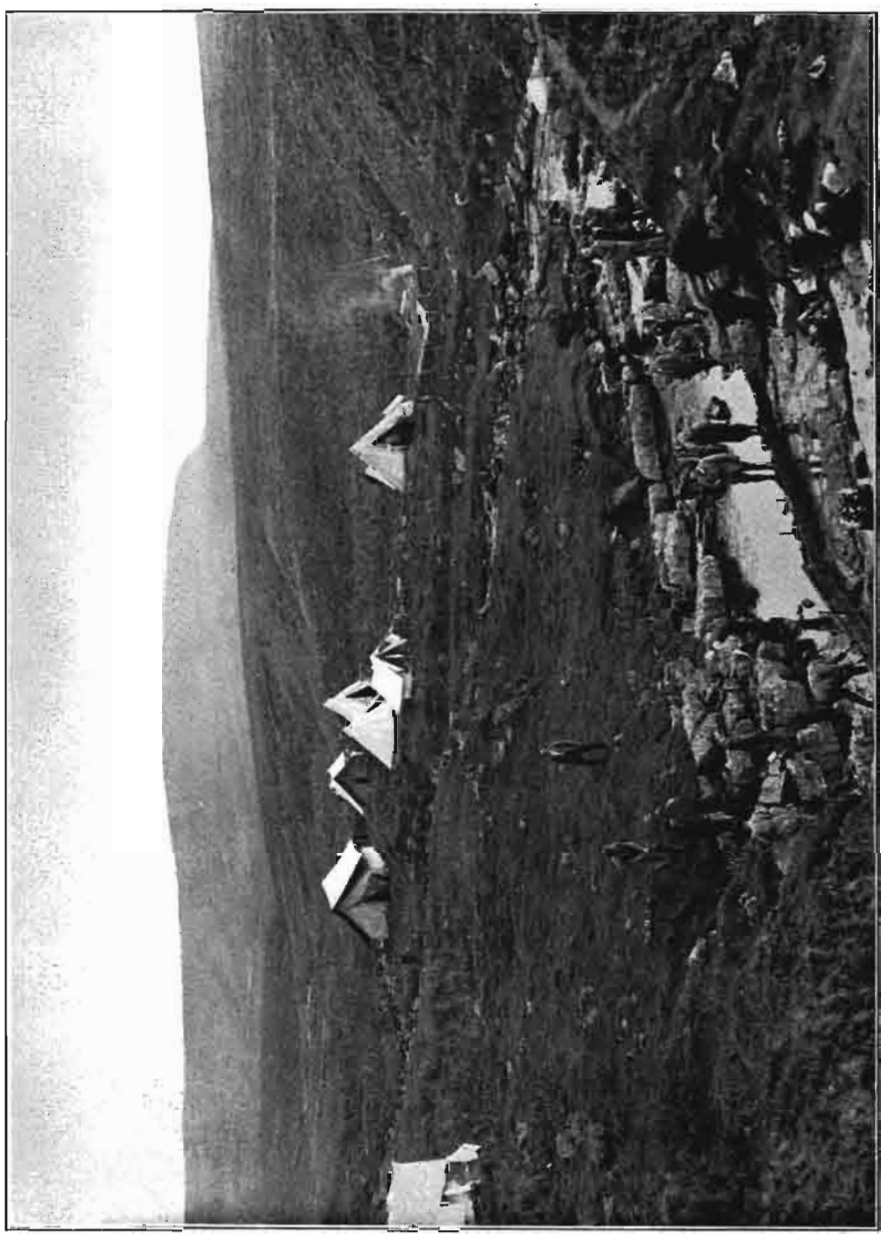


Photo. by F. Seaman

THE CAMP BY GAPING GHYLL.

A serious warning is necessary as to the use of the Far West Terrace as a quick descent. The end must be climbed roped and with care, even if the proper route is found easily, preferably by two only.

A splendid day's sport with rubbers was obtained on a crag far down below Bwlch-y-Maen, close to Llechog.

OGWEN, CARNEDD Y FILIAST.—It may interest climbers to know that the apparently impracticable slabs on this mountain are in reality well broken up and offer several routes of varying difficulty.

THE ALPS.—Those who went out late were not well treated by the weather. C. Chubb, at Arolla, had only one good climb, the Dent Perroc over the Pointe Genévoise with Etienne Vuignier in 14 hours, two days after a heavy snowstorm.

A. M. Woodward, in Dauphiné, climbed the Lauranoure from St. Christophe, a long day with apparently a new descent on the S. face. From La Bérarde he traversed the Plaret and went up the Pic Coolidge.

A. B. Roberts, in the same district, climbed the Tête du Rouget, Pic Coolidge, and the Pic des Etages, also in Savoy the Tsanteleina.

SKI-ING.—F. S. Smythe has become a ski-runner (like Wingfield and Mackie), through spending a winter at Innsbruck and Kitzbühel, and a spring at the Swiss Baden. From Innsbruck he climbed the Klein Brandjoch and the Pfremes Wand on foot, and on ski crossed the Solstein Joch to Scharnitz. From Kitzbühel he did nine peaks on ski, the highest being the Schützen Kogel (6,821 feet). On the Gross Venediger he ascended the Ober Salzbach Glacier to 9,000 feet. On ski in May he climbed the Claridenstock, and on foot Piz Rusein (Tödi).

CAVE EXPLORATION.

I.—NEW DISCOVERIES.

Ingleborough, Gaping Ghyll.—At Whitsuntide, 1922, H. P. Devenish made his way into a passage and loop from the Great Hall on the Stream Chamber Branch, which are probably new, and have not been surveyed.

The line of descent through Jib Tunnel can no longer be used, owing to a curious displacement and settling down of a very large boulder which masked the entrance to the passage, and now serves as an almost closed portcullis.

Alum Pot.—The mighty underground shaft into which falls the stream which comes from Diccan Pot, by Upper Long Churn, and which crosses Long Churn itself to the twin opening by the Long Churn entrance, was descended 7th June, 1922, by W. V. Brown, C. D. Frankland, and J. Hilton.

Depth 120 feet. They were confronted by another big waterfall pitch, the foot of which could not clearly be seen from the extensive platform on which the observers stood. Wingfield, Stobart and Addyman arrived as they were leaving, and Stobart also made the descent.

Pillar Pots (Nos. 2 and 3).—On 18th May, 1922, the unexplored shaft from the lowest point reached by climbing down either of these two holes, was descended to within 15 feet of the floor, making the shaft about 120 feet deep. Time forbade the lowering of the ladders. The view from the end of the ladders supported the belief that the same chamber had been reached as in Pillar Pot (No. 1).

Penyghent, Little Hull Pot.—Exploration completed 4th June, 1922, by R. F. Stobart, E. T. W. Addyman, N. Bates, and E. E. Roberts.

The difficulties of the fissure passage below the second pitch were more than up to expectations.

Short entrance passage leads to long troublesome pool in a bedding plane 2 feet high, next comes a fine stream passage, say 100 yards. First pitch, 80 feet; second pitch follows immediately, 95 feet ladder climb, 130 feet in all. Straight and very narrow passage of considerable length leads to third pitch, 24 feet ladder, into moderate sized chamber of very great height (new ground). Another stream passage joins here. The cave ends abruptly in a little pool a few yards from the chamber.

Hull Pot.—The upper cave was entered and the waterfall crack climbed by R. F. Stobart and E. E. Roberts in May, 1922. The stream passage is quite 20 feet in height to begin with, and lit up by the hole in the dry bed above. Climbing above a big ruckle of boulders, a traverse leads beyond a fine waterfall, and the passage rapidly degenerates into a low bedding plane, almost filled with a strong current of water.

The condition of the stalactites among the boulders showed that this visit was the first.

High Hull Pot.—In August, 1921, the opening was found blocked up. The place seemed to have opened out a little more, and local information was that the block was due to a further slip in the bank of the sink-hole.

It is amazing that the terrific storm of 21st May, 1922, which filled Hull Pot to overflowing, did not carry the obstruction away and sweep the sink clear.

The hole was opened again at Whitsuntide and sounded up to 140 feet.

Wharfedale, Penny Pot.—The path from Kettlewell to Arncliffe is crossed high up on the Arncliffe slope below a ruined barn by a strongly marked series of sinks. There are several holes easy of descent among those to the north of the path, but in the second sink, 20 yards from the path, is Penny Pot, a vertical descent of 27 feet, in all 35 feet. It was unknown to the local people, was first noticed in April, 1919, and descended March, 1922.

Buckden Pike—Gillhead Pots (M. Botterill and J. F. Seaman in 1912).—This discovery is of interest owing to the height above sea-level. They are almost on the 2,000 feet contour, high up to the north of the old mine at the very head of Buckden Gill. If the miners' track shown on the Ordnance Map is followed nearly to the mine, a small pot-hole will be found on the far side of the wall above. The deeper shaft, a few paces off, is covered in. Its lower portion is not directly below the upper, and is only gained by a desperate struggle sideways through a very narrow crack. No passage at the bottom. Depth about 50 feet.

Stump Cross Cavern.—A party of Cambridge men about Easter, 1922, did some prolonged excavation at the end of the lower series. After driving a " rat-hole " 30 yards through silt, under a rock roof, they struck the end of a roomy passage 60 yards long. Further additions were made in June and a stream reached. The extensions have been visited since by some of our men.

II.—Other Expeditions.

Penyghent, Hunt Pot.—A descent, probably the third (see *Y.R.C.J.*, Vol. II., p. 249), was made 6th June, 1922, by Stobart and Roberts, supported by J. D. Ellis and another at the life-line.

The depth is 160 feet, practically vertical, in two climbs. The first of 90 feet, mostly swinging free, leads on to the original floor of the fissure (room for a dozen people), but the water which comes down the end of the fissure plunges directly under the ladder wall into an almost similar parallel fissure. The second climb is a very wet affair.

The view from below is extremely fine. The chamber is about as long as the whole of the surface fissure and some 15 feet wide. Stobart is of the opinion that one end can be climbed and the fissure followed some distance.

Attermire Cave.—Since Cuttriss published his plan in 1897 (*Proceedings of the Yorkshire Geological Society*, Vol. XIII.), two holes have been artificially enlarged in the small passage described as " too contracted to permit of further progress." Some vigorous struggling now brings one to a crawl over scree uphill to a dead-end against solid rock. Here the cliff face must be very close, as during a gale the roar of the wind could be heard with the greatest distinctness.

Nidderdale—Eglin's Hole.—This cave is of more interest than is generally supposed, and progress is mostly by easy walking, not crawling. The total length must approach half a mile. At the end is a very low and interminable bedding plane. In view of conflicting statements about this cave, it is recorded that Jack Buckley and E. E. Roberts, at the Middlesmoor Meet, October 1921, penetrated at least 100 yards beyond an unmistakable stalactite grille, which is a long way inside the crawl, and appeared to have had but one predecessor. Further progress was still possible for a very small man.

Lost and Found.—There is news of Gritstone Pot, which turns out to be the most northerly, by a good 150 yards, of the Newby Moss group. Walkers from Chapel-le-Dale round Ingleborough to Gaping Ghyll usually pass close to it, and a little above it, soon after entering on the terrace opposite Crina Bottom, which broadens out into Newby Moss. As a pot-hole, Gritstone Pot is one of the most obvious of the series.

For Old Ing Cave, described by Moore in Bogg's *Border Country*, search has been made in vain by ones and twos during the last ten years. On the assurance, last July, from Old Ing Farm that the cave really existed in the pasture over the hillock to the south, Dismal Hill, a sweep by seven men in line discovered the cave in a sink-hole to the north of a tumbledown sheepfold and almost at the foot of the next hillock, called Rough Hill. It is not in the line of the watercourse which enters the pasture at that corner, but about 50 yards south.

Old Ing Cave is well worth a visit, and is a down-stream cave apparently going south, and to pass the big pools gives plenty of fun.

CLUB MEETS.

For two winters a Sunday meet has been arranged each month, alternately at Almescliff and at Ilkley. We were favoured by the weather in 1921, but were very unlucky last winter.

Whitsuntide in 1921 came a brilliant week-end in a dry period, as Whitsuntide is expected to do, to favour the camp at Gaping Ghyll.

Brilliant as were the early months of the summer, it must be confessed that the season passed with the most astonishing inactivity as regards cave-exploration.

It is difficult to explain why only two men went to Leck Fell in June, except on grounds of superstition. Driven up in his Ford car in the most sporting manner, over an abominable piece of road, by the host of the Ingleborough Arms at Ingleton, the two men spent the rest of a glorious day identifying the caves, and exploring the upper part of Lost John's. But Sunday !—Sunday was one of those west coast days which don't bear speaking about. Monday was, of course, beautiful, but there was no time to do more than descend the small shafts of Long Drop and Eyeholes.

Let it be known to those who stay in the little Leck Fell hut, that the nearest water is at Lost John's, half a mile off.

Three Peak Walk, 1921.—On 17th July, 1921, this walk was completed by J. Buckley, C. E. Burrow, J. P. Clarke, J. Coulton, H. P. Devenish, J. D. Gulick, R. McA. Mather, and H. Williamson. The day was one of the hottest of a very hot summer, and the route taken from Clapham, *via* Penyghent, Whernside, Ingleborough, back to Clapham, the longest. No attempt was made to break any records. Actually the gross time taken varied from 11½ to 12½ hours. On a fine Sunday in November several of the above, together with J. A. D. Anderson, D. Burrow, and J. F. Seaman again did the round, this time from the Hill Inn, taking Ingleborough first, then Penyghent, and finishing off with Whernside. On this much shorter round the time was good, the gross amount varying from 7 hours 20 minutes to 8 hours. On this occasion W. Clarkson was obliged to leave the party at Ribblehead after having done Ingleborough and Penyghent, to get home by the evening train.

In September, Mr. and Mrs. C. R. Barran, and H. P. Devenish also went round, starting from the Hill Inn at seven, taking Whernside first, and returning at 6.15 p.m. We wonder if this is the first time the Three Peak Walk has been done by a lady.

Middlesmoor, 9th October, was a most successful gathering, 30 men putting in an appearance. A column of three motors went up through a storm on Friday night, but the weather was otherwise fine and warm, and Nidderdale seen at its best, putting on the glory of autumn.

Eglin's Hole was explored on Saturday. Besides the fell walkers, some 20 men marched on Sunday to Goyden Pot, so that this cave and Manchester Hole were pretty completely explored.

At Kettlewell, 11th-12th February, 1922, 18 men enjoyed a week-end of sunlight and frost. There were heavy drifts of snow along the summit walls, and extraordinary masses in the roadway climbing over to Coverdale. The dale road was clear, and the fields almost so, but there were strips of snow under the walls running down into the dale, which were skilfully used for ski-ing and sledging till late at night.

Anderson walked out from Leeds through a brilliant moonlit night, icy cold. Brown and Chubb walked back on Sunday to Ben Rhydding by circuitous routes. Seaman, having sent the Editor on a wild-goose chase after a non-existent or fabulous tunnel through the Pennines, found the company somewhat sceptical of a deep pot-hole on Buckden Pike, but after an anxious 20 minutes was able to demonstrate next day to a deputation of two that Gillhead Pots really existed at a height of 2,000 feet on Buckden Pike.

A party of skaters, finding Birkby Tarn too rough, invented a new three peak walk, by crossing the dale and going over Buckden Pike and Great Whernside.

Six weeks later, much the same party reassembled to tackle Gillhead Pot under better conditions !

The advance party woke to a snow-covered dale and a cloudless sky. They enjoyed wonderful views climbing the fell to the Arncliffe side, and again, returning in the evening, of the green slopes up to the snow-clad sun-lit summits. The first descent of Penny Pot was made by Seaman, C. E. Burrow, Frankland, Longfield, and E. E. Roberts. The last two also made a very wet excursion to the far end of the long crawl in Scoska Cave.

Sunday morning showed the snow once more almost into the dale, wet roofs, a lowering sky and a strong wind. Nevertheless the whole crowd marched to Buckden, four ladders were slung precariously across the saddle of Anderson's pony, and the animal was successfully led through deep snow to within a few yards of the pot. The scene was a most comical one, a regular crowd round the hole, deep snow, and a gloomy sky, the ladders being tied up along a wall, and all almost level with the moorland summits. The shaft was a disappointment. There was a distinct hitch till the Editor, with much moral and sartorial damage, forced his way from the upper to the lower portion, descended the ladder, and reported nothing doing at a depth of only 50-60 feet. The crowd rapidly melted away with the surplus tackle, and after Frankland had descended, the chilly conditions made men waive their privilege of a turn at the struggle. All met at tea at Buckden, and improving weather permitted the day to finish with an enjoyable walk.

The Easter Meet at High Dungeon Gill Hotel was attended by nine men, who enjoyed some good snow work.

It was found impossible to arrange the meet at Appletreewick for 7th May, but Stump Cross Cavern was visited to see the extension recently opened out. It was necessary to divide and search the cave for it, so that some men had not time to visit the new passages, but the position is now well known in the Club.

CLUB PROCEEDINGS.

1921.—The week-end meets held during the year were—6th February, Arncliffe; Easter, Coniston; Whitsuntide, Gaping Ghyll; 12th June, Leck Fell; 17th July, Clapham; 9th October, Middlesmoor.

An informal dinner took place at the Hotel Metropole, 8th July.

The fourteenth number of the *Club Journal* was published in July.

Mr. H. M. Kelly lectured to the Club, 28th October, on "Recent Climbs at Wastdale."

The thanks of the Committee are due to Dr. T. Lovett, of Clapham, who has kindly undertaken charge of the Club's tackle. Members should apply to the Secretaries for the use of it.

1921–1922.—At the Annual General Meeting, on 19th November, 1921, the following were elected to hold office during the year—President, W. A. Brigg; Vice-Presidents, E. E. Roberts and F. Constantine; Hon. Treasurer, C. Chubb; Hon. Secretaries, C. E. Burrow and J. Buckley; Hon. Librarian, J. H. Buckley; Hon. Editor, E. E. Roberts; Committee, D. Burrow, W. Clarkson, B. T. Courtney, C. D. Frankland, B. Holden, A. E. Horn and J. F. Seaman.

The fifteenth Annual Club Dinner was held at the Hotel Metropole, Leeds, on 19th November, 1921. The President, Mr. W. A. Brigg, was in the chair, and the Club welcomed as its principal guest, Mr. G. A. Solly, Vice-President of the Alpine Club. The kindred clubs were represented by Mr. R. Bicknell, Alpine Club; Mr. J. W. Hirst, Scottish Mountaineering Club; Major Huntbach, Rucksack Club; Mr. J. W. Puttrell, Derbyshire Pennine Club; and Mr. A. B. Roberts, Fell and Rock Club.

Informal dinners have been held at the Hotel Metropole on 20th January, 1922, and at the Griffin Hotel on March 17th.

Mr. G. T. Lowe, the first President of the Club, has been elected an Honorary Member.

NEW MEMBERS.

1921.

Leach, James M., 240, Sandwell Road, Handsworth, Birmingham.
Taylor, Herbert Gate, Hillside, Wetherby.
Clarke, John Peard, 49, Stratford Street, Dewsbury Road, Leeds.
Crawford, James Stirling, Hanford House, Ben Rhydding.
Mackie, Alec Coleman, 3, Glebe Terrace, Far Headingley, Leeds.
Crowther, Henry, The Museum, Leeds.
Wright, John William, 13, Shaw Lane, Headingley.

1922.

Gulick, John Davis, 178, Upper Brook Street, Manchester.
Mather, Ronald McA., 16, Moorland View, Ben Rhydding.
Buckley, George Arthur, Gatehead House, Delph, near Oldham.
Higgs, Arthur Hilton, Lea Grange, Lees, Oldham.
Hilton, John, 18, Armley Park Road, Leeds.
Bain, Victor, East Rigton, Bardsey, near Leeds.

Back Numbers.—These, which are limited in number, can be obtained from the Hon. Librarian (J. H. Buckley, 168, Wellington Street, Leeds). Prices—Nos. 1, 3, 4 and 5, 5s. each; No. 2, 10s.; Nos. 6, 7, 8, 9, 10, 11 and 12, 4s. each; No. 13, 3s.; No. 14, 5s.; Specially designed green buckram cases for the four volumes, 2s. each. Postage extra.

REVIEWS.

Mountain Craft, edited by G. Winthrop Young (Methuen & Co.), 1920, 600 pp., 25s. net.—This book is packed with knowledge and experience such as one expects from the man who traversed the whole skyline of the Grandes Jorasses, and made other famous climbs. The first two-thirds set out the editor's reflections on mountain craft, and then follow chapters on special subjects and regions, some of them excellent, particularly Dr. Longstaff's on the Himalayas, a masterpiece of condensation.

One lays the book down with a feeling that there is nothing more to be said about mountaineering, and turns over the pages to find here some wise summing up, there a discussion of an aspect of the craft one has never thought of before. An instance of the latter is in the chapter on Reconnoitring; the sky just above a ridge can tell us something of the unseen face.

Quite often the reader feels he would like to know more of the incident, the glacier, or the peak the writer had in his mind, and personally we regret that Mr. Young did not make a book of his climbs with the dissection of the climber thrown in.

We see a lot of fun in future out of the author's ideal leader—but there is a wondrous lot of truth in that first chapter. Who can read, too, of the art of managing guides, and again face the responsibility of employing them? These are impressions.

Mountaineering Art, by Harold Raeburn (T. Fisher Unwin), 1920, 274 pp., 16s. net.—With two exceptions the best known and most successful of British guideless partnerships in the Alps is that of Raeburn and Ling. Both, and Mr. Raeburn particularly, have been active in the exploration of Scottish crags, as the contents of the book show. Twenty years' experience as a climbing leader is behind the endeavour to trace broad principles and to assist in forming the ideal, the safe mountaineer.

The standpoint of the writer is that of the British trained climber whose ambition is to lead his own party abroad, and such will read the book with the greatest possible interest.

It occurs to us that under the head of Centres it would have been most useful to a British party going out for the first time to learn in what groups away from the Pennine and Oberland giants they could measure themselves against the mountains and avoid the charge and annoyance of following others, by having peaks to themselves. There are many such centres.

The Playground of the Far East, by the Rev. Walter Weston (John Murray).—The author was one of the founders of the Japanese Alpine Club and is pardonably proud of climbing for the first time the granite tooth of Ho-wo-zan. His climbs and bivouacs have all the charm of early Alpine records. Ideas which run like a thread through the book are the contrast between old and new Japan, and the courtesy and hospitality of the delightful primitive people of the hills.

Home University Library—The Alps, by Arnold Lunn (Williams and Norgate), 1914, 1s.—A popular account of the growth of knowledge of the Alps. It is a pity that space has been given to printing once more Dumas' fantastic account of the first ascent of Mont Blanc.

Alpine Ski Guides, Vol. II.—Bernese Oberland (Kandersteg to Grimsel), by Arnold Lunn (King & Hutchings), 1920.—We should imagine this book will prove a most valuable help to the winter excursionist. Vol. I. covers the western wing of the Oberland.

On the higher peaks, ski seem to be used only to the point at which serious work begins, as a rule we should say the same as in summer.

An elaborate table of metres and feet is given. We have been so impressed with the author's pathetic remarks that we have been moved

to include in this *Journal* a simple rule, which should be better known, in the hope of saving future guide-book writers Mr. Lunn's experience of wasted hours. The rule is correct to an inch for any mountain in the world.

ALPINE SKI-ING, by Arnold Lunn (Methuen & Co.), 1921, 116 pp., 5s. net.—Snowcraft all the year round, not technique, is the theme of this book. Though the ordinary British climber can never hope to see the Alps in February, March, or April, unless his business calls him there, as the author's does, the discussion of snow conditions, and the distinction between and the naming of the types of snow surface will be found enthralling. A message of importance is that spring ski-ing in the High Alps is better than winter ski-ing, and is best of all in May.

The charge is made that the summer mountaineer is so conservative as not to ski in winter. We should change the words to " has not enough holidays." But the discovery of May as the High Alpine ski-ing season may have some effect on our mountaineering customs.

BRITISH SKI YEAR BOOKS, 1920 and 1921. Federal Council of British Ski Clubs.—Many beautiful illustrations and interesting articles. We recognise Wingfield in the start for the British Ski Championship, 1921.

PUBLIC SCHOOLS ALPINE SPORTS CLUB YEAR BOOK, 1922.

BORROW'S GUIDES. (1) THE LAKE DISTRICT, (2) NORTH WALES, by P. J. Piggott, with chapters on Mountain Walks and Rock Climbs, by Mrs. Dora Benson. Cheltenham (E. J. Borrow & Co.), 120 pp., 2s.—These are useful little guides and Mrs. Benson's work is particularly good. In the first it occupies nearly half the book.

HILL VIEWS FROM ABERDEEN, by G Gordon Jenkins. Aberdeen (D. Wyllie & Son), 1917, 40 pp.—This booklet contains three mountain indicator diagrams and is of considerable local interest. The article on Curvature and Refraction is of general application to problems of visibility.

SHORT BIBLIOGRAPHY ON SCOTTISH HISTORY AND LITERATURE, by A. R. Anderson. Glasgow (Saint Andrew Society), 1922.—A list of three hundred books for the average reader.

SCOTTISH MOUNTAINEERING CLUB JOURNAL (twice yearly).—The three last numbers have been produced by Mr. E. P. Buchanan as Editor. These journals are full of interest to everyone who has commenced to bag the peaks of Scotland, countless no longer.

SCOTTISH MOUNTAINEERING CLUB GUIDE. Section A—General; Section E—Ben Nevis.—The Ben Nevis guide is a most valuable summing up of all that has appeared in the S. M. C. J. about the great mountain and its tremendous crags.

The articles in Section A will interest specialists, while Munro's Tables of tops over 3,000 ft. threaten to cut the Gordian knot of pronunciation by replacing the worst names by numbers.

RUCKSACK CLUB JOURNAL.—No. 16 will be the last of many delightful numbers got together by that cheerful soul, Mr. H. E. Scott, to describe the doings of this most sporting club. We are sorry to note that thefts and damage have forced the Rucksackers to give up the Cwm Eigiau hut.

JOURNAL OF THE FELL AND ROCK CLIMBING CLUB.—The subject of the Lake District is not exhausted, as a perusal of recent numbers shows. The Editor is now Mr. R. S. Chorley. The minuteness with which the Wastdale crags are being gone over in the search for stiff variations, often as " stunts " explored by a rope from above, appears to be affecting the point of view of this club. The attack on the Central Buttress by so experienced and brilliant a leader as Frankland is characterised as risky mountaineering.

Exchange copies are gratefully acknowledged of the *Climbers' Club Journal*, *Rivista Mensile* and most important of all, the *Alpine Journal*.