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THE YORKSHIRE RAMBLERS' CLUB JOURNAL.

Edited by ERNEST E. ROBERTS.

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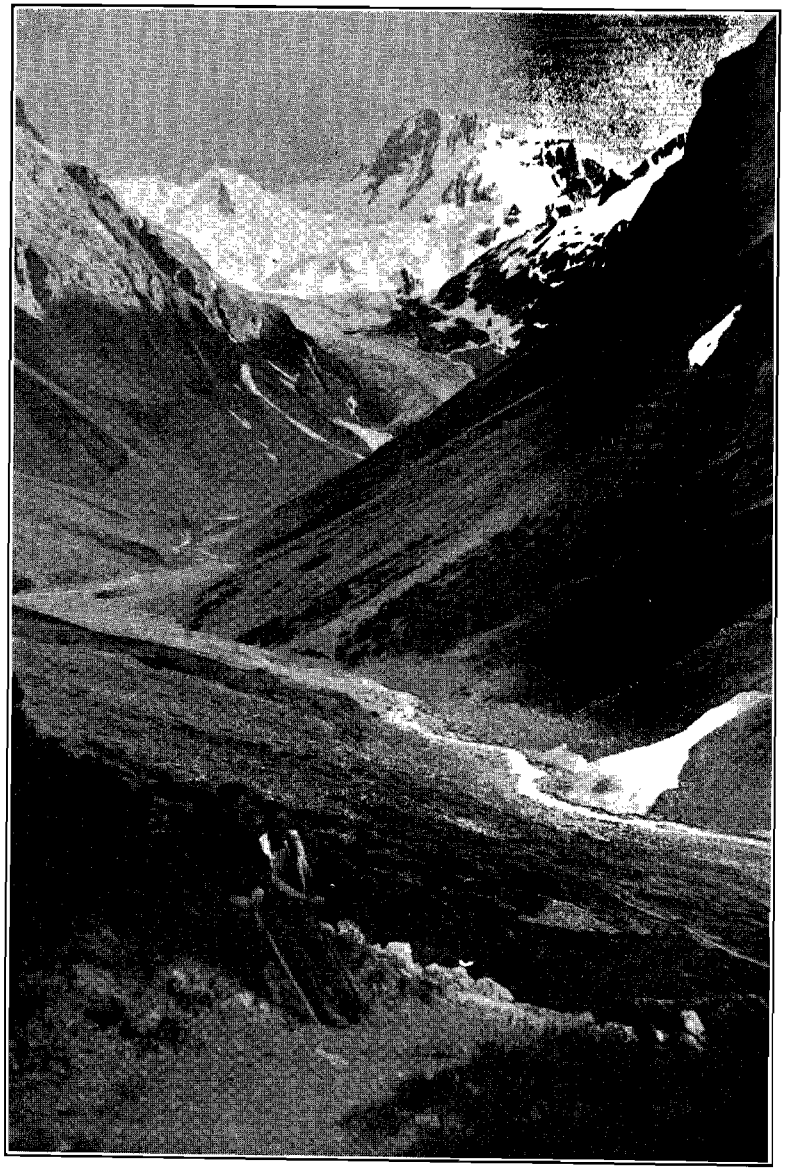


LES BANS *Photo by F. Oakes Smith*

THE
Yorkshire Ramblers' Club Journal

VOL. VII. 1934. No. 21

FORTY YEARS ON.

1892–1932.

By G. T. LOWE (*First President*).

To the members of the Yorkshire Ramblers' Club the past forty years are full of interest; in the remnant of the oldest, they arouse memories dear to all of us. Many have passed away, younger men have taken up the responsibilities of management and leadership, ever increasing the range of our activities and adding to the fame of the club. To me there seems to be energy and spirit which should give the greatest satisfaction to the survivors of the early days.

One naturally asks, what led to the idea of forming the club. The first of us were already beyond the youthful age; but rambles, walking tours, and other expeditions had frequently brought a few keen fellows together, and thus arose a condition favourable to the birth of the club.

The happiest memories of my earliest years are of walks round Leeds, to Adel, to Harewood, to Linton. Then later, as I became more ambitious, with trusty friends I undertook longer tours, among which that along the Roman Wall from Bowness-on-Solway to Newcastle-on-Tyne has left the strongest impression, then alone from North Tynemouth to Berwick by the coast, broken by ten days at Holy Island. Many were the week-ends we spent in Wharfedale at Appletreewick, whither I have twice walked alone at midnight from Bolton Abbey by the Strid and Barden Bridge, weird experiences. Down Bempton Cliffs for seabirds' eggs was exciting. Holidays in North Wales, Lakeland, Switzerland, Norway, Canada where a descent to the Cave of the Winds at Niagara recalled to my mind a wish I had uttered long before under Thornton Force at Ingleton, that I might one

day stand under the Father of Waters Holland, Belgium, and other countries followed, visits in which the ascent of Vesuvius, not by the railway, proved the most interesting event. Scrambling on Almescliffe nearly sixty years ago and cave exploration of the seventies and eighties was mere child's play compared with our later standard, and yet the inclination was strengthened by those early efforts.

Most noticeable about these expeditions was the change in companionship. Friends came and went, a few kept their interest and we stuck to the outings. When an expedition was proposed half-a-dozen men would respond to the invitation, but more than once, at the last moment, only two or three would turn up. This was very disappointing.

One of the walks which we looked upon as distinctly arduous was the traversing of Ingleborough, Whernside and Penyghent in one day. Slingsby used to refer to the first record of this walk; J. A. Green and others did it, then Charles Scriven returned from the successful tour of the three peaks. Before a beaten track could be made I arranged to make the attempt at Whitsuntide 1892, but when I got to the station in Leeds I found only one friend, W. Ramsden. We stayed at the "Flying Horse Shoe" and on Sunday morning set off in a drizzle up to the village of Clapham and the long slope of Ingleborough. Holtzmann of Bradford joined us for the first mountain but Ramsden and I were left to complete the ascents. It was during the tramp through Trow Gill, while we were talking about the failure of our friends to join us, that I told Ramsden I should approach all the men I knew to be interested in rambling over our Yorkshire moors and fells, with a view to forming a club and thus improving the chances of collecting larger groups for our outings.

In those days we did not realize the possibilities of such an organization; but a "Three Peak Club" floated in our minds. I spent some time in discussing the project with my friends and asked each one to do the same until a good number were sounded. In the meantime Slater, Green, Bellhouse and myself had a preliminary meeting at Slater's house in Headingley, where we drew up an outline of our proposals and a rough draft of rules likely to be useful Our

fears were not justified, the club was formed and has been a success from the first.

The titles suggested may appear somewhat curious and are therefore given at length:—The Yorkshire Pedestrian Club; The Leeds Pedestrian Club; The Leeds Walking Club; The Yorkshire Ramblers' Club; The Three Peak Club. The final choice was not made without careful thought. Eventually the majority decided upon our present title which delineates roughly the principal area of our work.

Notices were sent out to men in the Leeds district likely to join us and the inaugural meeting took place at the Skyrack Inn, Headingley, on the 6th October, 1892. Nine attended and it was decided to form a club, thirteen members being elected at the time. The proposed title was approved, officers were appointed, and the rough draft of rules accepted as a basis for the final decision. I had the honour of being elected the first president, with J. A. Green as secretary, H. H. Bellhouse as treasurer, and a small Committee.

From the first we steadily grew in numbers. Our papers at the fortnightly meetings in the Smoke Room of the Skyrack Inn were not ambitious, but they were the personal narratives of our exploits and led some of our members to attempt literary work for the first time. Our explorations have given the club a recognised position in the county and have made it an authority on many matters pertaining to Yorkshire.

Our next development was to associate ourselves with men known to fame in the climbing world and for this purpose we requested several mountaineers to become honorary members, The first of these was Edward Whymper, then W. Cecil Slingsby, C. T. Dent, C. E. Mathews and others. Of these the one who did more for us than any other was, of course, Slingsby, who was our president from October 1893 to 1903. Most assiduously he worked, not only introducing new members, but exercising his influence, so that at the opening lecture of each season the members had the pleasure of meeting and hearing in successive years, C. T. Dent, Herman Woolley, C. E. Mathews, C. P. Pilkington, Dr. N. Collie, Rev. Walter Weston, Mrs. Aubrey Le Blond, and others famous as travellers and climbers. The direct consequence was that the members took an ever increasing

interest in climbing in spite of the occasional protests from Slingsby, whose own example was most stimulating in spite of his precepts. It has extended the original ideas of the founders, and the prominence given to this elevating branch of sport has considerably widened the scope of the club. So much is this the case that in a candidate's applications for entrance particular attention is paid to his qualification as a mountaineer.

The original members, *mirabile dictu*, were affected by the craze for finding the most awkward and difficult way up mountains. The gullies and crags in the Lake District, North Wales and Skye were climbed. Many spent their holidays in Switzerland, Norway, Morocco and other climbing centres. Notable peaks were ascended and new expeditions were made before the end of the century. The south arête of the Rothhorn and the south east arête of the Nesthorn from the Bel Alp, the west arête of the Cross Ruchen, peaks in Arctic Norway, Mountains of Lofoten, Traverse of Mount Blanc without guides, etc. To day the Club must include a dozen men who count their Alpine guideless expeditions by scores, its President has climbed in four great ranges, and there are Everest men in our ranks.

One branch of our work is historic, the exploration of the caves, pot-holes and hidden watercourses of the Craven Highlands. A direct impetus was given by the descent of Gaping Ghyll for the first time in July 1895 by that plucky Frenchman, Mons. E. Martel, who entered this modest little note in the visitors' book at the New Inn, Clapham :-

E. A. Martel (and Madam)	On Thursday 1st of August
29 July 2nd August 1895	1895 I went down Yaping
Paris, France.	Gill hole, etc.

Edward Calvert was the first Englishman to tread the floor of this mighty pot-hole, a veritable Giant's Hall in the heart of Ingleborough. The strong combinations which our club has provided, have carried out this and many successful explorations :—Long Kin West, Sell Gill Pot, etc. Within ten years of Martel's visit the first wave of Yorkshire Ramblers had accounted for every big open pot-hole in the Craven area. One of the most awful chasms in Yorkshire, Rowten Pot, only yielded after repeated attempts. I was not

included in the first party organized by Edward Calvert that descended Gaping Ghyll on the 10th May, 1896 ; but I was invited to the second three weeks later, and I shall never forget the awe I experienced when I looked up to the sunlit orifice at the top of the great hall, 350 feet above me.

To those who are fond of excitement and desirous of adventure this form of mountaineering reversed is both novel and interesting to a degree scarcely appreciated by an outsider. It has brought some of the men closely together and taught them to know each other in a way years of ordinary life would fail to do. The interdependence of the party, the various duties pleasant and otherwise, which have to be performed, bring out the best sides of a man's character. To feel infinite trust in the man who holds you on the rope in a position where light is scant and unknown dangers may abound is a mark of confidence which we give and take with each other repeatedly. Where to fail may mean a crash, where carelessness or inattention courts disaster, the value of every member of the party is fully tested and respected accordingly. The seriousness of this has never been absent from our minds and the resulting friendships have been firmly founded on mutual esteem.

As a training ground for those anxious to practise the steps to more ambitious ascents, our county affords some superb opportunities, even for busy men, Almescliff, Crookrise, Simon Seat, Brimham Rocks, and over the border, Laddow. We are essentially an open air club and our aims should recommend us to every man blessed with health and strength. To see and come into contact with nature in her wildest and sternest moods far from the madding crowd, is worth striving for. To escape from the rut and conventional dullness of everyday life is a marvellous tonic. In these days to do this we are driven into the inner recesses of our glorious county and amid the variety of hill and dale, moor and wood, or on our rugged coastline we approach an ideal, and eventually seek the snowclad peaks of the mountain ranges.

To see Gordale Scar in a winter garb of snow and pendent icicles glittering in the sunlight, is a picture as marvellous as a glimpse of fairy land. To breast Ingleborough clothed in deep snow, or in a raging blizzard, is an experience not to

be forgotten. The fitness to accomplish and endure it is well worth the training which constant practice gives.

In the nether regions many things strange and mysterious impress the human mole burrowing in our limestone caverns. Beautiful calcareous formations encrust the roofs and floors or drape the sides with wonderful cascades. The stalactites and stalagmites vary from reedlike stems to massive columns where the progressive deposits in the hidden chambers and passages, have in the course of ages been free from disturbance. To look up the great shafts is awe inspiring, but Nature, whether above or below ground, to those who appreciate and court her is a never ending book of new and charming delights. How long the present conditions may continue no one knows, the remote hills, last to be improved, are now being attacked, and soon the tar macadam and the unheeding motorists of the towns will invade our choicest haunts, to desecrate them in their own peculiar and objectionable way.

It will not be out of place to give a few details. On the 6th October, 1892, the birthday of the club, thirteen members were elected, increased to thirty four by the end of October 1893. A larger room for our meetings was necessary so we removed to the Victoria Hotel, behind the Town Hall, in December 1892. Again in 1896 a change was made to the Thoresby Society's Room, in Park Street; lastly in 1924 we took a room at 10, Park Square where our library is installed and the committee meetings are held. The old free and easy gatherings amid the fragrant incense of burning weed have been transferred to the meets. Personally I should like to see a revival of these Bohemian evenings in town at least once or twice a year.

The *Journal* has given our exploits prominence and helped to strengthen the position of the Club. It was talked about in 1895, but did not begin until 1899. In a remarkable letter, dated February, 1895, Gray, the first editor, prophesied that the Club would reach 100 members in 1904, and laid down the lines on which he considered Club and *Journal* would be successful, namely, by putting mountaineering in the forefront.

So well did Whymper think of the Club that he left us a legacy (£50), which may be considered as having been well

expended among the substantial sums the Club has granted to the Everest and Kamet expeditions.

The promise after forty years is good and the records of these years in our *Journal* are a tribute to the spirit of the members, now over 160 in number. Since our foundation, many kindred clubs have been founded with the same interests and enterprising enthusiasm. Several of them have a greater number of members and their own journals of great literary and illustrative merit. That we have grown more slowly has caused a little adverse comment, but it should be remembered that in a great number there is some difficulty in getting the friendly association which should be fostered among us, and it is something to hear it said of us, " They all know one another." Intimate companionship is one of the things we want and try to establish among our large family of young men.

In looking back over the years to 1892 the oldest of us must feel the loss of our old and tried companions; Slingsby, with whom in 1895 I traversed the S.E. Arête of the Nesthorn to the Bel Alp and the Oberaletsch Rothorn S. Arête; Lewis Moore, whose personality embodied the very essence of good fellowship with a keen sense of humour and hearty geniality; Swithinbank, Ellet, Green, Cuttriss, Ralph Smith, Waud, and Buckley most faithful of Ramblers; each one dear to us for hard work, ready help, and high spirits, especially when the conditions were unfavourable or trying.

Hill, a scientist and keen cave-explorer, Benson, a contributor to mountaineering literature and an entertaining lecturer, great figures like Wingfield and Payne, great rock climbers like Fred Botterill and Frankland, famous for their style and balance, all these have come, and gone.

The men now in charge are trustworthy and keen. They show remarkable vigour and common sense in all that concerns the club. We feel assured they will carry on and that we may without anxiety leave the Yorkshire Ramblers' Club in their keeping.

A GLIMPSE OF THE DRAKENSBERG.

By G. S. Gowing.

For some time prior to my departure for an eighteen months' stay in the Union of South Africa I had been busily reading the glowing accounts of mountain exploration in that country as set out in the Journal of the Mountain Club of South Africa. Full of enthusiasm, I had pictured climbs on Table Mountain, among the numerous ranges of the Cape Province, in the Drakensberg and even perhaps a visit to Mount Kenya or Kilimanjaro on the way home. But a very few weeks in Johannesburg, amid the monotonous scenery of the high veldt, many miles from the nearest mountains, soon sufficed to dispel these dreams. The visit was not a holiday, time off was scarce, there was a lack of climbing companions which rendered any mountaineering prospects somewhat slender. So month after month passed and all I had seen of the mountains of South Africa were a few brief glimpses from the train between the Cape and the Rand.

Towards the end of my stay, however, at long last a companion arrived in the shape of a colleague on a short visit to Johannesburg, and one Thursday morning he dashed into my office and announced that he had the week end free and "what about some climbing?" A short discussion followed and it was agreed to make a shot at the Drakensberg; after which the rest of the day was spent in hasty preparations, the most important the finding of a trusting soul who would lend us a car to carry us over the three hundred odd miles of indifferent road separating the Rand from the best climbing centre in the Drakensberg. Thus the following morning saw me, just before dawn, picking my companion up at the Rand Club, complete with food, drink and a borrowed car.

Our destination was the Natal National Park in the Drakensberg. This range of mountains forms the eastern and south-eastern rim of the great interior plateau of South Africa and stretches from the Eastern Province to the northern Transvaal. The whole interior of the country is formed of ground some 5,000 to 6,000 feet above sea level and, just before this plateau falls away to the coastal region it lifts up to form a range of mountains, rising in places to 10,000

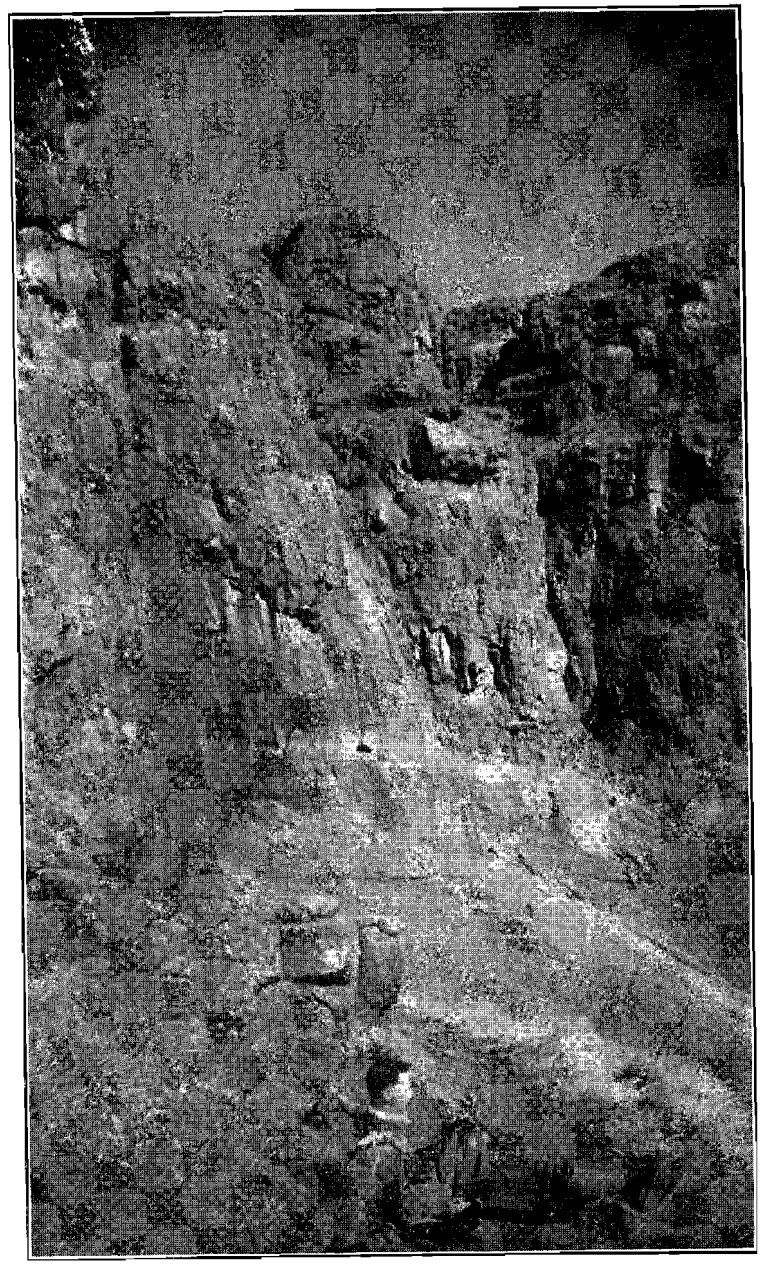


Photo by B. R. Goodfellow

BEACON BUTTRESS
(MONT AUX SOURCES).

or 11,000 feet. The range as a whole can be followed for some 1,000 miles, but the part for which we were heading was that at which the boundaries of Natal, Basutoland, and the Orange Free State, all meet and which is actually the highest of the range.

Our route in the car from Johannesburg lay through the Transvaal as far as the Vaal River, then through the Free State to Harrismith, after which we crossed the Drakensberg by a most appalling road over Oliver's Hoek Pass and dropped down into the National Park, which lies at the foot of the Berg on the Natal side. As we drove up to the National Park Hostel, at which we were to stay, the geography of the mountains became apparent. The main range stretches eastwards and northwards in an almost unbroken escarpment of about 5,000 feet and the angle between the two directions forms a vast cirque of magnificent cliffs. On the Natal side the escarpment is precipitous, while on the Basutoland and Free State side the land slopes up more gently, the actual highest point in the range, Mont aux Sources, lying somewhat behind the edge. The cirque appears to have been formed by the cutting back of a river, the Tugela, which at present comes over a fall of 3,000 feet from the top of the Berg into the valley below. The whole country is igneous, the upper parts of the range being basalt, while the lower parts are volcanic sandstone, which forms strangely fretted ridges sloping down from the main escarpment.

Mont aux Sources itself, which is the highest point in the Union, is not a peak in the strict sense of the word, but merely the highest point in an area of high moorland and is, as mentioned above, some little distance back from the edge of the escarpment. The points usually climbed are spurs which, projecting into the skyline, form prominent objects in the view for miles around. The two of these which are nearest to the Hostel are 10,740 and 10,530 feet above sea level and are called the Sentinel and Beacon Buttress respectively. They lie together at one end of the cirque, while at the other is a series of towers of about the same height, composing what is called the Eastern Buttress.

After some consultation we decided to have a shot at the Sentinel and accordingly set out from the Hostel at six the

following morning—just before dawn, since it was almost mid-winter. Our climbing kit was, to say the least, sketchy, for neither of us had managed to raise even a pair of boots and we had, perforce, to do the whole trip in city shoes, an experience that the writer does not wish to repeat. In fact all the equipment we had was a folding lantern and it was lucky that we had this, for without it we should not have been able to get as far as we did. However, not to be deterred by such minor details, off we went. From the Hostel, the route follows a pony track all the way to the base of the Sentinel, a distance of about thirteen miles, rising some 5,500 feet. At first it lies along the valley of a tributary of the Tugela, through almost sub tropical vegetation, and then climbs out on to a spur of the Berg, where there is nothing but the sparse grass of the veld. After reaching the main ridge, we contoured for what seemed endless miles on the Free State side of the escarpment, looking out to north-westwards over mile upon mile of bare brown rolling moorland.

It was past midday before we reached the base of the Sentinel, where only some 700 feet of easy rock separated us from the summit. And here comes the sad part of this tale, for we were both so completely out of training, so tired from our tramp, and in addition so affected by the altitude, that the rocks were too much for us. In our state and with our inadequate footgear we were obliged to allow ourselves to be repulsed by a little rock climb that would hardly be classified as "difficult" in the Lakes. We tried to console ourselves with the reflection that anyway the rocks were iced and had patches of snow on the stances; they were, but had we been really fit we should have scarcely noticed it. So we gave it up and had some food and then I lazed and watched the view while my companion climbed, with the aid of a chain ladder conveniently erected in a gully, to the top of the Beacon Buttress and was rewarded by some photographs of the cirque. The view was certainly a grand one, for in the clear air one could see far away over the Free State into Zululand and pick out the kopjes around Ladysmith and Majuba.

The return journey was a slow and, with our dreadful shoes,

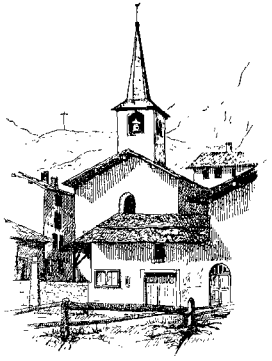
a painful process. Dusk overtook us before we left the high-level path, and for the last four hours we made full use of the lantern. Fortunately the air was still and the somewhat flimsy contraption served us better than it did on one memorable New Year's Eve, when it failed miserably to light our way from Wasdale to Seatoller at midnight in a blizzard. Suffice it to tell that we reached the Hostel some fifteen hours after setting out, for the last half mile guided by a friendly Kaffir, having missed our way almost on the doorstep.

The following day, far too stiff for anything very energetic, we contented ourselves with strolling up the valley of the Tugela, to look at the end of the cirque. The clouds were lying low over the Drakensberg and we congratulated ourselves that we had not reserved the main expedition for the second day. The way up the valley was extraordinarily pleasant, leading as it did through dense patches of bush, filled with maidenhair ferns, cycads and other strange plants, these patches alternating with bare sandstone ridges covered with proteas and other kinds of shrubs. At the top of the valley the sandstone walls close in and the river runs through a narrow winding gorge, so nearly closed in overhead that its name, the Tugela Tunnel, could hardly be more appropriate. The river fills the gorge in places from side to side and wire cables had, at one time, been fixed over these pitches to allow the more adventurous tourists to pull themselves along, precariously suspended over the water in a "bo'sun's chair." Now only the somewhat frayed lengths of cable remain, but by means of some ingenious engineering with these and sundry tree trunks found lying about, we were able to negotiate the gorge without a complete wetting in the ice-cold water of the Tugela. Altogether a trip distinctly reminiscent of pot-holing! After a brief stroll at the far end of the gorge we successfully made the return passage and wended our way back to the Hostel.

The following morning we set out for home, this time keeping east for a while in Natal, through Ladysmith, past Spion Kop and on to the main Johannesburg-Durban road at Majuba; then past the smoke of the Newcastle collieries and into the Transvaal at Volksrust. Next the long dreary

run over the veldt, mile upon mile of dusty road, until at last we saw the low line of hills that marks the Witwatersrand, with little trails of smoke from the mines on the Reef, and so past the rattle and roar of the stamp batteries into Johannesburg and our trip was over.

The Mont aux Sources region of the Drakensberg is certainly a place worthy of a longer visit, as it is an ideal centre for mountain tramps. Although there are plenty of rock climbs mentioned in the guide book, we gained the impression that the rock is mostly rotten and in many places quite unjustifiable. But the scenery is good and hotel accommodation in the little thatched *rondavels* all that could be desired. Altogether we certainly suggest that any Yorkshire Ramblers visiting South Africa should not fail to include Mont aux Sources in their itinerary.



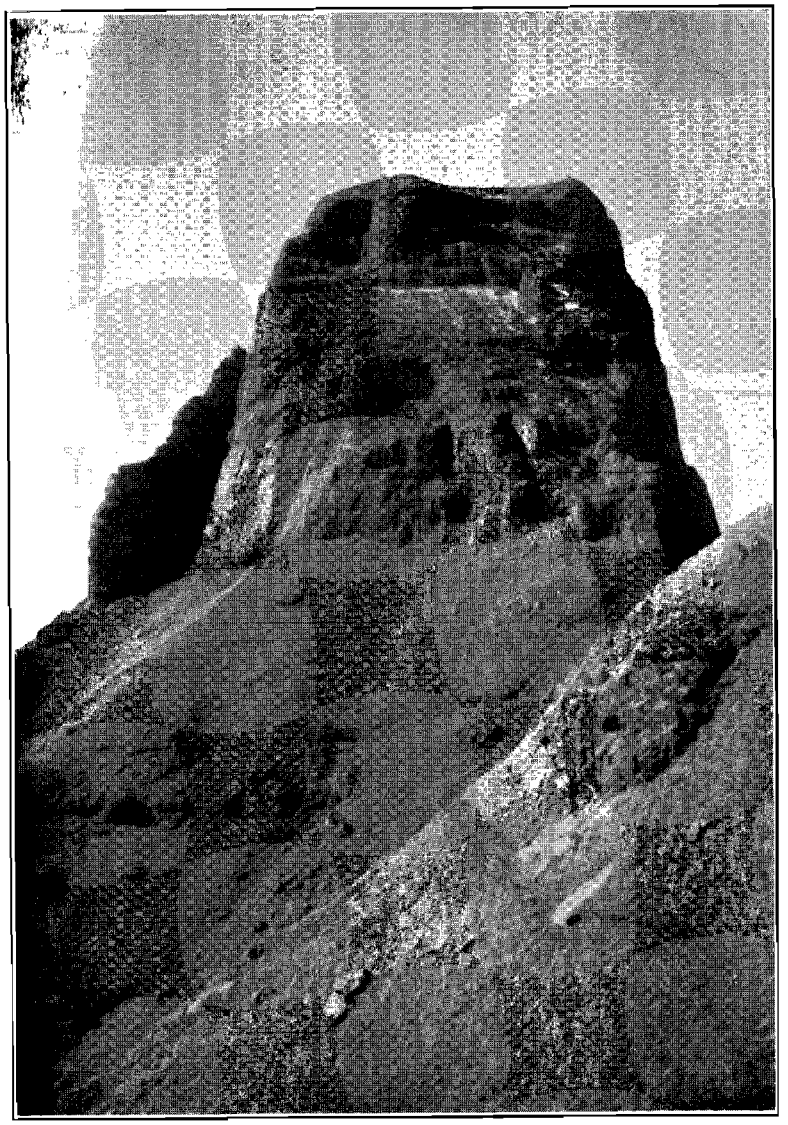


Photo by B. R. Goodfellow

THE SENTINEL.
(MONT AUX SOURCES).

MOUNT OPHIR, JOHORE.

By G. H. Lowe.

Mount Ophir is the highest mountain in Southern Malaya ; it is situated about twenty miles south-west of Malacca in the Muar District of the State of Johore.

Why it is called Ophir no one seems to know. Possibly the Portuguese who arrived off this coast in the 15th century thought that they had at last found King Solomon's mines, as gold used to be worked on the Malacca side of the mountain. Also there is a plain at the foot of the mountain called Paya Mas by the Malays, which means the Swamp of Gold.

Mount Ophir is an isolated group of hills composed of three granite ridges running in a north-west to south-east direction. The most easterly of these is called Gunong Besar, or big mountain, and ends at its southern extremity in a sudden rise of rock called Blading, after the sharp curved Arab knife, *bladek*. The central ridge has two main peaks and several smaller ones. The main peaks are called Muring and Gunong Ledang ; the latter is the highest point and is 4,180 feet above sea level. The western range is lower than the others and has no distinctive features.

Nearly the whole of the group is clothed from base to summit by dense jungle, and only on the upper slopes of the main ridge does the dark red granite show through in huge slabs, in places two to three hundred feet high. This main ridge is steep on both sides and seen end on from Muar has the appearance of a fine conical summit.

The mountain has been climbed on many occasions from the Malacca side, but it was not until Mr. A. C. Baker of the Scottish Mountaineering Club came to Muar as Assistant Adviser that any serious attempt was made from the Johore side.

The difficulties were not of the order of those experienced in more temperate climates. Before the mountain could be approached, a path had to be hacked through the tropical jungle of the foothills. When this was done and the lower part of the ridge was reached, a game trail was found running along the top, and this was followed along the gradual rise to a height of about three thousand feet.

There now seemed to be every prospect of a successful expedition. There was a cut path through the first thousand feet of dense jungle and a clear game trail through the more open hill forest for the next two thousand feet. After that the ground rose steeply, and through the trees the top of the ridge could be seen. But the big trees were replaced by a thick scrub with bushes and tall grass and there was no path.

During the dry season of 1928 Mr. Baker sent out a party of Malays to cut a path from this point onwards, and followed the next day with another party consisting of himself, Mr. G. Laub, Dr. R. Crawford, and Mr. Lilley, and without much difficulty reached the top of Muring. They thought they had reached the end of their labours but found that a gap in the ridge, full of dense scrub, separated them from the true summit. After some difficulty an easy path was discovered and shortly afterwards they were on the top, where they spent the night and descended next day by the Malacca side.

In February 1930 I had the pleasure of accompanying Mr. Baker on another ascent when a night was spent on Gunong Ledang, and I have been up twice since, at Easter 1931 and in November 1931. On both these latter occasions the party went up the Muar side and down the Malacca side in one day.

The ascent starts from Sagil village, whence an estate road is followed for some two miles. Here the cars have to be left with instructions to go round the foot of the mountain and wait at Relau Customs Station.

After a short distance through the rubber trees, the path enters the jungle and follows the very steep boulder-strewn valley of the Sungei Blemang. All around are the huge jungle trees and after the glare of the rubber estate the shade is very welcome. On the other hand no wind can reach one as the vegetation all round is so thick. The air is filled with a dull roar from the high waterfall of the Blemang where it plunges down from the upper slopes. Nowadays there is a much easier path a short distance to the left leading up to the upper valley, where it is proposed to make a reservoir to supply the Muar district with water.

This upper valley is flat and swampy and legions of leeches rise and make for the legs of the traveller. Their bite is not painful, thus if they are not noticed in time the bleeding may go on all day. However after about a quarter of a mile the path strikes off to the right and for the next hour and a half rises in easy stages along the ridge. Though there is still nothing to see but vegetation the trees gradually become smaller, and the undergrowth thins out as the height above the sea increases. At last a point is reached where the path rises very steeply and the vegetation changes suddenly to thick scrub, tangled grass, and small trees very similar to fir trees in their general appearance. The view is more open, and high above is the green cone of Muring, against a deep blue sky. Higher still, large moss-covered boulders make their appearance, and at one or two points it is possible to look back over the coastal plain of Johore to the sea.

From the top of Muring the final peak of Gunong Ledang can be seen about a quarter of a mile away. Everything here is covered with yellow and green moss, and at one or two points the little fir trees are so covered with it that one walks along the narrow path in a sort of green twilight.

The intervening distance is soon crossed and the bare rock of the summit is reached. Thence is a most wonderful view on all sides on a clear day; even the coast of Sumatra can be seen across the Straits of Malacca.

The way down the Malacca side is more interesting. It starts straight down the side of the ridge and for about three hundred feet it is called the "Ladder." If it were not for the vegetation, this place would be very like the Idwal slabs in North Wales, but here every crack and crevice supports some sort of tree and the footholds are all tree roots. After the Ladder is passed there comes a small hill called Gunong Kedundong whence, looking back, is the only comprehensive view of the main ridge. The path now goes down to the Padang Batu, or the Field of Stone, once much bigger, but vegetation is rapidly covering it. This is an expanse of bare rock about a hundred feet across and sloping at about forty degrees with the horizontal. A broad crack gives an easy way for descent and from now onwards the way is a steady grind along jungle paths, often, alas, going up hill again,

and always too steep for comfortable walking. On the way we pass over the lower shoulder of Gunong Besar and shortly afterwards arrive at the Relau Waterfall.

This is a good place to sit and eat the last biscuit and have the last drink and, if there is time, there is a small, deep pool in the rocks above the fall, big enough for a bathe. Between the solid walls of trees fringing both sides of the fall one looks out over Malacca territory to the hills beyond Tampin, and here and there the smoke from some hidden village or estate coolie-lines rises above the trees. That nearest smudge is from Relau, where the cars should be waiting, and if we do not wish to spend the night out in the jungle it is time to follow the path down through the darkening forest to the road and home.

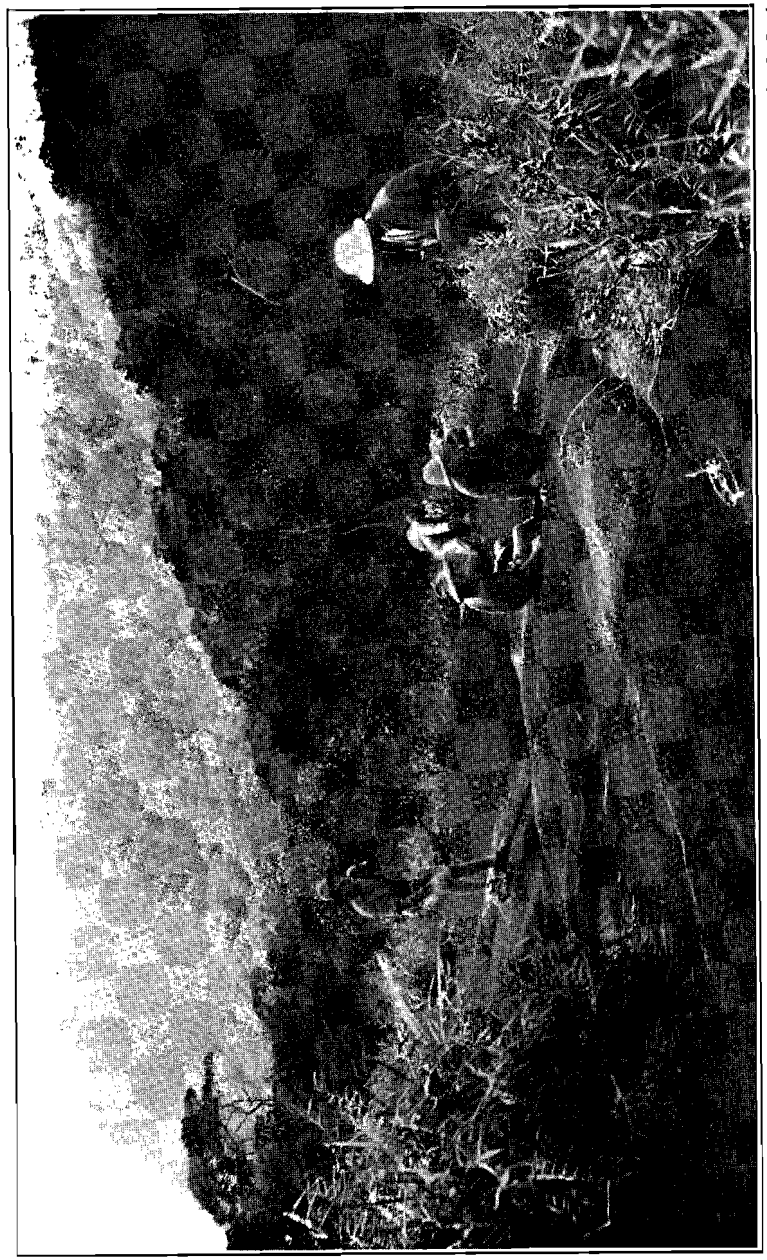


Photo by G. Laub

THE PADANG BATU (MOUNT OPHIR).

SIX DAYS IN DAUPHINÉ.

By F. Oakes Smith.

The first day found us at Ailefroide in delicious alpine environment, at the junction of the St. Pierre and de Celse torrents, Eastern Dauphiné. Thrust into the outhouse of an hotel at the call of later but wealthier patrons, we slept late, lost to the beauties of the morning. The day was an easy one as we were bound only for the Cézanne hut, one and a half hours up the valley, at the foot of the converging Glaciers Blanc and Noir. Bathing, sun and water—the kill-time of the Alps—passed the time quickly enough and the afternoon saw us trudging up to the hut.

It is small, much too small for the three streams of climbers converging on to it, but we were early arrivals and had the place to ourselves until evening. Major operations on the stove—which involved lifting it bodily outside the building—and on the preparation of foodstuffs, resulted in a meal. With bunks reserved we wandered on comfortably up the valley and considered the precipices of the Fifre and the Barre des Écrins.

The hut was quitted at 3 a.m., a late hour in view of the severity of the work in front of us, and the Glacier Noir was followed. It is completely covered for half its length with the rubbish of countless stone avalanches. A longitudinal moraine unbroken for fully two miles makes an easy way up its right side to the basin of the glacier. In one hour of splendid going, one reaches the foot of the Couloir des Avalanches. The slope, frozen hard, led to the foot of the bergschrund. The intention was that it should be crossed, the face of the Fifre on the left gained, and thence a first ascent forced up a couloir to the right of the Couloir du Brèche Nord, which lies further to the left and leads to the Brèche Nord du Fifre.

The schrund turned us away from its right flank where it was lowest, some twenty feet high. An uncomfortable half-hour or more was passed, for the whole area was covered thickly with powdered stone. Already the sun had reddened the ruinous mass of the Écrins straight up above and streamlets from melted snow were splashing down. The rocks on the

left extremity were finally climbed, and time it was that we left the unhealthy place.

For twelve hours we climbed hard and the climbing was consistently that of a straight British severe. The couloirs were themselves about forty-five degrees and the snow was frozen hard. At 3,400 m. the right side of a névé was reached. It lurched into space and was circumvented on the right to avoid falling snow and stones. Two feet on our right fell the vertical wall of the Fifre, to bury its foot in the Couloir des Avalanches. The snow lay shallow on the scree-strewn rock, but the passage along the edge of this card pack was mercifully short. A diminutive crevasse was followed to the south toward the Col du Brèche Nord on our left.

Above, we made a long and serious attempt to reach the summit direct. A second small névé was crossed, obviously highly unsafe. Its foundation was again sloping slabs covered with loose stones and a light mantle of snow. The whole surface was ready to slither and there were belays nowhere. We wanted them badly. The top of the slope was reached and, full of hope, we went round the buttress to the right again to a gully. The top of the mountain was visible now, only two or three hundred feet above us, crowning an unclimbable wall. There was the gully at last. It had a slope of something like seventy degrees, but just as rotten as it was possible to imagine. Every spike of rock, and there were hundreds, leaned outwards and leered drunkenly down at us. It was hopeless and we knew it.

The time was now 4.30 p.m. and to descend the way we had come was out of the question. The one thing only to do was to descend slightly and traverse to the Couloir du Brèche Nord, mount it if we could to the Brèche, and descend by the south-west slope of the mountain to the Temple Hut. Therefore had we the immense pleasure of descending the nerve-racking slope we had mounted. The traverse looked as if it might go, and go it had to!

We reached the foot of the final 30 ft. of the couloir, which narrows down to a chimney. Both walls were covered with clear ice, and the chimney itself was capped with a cornice. The lead was magnificent and this couloir climbed for but the

third time. The summit lay at hand up some easy rock on our right.

We were now in a less precarious position, but it was 6 p.m., and we turned and fled down a wide gully which offered. We were still in the gully when the last sunset fires flamed and burnt out. At 8 p.m. we reached its foot and gazed into the hostile maw. The Vallon de la Pilatte Glacier was hundreds of feet below and our spare alpine line was insufficient to use *en rappel*. Vainly we looked for a ledge where we could suffer the night in reasonable discomfort. There was nothing, and no light in which to go looking for non-existent lairs—of the kind we wanted anyhow. A number of jammed chock-stones in the snow-filled gully offered the only hospitality, and one hour's chopping and scraping laid open a little sconce, five feet high and four feet square at the base. Firmly tied on to a belayed rope, we crept into our hole like four rats. Two of us taking the view that sleep would lower dangerously the vitality, declared against it. After we had made an intolerable effort to lie two deep, the two had the opportunity of practising their undoubtedly correct conviction by standing in a graceful curve with their backs to the ice all night. Their heads stuck out like giraffes' against the stars. This ought to have been funny but the time was definitely not one for such humour, which would not have been appreciated. Thoughts wandered in strange realms that night.

Snow fell slightly throughout our sullen vigil. Spectral clouds, fugitives from uneasy gusts, swept away the cold radiance of the stars, only for it to return, flashing brilliantly through the thinning veils. Venus burned as never she has burned to the dwellers on the plains. Winthrop Young, I believe it is, describes the faint purple shadow cast on the snow in her light. The planet is superb.

Fortunately for the sleepers, the cold was not intense. The night dragged along. The wall and bed of the cave soon became saturated with water which had melted during the day and was now seeping down the bed of the gully. It wetted everything, stopped the cigarette-clock with its quarter-hourly solace, and then froze. The stars began to fade a little at 4.30, and little by little the ghostly glaciers

were linked up as the darker rock ribs and buttresses took form. The shadowy outlines of the peaks became defined and soared lightly until they touched the sun's fire. I have a recollection—possibly not unnaturally—that the sunrise was unusually beautiful and soothing. The Val de Vénéon was brimming with a sombre mist untouched yet by the rising sun. Fugitive pennons of diaphanous mist arising from the slaty-hued depths were diffused with the morning gold of the sun. They floated round the glittering snow peaks, disintegrated, and disappeared against the reds and azures of the sky. The precipices and virgin hanging glaciers spoke not yet. The silence was absolute and the scene perfection.

One or two dots below on the glacier came into sight: a late caravan for the Écrins. We yelled; a pause; then we saw the dots stop. Again a pause; and then an answering call came thinly up to us. It was immensely cheering.

Slight frost-bite was patiently rubbed out. At five we rattled, or anyway, creaked away to the lists, our armour-plating firmly riveted in place. I suppose we looked as if we were in the throes of acute rheumatism. The contour was followed round the south-west buttress of the Fifre towards the higher slope of the glacier, and a subsidiary gully was reached after a short spell of climbing. An *abseil* took us then to the longed-for slope. The doubled belay rope would not be recalled and back one went, unhooked it and climbed down, chiefly by avoiding holding on to anything for long. The wall was bulgy with disintegrated plates leaning outwards. A grand feeling it was to get our feet on that glacier at last. The axe fairly whistled its way down the three hundred yards of steps—for we were without crampons. Little we should have cared if there had been a half-mile of such slope. The schrund was jumped and within an hour we were basking in the hot sun on the little sward by the Temple Hut spring; thirty-six hours after setting out.

We overhauled our supplies: a few bits of chocolate and wet biscuit pulp. The biscuit was divided to a drop.

An hour's sleep by the trackside righted matters and the party ambled down to La Bérarde after a Parthian glimpse

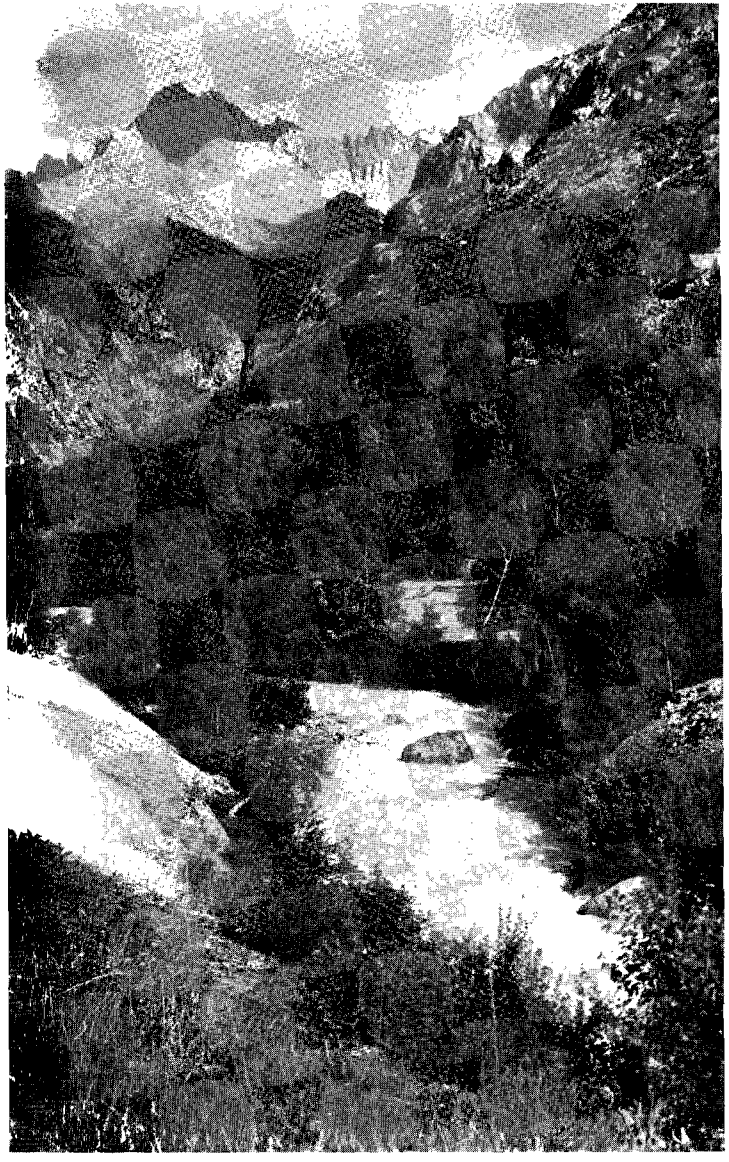


Photo by H. E. F. Howson

LES ÉCRINS (fr. VAL DE VÉNÉON).

at the shining steeps of gold and snow.

An off-day, or rather two-thirds of one, sufficed to put us in kettle and once again we left for the Temple Hut. It lies but two hot hours from the village. The slope faces south-west and is covered with scrub. Our quest on the morrow was the Barre des Écrins, the highest of the Dauphiné. It is a grand mass and its glacier is dwarfed to a mere label stuck high up on its side.

The hut was left at 3.15 a.m. and we followed the fine sweeping curves easily and steadily upwards. A broad snow arête circling the bastion of the Fifre arose from the bosom of the Vallon Glacier and gave direct passage to the Col des Avalanches, from the south-western side. High up on the Fifre, we could see the speck of our bivouac of the night before. In three and a half hours after leaving the Refuge we reached the Col des Avalanches. We looked east. Arrayed before us were the peaks of the Eastern Dauphiné. On the right was the buttress of the Fifre, steep and broken, whereon is the ordinary south-west route. We turned to our left and after drinking and spilling good wine, eating tinned herring and bread, we crossed the snow to the foot of the Barre and to a small couloir. The rocks on the right are climbed after a step over the crevasse. In the main they consist of two steep and completely enjoyable slabs with adequate holds. High up, the second becomes almost vertical, slippery, and blotched with yellow, somewhat suggestive of an oily leer. They are climbable if free from ice but a short steel cable hanging down saves time. The correct route then crosses to the right and after a delicate fifty foot climb on straight-up rock we spotted the right route crossing below us. A traverse of nice balances on bronze-coloured plaques took us on to it, and led to the Couloir Champeaux. A streamlet falls here during the afternoon with the result that the gully is filled with hard clear ice. That is crossed and a long rock arête followed: grand easy work in the thrice-blessed morning sun. The peak seemed a colossus in its vast reach, pinnacle on pinnacle, clear lines against the purest and serenest of blues. This was the first wholly fine day we had had and we cherished every minute of it.

The Glacier des Écrins is crossed along its upper section and the great couloir reached. The snow had become unpleasantly soft but seemed sufficiently consolidated. The right edge of the couloir was taken to avoid the risk of avalanche from the cornice and subsidiary gullies above. A wise precaution, for with a hiss, a malicious little avalanche buried the rope between us whilst we were crossing one after the other. Ultimately one is able to take to the rocks on the right for the final section. The head of the gully was hung over with an enormous flaked cornice but these rocks gave us a safe route to the twin summits.

The crest of the Barre is a long ridge, each end higher than the centre. The ends form the culminating East summit 4,103 m., which we were approaching, and the West, Pic Lory, 4,083 m., to which we passed. The reverse side, the North of the mountain, is glistening ice-slope, exceedingly steep. Although, I believe, there is a route up it, the normal descent of the mountain is made by this traverse to the Pic Lory, by following the arête and leaving it before reaching the Dome de Neige, 3,980 m. The position is entrancing, for in places the ridge is only a knife-edge which one can sit astride, one leg over the Vallon Glacier many thousands of feet nigh sheer below, and under the right foot the Glacier Blanc, a vast circle of ice and snow without rock outcrop to blemish. It is spotless. The vast Mont Blanc Massif, Grand Combin, the Valaisan group, Matterhorn, and Monte Rosa, spanned the whole northern horizon, over fifty miles away. The burnt Italian Maritime Alps stretched to the eastern horizon in all their naked lifelessness. On the south horizon were the plains of Savoy. Nearer lay the Grande Ruine, presenting turret after turret, the square Zsigmondy face and Glacier Carré of the Meije, the Pelvoux bloc, the spread of the sweeping pinions of the Ailefroide, and Les Bans.

Our reveries over a bite of food were broken by the roar of an avalanche, and a cold wind from the North drove us from the summit down the slope. The inevitable schrund separated the summit snow from the Glacier Blanc, and after a climb down to its upper lip the six feet separating it from the lower were jumped. We bore off across the face

of the east side, only very gradually descending. It was essential to pass above the ice-cliffs which hung over the main glacier. From here we zig-zagged to their base between the unsteady ice-walls. The track of a recent avalanche was passed at the double. There remained several hours' distance to the Cézanne hut, so we bent our heads and trudged on through the soft snow, past the Caron hut under the shoulder of the Roche Faurio, then skirted the tumbled base of the glacier as it turns over into the St. Pierre valley. On we plodded to the Tuckett hut—a veritable barn. The way, lost awhile amidst the shifting moraine, turns sharp right across the glacier end. The unwary plunges straight on and inquisitive wild things want to know what the lumbering thing is doing in their domain. Marmots inspect and then skip away under some boulder or other. A quarter-mile precipice however, with a view down on to the Cézanne hut, a mere speck, shews him conclusively the error of his way and he returns to overtake his lazy but wary brethren, already half-way down to the Refuge under the Grande Sagne at at the other side of the gorge. Its black polished sides warn away most folk, who have but a single thought—the Cézanne Refuge and its bunks.

The hut scenically is beautifully placed. It is built at the foot of the gaunt rock slopes, at its sides and back the protective pine-wood, and beyond rise the Massifs of the Dauphiné, Pelvoux and Les Écrins. The snouts of the Glaciers Blanc and Noir overhang the high meadow. The smooth ravine of the Glacier Blanc shows that the glacier has yielded ground to his mighty foe.

One party of men and women filled the hut but contrived most generously to make room for us. One expects as much consideration as cleanliness in many a French Alpine hut, but one experiences nothing but kindness and cheerfulness from the Hauts Montagnards of the Club Alpin Français. There was even a bolster fight that Saturday night.

We rose on Sunday at the Christian hour of eight o'clock or so, and went out into sparkling air. It was delicious to laze on the meadow with the runnels each side carrying their icy water. The stove—the chimney of which had been apparently carefully removed by a neighbouring peasant,

to encourage trade in lean times and discourage the use of pine-wood—was bullied into giving out warmth and a disproportionate amount of smoke. Breakfast and bathing as usual filled the morning and mountaineers are as near to heaven in these spells of leisure as they are likely to ascend.

The approach of midday sent us with reluctance down the valley to the Ailefroide Hotel and filthy swarms of flies. We had, and paid for in full, a satisfactory dinner. The flies made a valiant effort to turn our stomachs: they crawled on everything and in scores.

Mountaineers are not welcome. The flies, carelessness which ruined a suit—a serious matter—and the unsympathetic management, made us glad to leave. A sun-speckled dell with the mountains peering over, is the only memory I care to preserve. It had a small intake, scoured out by the backwash of the torrent whose voice rose rich and deep. The boulders under the seething waters could be heard speaking gutturally as they were driven and pounded along in that mad rush. Forty winks completed the spell, broken by a wicked horsefly. He bit through a thick stocking.

We left just after four in the afternoon for the Selle Refuge. The way lies up the Torrent de Celse Nière and soon becomes rough and steep. High up the valley one has to cross over to the south side to mount a steep snow slope and pass over a shoulder of the cliff which blocks the head of the valley. The torrent here plunges into a great throat behind the thin dry lip of the precipice, whence drifts a light cloud of spray. The river reappears from under a snow arch over which we had passed, at the foot of the cliff. The force is shattering but it spends itself in the depths. The moraines lie here and the Sélé Glacier is close by.

The night was closing on us rapidly when we spied the hut perched under a protective buttress. In the gloom without a lantern it was something of a climb to reach the hut, for it lies above loose rock of perhaps 150 feet in height.

We had taken some four hours to rise the 1,300 m., for the Refuge lies at 2,700 m.

The interior was filled with the usual French guides, and dirt. The table ware was unusable as it was covered with grease. The chimney smoked dreadfully. The only coffee

percolator was commandeered by them—for an early morning start. Altogether we were just as happy to leave the grease and fleas of the hut—we were all bitten more or less severely—as we had been to leave the inhospitality and flies of the hotel.

The cool sweet air before the dawn and the indescribable grandeur of the sunrise cleansed us mentally of our troubles and unkind expressed thoughts. The snow swept up before us to the south-west as if to join the sky. On the north, the Ailefroide for mile after mile turns round on its vast pinions. The resemblance is perfect and astounding. Tapered buttress after buttress runs up to the Pelvoux ridge, the wing-bone, to form feather after feather; and the wing-bone joint and droop are exactly right.

We crossed to the south side of the glacier and after strapping on crampons ascended the frozen steep snow easily. The glacier wheels to the west, steepens and breaks up into ice-cliffs and crevasses. By passing above on the left, one reaches the Col du Sélé.

The day's work lay in front of us, and after a meal we moved off in the usual two strings. At our feet the rocks sank away to the upper reaches of the Glacier de la Pilatte. They were shattered, but by the use of two shallow parallel gullies, any danger from dislodged stones was eliminated. At the edge of the snow, crampons were remounted. The traverse under the ridge connecting the Boeufs Rouges with Les Bans was really steep and frozen hard. The slope was at least half a right angle and at the ice-falls vertical or overhanging. The frozen snow would have needed many hours of step cutting but with crampons we were able to walk across cutting but few. Ankles complained of the awkward strain, and the spicules of dislodged ice scuttled down with surprising acceleration, finally making one unnerving bound over the bergschrund below. One felt most insecure and feeble-ankled. The best of the traverse was the crossing of the final ice-cliff. The crevasse was fully 100 feet deep and it ran out into the overhanging cliff. Its extremity was bridged over with snow, but as it was cheesy there were four ice-axes belayed at this point! All went well and by following a semi-circular route we gained the

scintillating white ridge and the Col des Bans. This sharp corniced ridge led us to the foot of the rocks. A short clamber up snow-covered rock took us to a knob, clearly visible on the horizon from the hut below, where we dumped the sacks. Sardines were swallowed on lumps of chocolate, because that was all we had.

The kit was light, but we enjoyed the sheer bliss of climbing with none to the summit. We fairly shot up the tolerably sound rock—glorious climbing—and reached the summit in just one hour. Even impossible routes on the wall on our right were worked out in our exultant minds.

The view from Les Bans is that of the heart of the Dauphiné. In the north sweep the Meije, Écrins, and Ailefroide, and below is one of the two most riven and picturesque ice-rivers. We slept on the top, utterly content, for some period we wotted not. The hot sun, blue sky, white glacier and dark rock made a perfect tableau. We were the only blemishes, like so many nigger minstrels with sun-burnt faces ringed and smeared with white cream.

The descent to our pinnacle took three-quarters of an hour. On reaching the snow ridge the two strings roped together and this time went straight down the slope. It was excessively steep but went well. An airy jump of some eight feet landed us on to less steep ice and we joined the Col des Bans route, and zig-zagged in a series of *chevrons* to the foot of the Pilatte. The stony track from the Pilatte Refuge to La Bérarde passed slowly although it is a fine walk. Occasional glimpses of chamois against the skyline kept up one's flagging interest until the village was reached. Two long mountain traverses had left us little the worse for wear.

The dinner that evening was suited to the occasion and the soft clean beds were as soft as we had wished them to be. On the morrow the ways of the four diverged—each to softness : a cabaret at Chambéry, and a river balcony at Grenoble and charming female company.

Photo by F. Oakes Smith

BELOW THE COL DES BANS.

THE ROMAN WALL OF HADRIAN.

By G. T. Lowe.

My first knowledge of the Roman Wall was derived from scanty references in school books on the histories of England and the Roman Empire. An article in *Once a Week*, Vol. V., 1861, entitled "An Artist's Ramble along the line of the Picts' Wall," aroused my interest, and I began to read more about this interesting relic of the Roman occupation of Britain. At last, at Whitsuntide, 1888, J. A. Green, H. Slater and I arranged to spend a week in exploring the Wall from end to end. We took for our guidance Jenkinson's smaller guide and Dr. Bruce's handbook, starting from Carlisle as the walk increases in interest as one approaches the western end.

The Roman Wall, once frequently called the Picts' Wall, in its perfect state, was one of the most remarkable examples of military engineering in Europe. Even now, after a lapse of over 1,800 years, its despoiled remains tell in no feeble manner of its former strength and magnificence. It has generally been regarded as a barrier against the Picts of Caledonia, whose frequent inroads proved a terrible scourge to the inhabitants of Southern Britain, at that time becoming less warlike and self-reliant under the influence of the Roman rule. Added to this formidable menace, the Scots from Ireland made repeated attacks south of the great barrier.

Bede in his Ecclesiastical History (completed 731 A.D.) says that Severus was the builder of the rampart, which stretched from sea to sea with fortified camps, made of sods cut out of the earth and raised above the ground like a wall, having in front of it the ditch whence the sods were taken, and having strong stakes of wood fixed upon the top. He says also that the Britons built the Scottish Turf Wall after 420 A.D., and later with the temporary assistance of a Roman legion built a strong stone wall not far from the trench of Severus, eight feet in breadth and twelve in height. Bede's dates and facts are very confused.

From the double nature of the fortified line, as represented by the Vallum or earth wall, which consists mainly of three

ramparts and a fosse, and by the *Murus* or stone wall, with a broad deep fosse running uniformly on the north side, many archaeologists hold the view that protection against the south was also an essential feature of the work. A more recent suggestion is that the Vallum is the older structure, and that the stone wall was erected at a later date, invasion from the north being the only reason for the existence of the fortifications. Around this phase of the question enthusiasts have disputed with the calmness and moderation characteristic of specialists.

Stretching with undeviating persistency along the most impregnable line of natural defence, the Wall forms a huge bow from Bowness, on Solway Firth, to Wallsend-on-Tyne (Segedunum) a distance of over 70 miles. Between the Wall and the Vallum, and pursuing an easier course, was the great military road from Newcastle to Carlisle. From Sewingshields along the Nine Nicks of Thirlwall, an undulating series of precipitous basaltic cliffs, running some distance north of the most direct line across the isthmus, induced the military engineers to carry the structure along their verge, thus adding enormously to the strength of the barrier.

That the forts were in existence before the Wall is evident from the fact that, where the latter is built up to continue the north face of some forts, the rounded corners of the fort do not fall in with the line of the Wall, as may be seen at Borcovicium, while in the case of Cilurnum the Wall actually meets the ramparts some distance from the corner. In several instances forts lie to the north or south of the wall, entirely separated from it, as at Vindolana, the present Chesterholm, and these are believed to be part of the first chain of forts set up by Agricola.

Neglected and deserted for nearly 1,500 years, its well-dressed stones have been utilized by generations of dwellers in its neighbourhood for the construction of castle, peel and homestead, until the extremities of the Wall have practically disappeared, although the fosse may still show traces of its former course. In the central portion, however, the existing remains are such as to enable the wanderer along its line to reconstruct in imagination the ancient rampart in much of its original form. Careful observations, assisted by excava-

tions, have given us a clear conception of this truly interesting monument of the Roman occupation.

The more easily accessible forts are frequently visited, but few care to undertake to follow the whole line from sea to sea. This excursion is one to be strongly recommended, not only for the benefits to be derived from the exercise, but from the intellectual advantages. To see these time-honoured remains *in situ*, to clothe the dry bones of history with fact, is to live again in the past, and to give birth to a desire to know more of the greatest nation of warriors and statesmen the world has ever known.

In following the Wall it is advisable to trace its course from west to east, as the interest in the relic is augmented by the gradually increasing importance of the remains.

The Wall was built of carefully dressed stones, generally about eight by ten inches, resting on a double course of larger stones which projected a few inches on either side of the upper portion. The space between these facing stones was filled in with rough concrete composed of small stones and excellent lime, as existing fragments testify. It was probably about eighteen feet high, and below the parapet from six to eight feet thick. The narrowest portions are found where the Wall traverses the steep heights in the middle of its course. The north face of the Wall is continuous, but the breadth seems to have been deliberately reduced during construction from eight to six feet.

At intervals of a Roman mile (about 1,618 yards) small gateway forts (milecastles) were placed, having two entrances, one to the north and the other to the south. Between each two milecastles were two small watch-towers, about two furlongs apart. So close were these sentry-towers that an alarm raised at any point could be passed from one to the other with great rapidity, thus enabling attacking parties to issue from the gates. In addition to these milecastles and turrets there were fourteen larger forts with barracks, varying in extent from three to five acres, situated at convenient positions along the Wall, usually about four miles apart and one at each end. They were quadrangular in form and rounded at the corners.

From the *Notitia*, compiled about the beginning of the fifth century, which is a kind of army list of the Roman Empire, a list of the prefects and tribunes of the cohorts located along the Roman Wall can be obtained. From this list, by comparison with inscriptions found on the spot, the names of many of the forts have been ascertained with absolute certainty. The number of these stations actually connected with the Wall was sixteen out of the twenty-three enumerated in the *Notitia*, the remainder being supporting stations north or south of it, among them,—Bewcastle, Castra Exploratorum (north of Longtown) and Birrens on the north, Chesterholm on the south.

It is convenient to consider the Wall in three distinct parts :—I. the stone wall or *murus* with the fosse to the north ; II. the earth wall or Vallum on the south side of the stone wall ; and III. the stations, roads and habitations which would invariably spring up in the vicinity of the great camps. For the most part the Vallum and stone wall run within a few yards of each other right across the country ; but in the central portion, where the Wall is carried to the north to take advantage of the high ridges, the space is much greater, approaching in one instance to half-a-mile.

And now one naturally asks whom shall we credit with the authorship of the fortification ! Undoubtedly Agricola led the way when he built many of the forts across the isthmus afterwards traversed by the Wall. Modern excavation has shown definitely that the Vallum and forts mark the line first held, but just as definitely that the stone Wall was built in Hadrian's reign, and restored by Severus, and again by Theodosius. The most recent theory, set out in Mr. F. G. Simpson's lectures in Leeds (1934), is that the Vallum was constructed in Trajan's reign, and the failure to hold the line is related to the destruction of the Ninth Legion. Hadrian landed in Britain A.D. 122 and died A.D. 138 ; the Wall was probably finished by 127 A.D.

In the course of two rambles along the Roman Wall, in one of which we traced the whole course from the Solway to Wallsend, we had ample opportunities of examining the principal points of interest. It is instructive to notice along the route how the place-names are significant of the existence

of the Wall, as a cursory examination of the map will instantly confirm.

From Carlisle to Bowness the traces of the Wall are entirely absent, though the fosse gives feeble proofs of its former existence. To the east of Carlisle the first indications are to be observed in Drawdykes Castle and the peel at Linstock. The stones used in their construction are unmistakable, and make clear to the most careless observer the fate of the Wall. Such a convenient quarry could not be overlooked. Now, after 1,800 years, it is marvellous that so much of the original structure remains. From Wallby to Bleatarn the fosse is distinctly traceable on the left to the north. About a mile from Bleatarn the ditch passes through some gardens at Old Wall. Here a villager showed us a small stone nearly eleven inches long and nine broad, bearing an inscription to the century of Julius Tertullianus of the second legion. The stone was in the outer wall on the east side of a dilapidated hut near the end of the village.

After walking about half a mile in the fosse, we passed through Irthington and stopped at Cambeck Bridge for refreshments, and then went through the park by Castlesteads, which is probably the Petriana of the *Notitia*, to Walton. Westward of Amboglanna, *Burdoswald, no inscriptions have been found to enable us to identify the stations with the stations of the *Notitia*. Until one does turn up we must be contented to take the order of the list from Amboglanna and trust to its accuracy.

On the hills beyond the Kingswater the fosse can be traced for a great distance. After crossing the stream we found a long heap of stones under a hedge, which indicated the site of the Wall. Before reaching Garthside Farm several detached portions of the Wall from three to four feet high, considerably grass-grown, appeared ; the fosse was well marked and regular. Many of the portions were without facing stones, but showed rubble and lime. Below Craggle Hill, in the south-east corner of a field, we found an unfaced bit nearly six feet high. The lime was good, showing white and clear. In the next field, at the bottom, another piece, seven feet high, was observed. On Hare Hill the fosse was magnificent.

*Oswald's Burgh. Burdoswald or Birdoswald.

The view looking back embraced the Solway, Carlisle, Skiddaw, Blencathra and the undulating country south of the Cheviots. A little to the south are Lanercost Priory and Naworth Castle.

At Banksburn the highest existing portion of the Wall is found in a garden by the side of the brook. It stands nine feet ten inches high, but had been deprived of its facing stones. It has, however, been refaced to keep it up.

Nearing Burdoswald the Wall appears on the south of the road in good preservation for a long distance, over seven feet thick and nearly six feet high. This fort, the Roman Amboglanna, is the largest on the line, being five and a half acres in extent, exceeding Chesters and Housesteads. It is situated behind a farmhouse immediately above the steep right bank of the Irthing. The place is typical of the rest. Looking out of the west gate the Wall on the right is six feet high, and on the left seven feet. The south-west corner is very high and solid, with the foundation stones very plain. The south entrance is broken down. The east Wall is almost gone, but over a modern wall the best gate is still to be seen, with two side guard-chambers. The walls are nearly eight feet high, with the remains of ornamental capitals. The pivot holes for the gates are very good ; there are two curved stones among the *débris* nearly two feet across, which probably formed portions of the arches.

A rough heap outside continues the Wall to a part of the foundation stones overhanging the Irthing, which, in the present state of the precipitous bank, causes one to wonder how the Wall was continued to the river, and to the bridge which must have crossed it. Several more mounds and portions of courses behind the vicarage garden next appear. Near the railway station there are traces of the existence of a milecastle. Next †Thirlwall Castle, built of stones from the Wall, is reached. At the back of an outhouse close to the stream at Holmhead, and built into the wall wrong way up, is an inscribed stone—CIVITAS DUMNONI. Up the hill the fosse is in splendid condition, and by the quarries the Wall is three or four courses high. The prospect along

†A.S. *Thirl-ian* = to penetrate. Said to be where the Caledonians first hurled down the wall.

this portion overlooking Spade Adam Waste is wild, and until Carrow is passed the route lies along the most perfect and picturesque part of the Wall.

From Magna (Carvoran), one can walk on the top of the Wall, which in some instances is over six feet high, in perfect courses. Much of the first part is among boulders and a thick growth of trees. Passing an excavation about twelve feet square we noticed the fosse was absent, and the configuration of the country shows no need for this precaution, which, however, appears at every point where the natural protection is inadequate. Over the Nine Nicks of Thirlwall the Wall rigorously pursues its course on their precipitous sides to Æsica (Great Chesters), a large fort indicated by high grass-grown mounds. At this point the rampart may be left, and at Haltwhistle, about two miles south, convenient accommodation is to be found. Resuming the journey, Cawfields milecastle, beyond the Caw Burn, is next reached, and the Wall shows in courses and mounds over Whinshields to the pretty group of Northumbrian lakes. Before reaching Crag Lough over Whinshields (1,230 feet), the middle and highest part of the Wall is passed. Nearly to the top of the crag the Wall is in splendid condition, and the sharp angles formed by it as it follows the contour of the edges are remarkably interesting. On the cliff we stopped for a long rest and thorough enjoyment of the varied scene. The pretty little mere at our feet was dotted with waterfowl, and in the crevices of the rocks dwelt jackdaws, rockdoves, starlings and other birds.

On the next hill, after leaving the lake, is Hodbank Farm, where a visitors' book is to be seen, given by the great antiquarian, Dr. Bruce, in 1856. He at the same time presented them with two of his works, which have since been borrowed.—Well, I need say no more ! The farm is beautifully situated, and affords a delightful and convenient resting-place for visitors.

From Hodbank we walked on the top of the Wall, which is here five feet high and over six feet wide, for a considerable distance. A little before the long plantation which terminates in Housesteads a grand milecastle is passed, with the northern wall over nine feet high ; the southern doorway is broken

down. Housesteads, the Borcovicium of the Romans, is a most interesting fort, magnificently situated on the brow of a hill, which, on its southern slope, shows traces of a considerable number of exterior buildings, the site of a town which had grown about the station. At some points the walls are over nine feet high. The western gateway is in excellent condition, with square columns standing, and two guard-rooms on each side about ten feet square. It has been reduced to half its width by closing the northern half of the outer and the southern half of the inner gate. When the garrisons were reduced this expedient was adopted at most of the camps, or it may have been owing to the lack of use. Bases of columns and other curious blocks of stone lie around the southern entrance. Rut-marks, as is often the case, caused by the chariot wheels, are plainly worn into the sill-stones of the gateways. The width of these ruts, 4 ft. 8½ in., is precisely the same as those to be seen in the narrow streets of Pompeii. The Pompeian streets surprised me not a little, and the high stepping-stones seemed to block vehicular traffic entirely. Probably their horses were inferior in size to our modern breed. It is noteworthy that this measurement exactly agrees with the gauge of the modern railway track, if it is correct.

The Wall, on leaving the station, is nearly eight feet wide and at the bottom of the valley is broken by a gap with large stones on each side, and to the south there are traces of guard-rooms. This was, no doubt, a more convenient entrance to the fort and town on the hill above, or it may have given egress to the amphitheatre supposed to have existed on the site of a hollow immediately to the north of this lower portal. Up to the small plantation the Wall is good, then it disappears, but by heaps of rubble it may be followed to Sewingshields.

It is an interesting variation to walk along the foot of the basaltic cliffs from Sewingshields to Borcovicium. The additional security obtained by leading the Wall to the north, along the verge of the precipices, is apparent.

With the exception of the Chesters remains the most interesting, and certainly the wildest part of the Wall, is now left behind. Undulating hillocks succeed, steep towards the north, then a recently excavated milecastle, with gateway

and guard-rooms very plain. Several more castles were indicated by grassy mounds, and at Carrow we stopped to examine Procolitia, on the south side of the present high road. Carrowburgh is a dreary-looking station, with grass-grown ramparts, and the ruins of the gateways plainly appearing. The antiquarian knowledge of a local farmer led him, in a season of drought, to search here for water, and he was rewarded by the discovery of the ancient Roman well which on examination yielded a remarkable quantity of coins, altars, carved stones, Roman pearls, etc.

A little further on, and about a mile from Walwick, there are some fine pieces of the Wall and ditch. In one instance the former is over eight feet high, and remarkably solid and strong. The top is covered with a thick growth of bushes. The change in the character of the scenery is now very noticeable, cultivated fields and thick leafy woods replacing the wild rugged moorland. After passing Walwick, at the bottom of the hill Chesters is reached, at one time the residence of the late Mr. John Clayton, who has done more than any other man to preserve and make known the relics of the finest monument of the Roman occupation of Britain. In the road going down the hill to the entrance the foundations of the Wall were very clear in the present high road.

Permission being readily and courteously granted, we examined the numerous altars, inscribed stones, ear-rings, bones, pieces of pottery, etc., in the museum and behind the house and then proceeded to the park in front to inspect the remains of the Roman Cilurnum, which covered an area of five and a quarter acres, coming next to Amboglanna in size.

The ruins are nearly all exposed and free from earth accumulations, and present the most perfect examples of the buildings of the larger Roman forts. The Forum occupied the centre and at the south end of the enclosure is a vaulted chamber in good preservation, the *aerarium* or treasury of the station. Near the centre of the eastern wall was the *praetorium* or commander's quarters. The hypocaust, blackened by smoke, and formerly yielding quantities of soot, is in an almost perfect state. The slabs of stone which formed the floors of the rooms are in position. Close to the

river a series of seven arched niches, in good preservation, is noteworthy, and the building is clearly recognized as baths. At this point the North Tyne was crossed by a bridge of considerable size, as is evinced by the remains of the buttresses on the banks and the piers in the river bed. On the left bank the river has receded and a large mound of earth intervenes between the buttress and the stream. The lewis holes and grooves for the iron binders are clearly defined. One curious piece of stone, over a yard long, has the appearance of an axle-tree, with the holes round the centre. When the bridge was perfect it must have been a noble example of architectural skill.

Tired, yet thoroughly pleased with our day, we turned into the "George," a comfortable hostelry facing the lovely river.

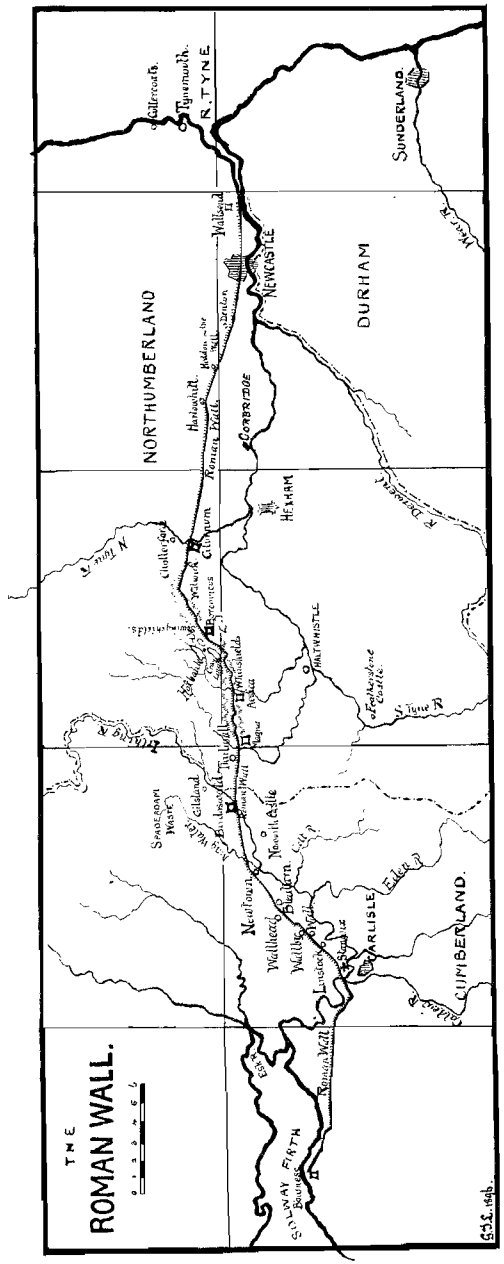
Between Chollerford and Newcastle few obvious traces of the Wall are to be seen. Here and there the highroad passes directly over the foundation stones. This is especially noticeable before reaching the Errington Arms, and after heavy rain the stones used to be exceedingly plain.

At Heddon-on-the-Wall a long strip covered with a thorn hedge appears on the right of the road and just over the hill there is another piece nearly four feet high with the remains of a milecastle. The winding Tyne is now seen away to the south-east and a canopy of smoke indicates the proximity of a large industrial centre.

At Dene House, two miles past Heddon, in the corner of a garden close to the road, is a heap of stones which have formed the columns of the gates of a milecastle. Next, at Denton Burn, there are two irregular mounds between three and four feet high, surrounded by a wooden railing.

Of course, in addition to the remains enumerated in this brief outline, there are many less conspicuous which the keen antiquarian has disclosed, and to those who wish to have an exhaustive account of these I would suggest a study of Dr. Bruce's large work and, for actual use on the walk, the handbook. Even at Wallsend traces still linger.

A few general remarks must terminate this account. Each of the forts was occupied by a number of soldiers varying from 600 to 1,000, so that the whole garrison, consisting of



cohorts of various nationalities, was probably about 12,000. In many places along the Wall specimens of rough inscriptions are still to be found, notably at the quarries on Fallowfield Fell, near Chollerford, at Coome Crag and at the Written Crag, in the glen of the river Gelt, near Brampton.

As will be gathered the central portion is in the most perfect preservation and this it undoubtedly owes to its wild and isolated situation. Thanks to the exertions of the Earl of Carlisle, the late Mr. John Clayton and others, the mutilation of the Wall has almost ceased and it is to be sincerely hoped that what remains of this valuable relic will be preserved from the destructive propensities of the passing vandal and the quarrying by the immediate inhabitants, ignorant of its antiquarian importance. Finally, a new era may be said to have opened for the Roman Wall, for now, careful and indefatigable attention is being devoted to its study and preservation, notably by the Society of Antiquaries of Newcastle-on-Tyne, whose journals contain notes on the most recent excavations and the consequent theories advanced.

AN APRIL RUSH TO CUMBERLAND.

By D. L. Reed.

Much depends on the way one approaches the hills, and the tone of a journey to the Lakes may determine the whole week-end. On the 16th April we went over in Goggs' Bentley like all the similes of speed. To some "Leah" was just another old car but the discerning observed her length of bonnet, the diameter of her brake drums and the massive forging that was the front axle. We went to the Lakes, then, like a ball of fire, like a bat out of hell, arrived "Fojos"* at Seathwaite and so remained. Our speed diminished appreciably after this and we reached the Styhead sign post some fifty-five minutes after leaving the farm, slothfulness rather disgraceful but excusable perhaps in the early spring following a winter that had yielded less than the usual amount of Pennine ski-ing. It is well to go gently after leaving the signpost so that, moving round towards Kern Knotts one can note to a yard the spot at which the roar from Piers Gill sweeps across the valley and breaks upon the silence that lies about Styhead. Then one can claim another minute's rest to listen to it.

So Crowe, Goggs and myself arrived at the Napes about five of a clear evening with a keen dry feel in the air. Sale and Brown came along a little later, were rather blasé about our attack on the Abbey Buttress and started to rope at the foot of the Eagles' Nest Arête. By this time we had, with due solemnity, gone through all the rites proper to the auspicious commencement of a rock climb; we had uncoiled the ropes, tangled them, untangled them, taken a photograph of someone standing on a rock gazing out over space, and we had broken into the chocolate.

"Talking of curious information, which we weren't, do you know that the firm which makes this chocolate has complete control of the supply of fresh milk to Barcelona?"

"Talking of rock climbs, which we ought to be, do you know we came here to climb the Abbey Buttress?" and the climb began. All went well for a little while and the silence at the foot of the rocks was helpful and in the best

*Fojos, Full of the Joy of Spring, usually pronounced Fokyos.

of taste, until the leader began to falter, went up a step and came down again, stood a long time in a very uncomfortable attitude on one foot and repeated the manoeuvre with equal success on the other. Then from below :—

"Hello." "Yes."

"Did you know that *droshky* is really plural, so that if you speak of riding in a *droshky* you're wrong ?" In spite of this the top of the first pitch was reached, the second tackled and another sticky patch discovered.

"By the way," said number two comfortably ensconced at the top of the first, "you are aware, of course, that at one time the engineering workshops at the University of Oxford were entirely devoted to the manufacture of astrolabes ?"

And so to the top of the buttress, reached just in time to offer the Eagle's Nest party the assistance of a rope from above. It was refused, but we thought, not scornfully. Soon afterwards there were five men at the top of the Eagle's Nest West Chimney, which is too many for any platform on the Napes, however spacious. Some went down Ling Chimney, and some the other ; for descent Ling was voted the easier. There was a grand sunset going on when we reached the bottom, but, as far as I can remember, callow youth went off and climbed the Needle whilst appreciative age watched the snow on Lingmell turn to pink, watched the banded red of the clouds over the sea.

The party descended Gavel Neese in open formation, joined ranks at the bridge and marched to Burnthwaite in good order. There whilst the bacon fried we held debate ; the motion before the house, "To bath or not to bath," reached the inevitable deadlock of :—

"I hate to let my sweat dry on me," and

"If you continue to plunge your marble limbs into hot water at every opportunity you'll have no epidermis left."

At supper we met two women who had walked over from Rosthwaite, having parted there from an acquaintance they had made who seemed to know every place in the Lake District ; they thought, possibly he had done some climbing, they thought his name was something like Beeton or Bentham or both, they wondered if we had heard of him. We had.

We did not continue our debate on the effect of water on the epidermis after supper, for these two departed immediately to the bathrooms and later there was no hot water. Left to ourselves and the soothing hum of the local dynamo, the usual question, "Well, what are we going to do to-morrow ?" fell on unresponsive ears for we were full, and content to let the next day take care of itself in spite of the necessity to decide whether to climb or to take photographs with the cinematograph machine Crowe had brought. We felt that it was impossible to do both but that we should inevitably try.

The morning came and was good, the sort of day on which Montague felt "that to stay indoors and write works about equal to Macbeth is a contemptible spiritless sort of business ; I must get out . . . . ." There was no nonsense about bathing as there had been one day in March when Longland and Watts rushed into the river near Rosthwaite, but we felt strong and took our breakfast without that wambly feeling at the knees that the thought of Brown Tongue immediately afterwards so often engenders. Dubiously weighing the sandwiches in our hands we set out ; Brown Tongue duly took its toll, we rested long at the stream and decided that the marmalade, of the gelatinous variety known as "pond life," had not been sufficiently nourishing. This settled we felt able to proceed as far as Hollow Stones, where we went into Committee. On the right stood Scawfell, its ledges white with snow, its faces dark and cold and fascinating ; on the left Pike's Crag, bare of snow and already warming up beneath the sun. Scawfell seemed to tower above Pike's Crag, one felt its challenge. Sale, Crowe and I accepted it, setting our faces sternly towards Lord's Rake. Brown and Goggs crept away to the pleasant fastnesses of Pike's Crag, but first we unloaded on to them an ice-axe saying they might find it useful for cutting lotus blossoms, thinking that we ourselves should find two an encumbrance.

Scawfell was in splendid form with lots of snow about and here and there some ice ; mindful of various involuntary glissades we had heard of in these parts, we roped on Lord's Rake before setting out for Steep Gill. There is a fascination, almost an inspiration, in the rocks of Scawfell ; one can lark about on the Napes as we had done the night before,

and one remembers people going up Pillar in top hats, one has heard of a man standing on his head on the Needle, of another proceeding, slowly, down Idwal Slabs head first, and of another going up the Cioch Direct feet first and backwards, but that sort of thing does not accord with the rocks between Lord's Rake and the Pinnacle summit.

Sale led, Crowe, carrying his heavy cinematograph, was second. Snow lay fairly deep on the lower reaches; Lord's Rake to the Progress was something more than a scramble and the whole place appeared different from what one remembered. We seemed to enter Steep Gill by a variation route (not to be recommended), and things became more difficult for the snow thinned out to a ticklish depth, not thick enough to hold an axe but far too thick for one to discern what was underneath. We climbed slowly to the Crevasse and bade Crowe unlimber his camera whilst we tried to get warm and passed a vote of censure on the Guide for its remarks on Slingsby's Chimney, " . . . . provides remarkably little genuine climbing, but is well worth doing for the sake of the views . . . . " To-day the climbing was genuine enough and the half was not said, nor could be said, about the views. The clouds had lifted as we climbed, we could see hill beyond hill, the rock walls beside us were magnificent; in the middle distance and below us was Pike's Crag, sunswept but insignificant compared to the rocks near by. First of all we were to attempt Sansom's traverse; Sale went down slowly, looked round the corner, looked back and said we could give it up, which we did. He started back as Crowe began to wind his machine. " Now smile," said Crowe, and as he spoke Sale found the hold for which he had been searching and obliged with considerable *abandon*.

So Sale returned and chivvied me up Slingsby's Chimney. Now it must not be supposed we were comfortable at this time, we were out of the sun, there was plenty of snow about and the wind came in chill gusts. In a half-hearted way I scratched about with the ice-axe, trying to uncover handholds to help me across the crevasse on to the sloping platform below the chimney and thinking that there weren't any. Having found one, in the wrong place, I pushed off and found myself balanced on one knee on a round knob trying

to maintain equilibrium with one awkward hold for the left hand. Here I remained, poised unstably whilst occurred one of the most satisfactory and good-humoured exchanges of small talk I can remember. Everything was said which should have been said, every sentence was well rounded, nicely finished, there was not one word which either party wished to alter after the maturest reflection. The point was my left kneecap moved, as kneecaps do when knelt on, and I began slowly to overbalance. Sale observed it.

" I say," said he, eyeing the sloping foothold below, " would it be of material assistance were I to hold your foot in? "

" Well, no; the situation is, not that I am about to slide off, but rather to rotate in a clockwise direction as viewed from behind. If you will be so kind as to press against my right buttock, I shall be grateful."

" How unfortunate! D'you know it is, at the moment, beyond my reach. I could use the axe of course; which end would you prefer, the flat of the blade and pick, or the point? "

" The former would, I think, be preferable."

The welcome pressure came. We shall remember those sentences, paltry as they look when written down, we shall remember too, the scene, a conversation piece with a setting of rock and snow, and a clean wind blowing.

Of course after that the sight of a bit of ice in the chimney frightened me, I crept back to the Crevasse and Sale went on with his customary ease. He hauled up the rucksack whilst Crowe and myself squatted at the foot of the chimney. Crowe went next with the ice-axe through his belt, went up quickly till its point was dangling about six inches above my head and his tricounis scratching away at the same level, then he stopped and stayed put for about a hundred years until, my penance being completed, he climbed on without more ado. Shortly afterwards we arrived at Low Man, where the sun was shining, and took lunch. It was half-past three before the real work of the day began, the movie camera was wound up and aimed at Sale who set out across the Knife Edge and up the Arête. It was the best place we could think of for the job, and the sun shone on Crowe's endeavour.

The sun did not shine on the easy way off High Man ; with snow and ice about we had fun getting off and more fun later on Broad Stand, whence we could see the other two, lounging in the sun on the Pike. So, back to collect the sacks, down from Lords Rake and away along the Corridor Route to Styhead, pausing only to drink and to take telephotos of Scawfell. We arrived at Mrs. Edmondson's completely famished, there was no question of baths, hunger was of paramount importance ; we sat round the table listening to the sizzle of bacon and greedily eyeing the sugar in the basin and the small round cakes.

" The only thing I can't resist," we quoted, " is temptation," and succumbed, but we did not spoil our appetites for a tremendous hyperborean dish of bacon and eggs.

There is not much more to tell of this April week-end ; one thing I remember seeing from the Bentley before pulling the rug up to my ears and closing my eyes, a silver birch, leafless, shining in the headlights against a dead black background. Later it occurred to me to wonder, sleepily, how the week-end would have been described forty years ago. Headed, no doubt, by a quotation from one of the minor but more uplifting poets, its first high spot would have been a halt on the Keswick road to look at Saddleback and allow some bearded member to remark, :—

" Vide ut Blencathra, stet nive candidum,"

and for another to forgive him the parody. There would be some debate as to whether the Eagles' Nest was justifiable, and then ? Well after all there wasn't anything really worthy of comment. Forty years hence ? Still less, some description possibly of the food taken, expressed in proteins and calories, the latter worked out according to the Grouch formula which calculates the amount of work to be performed from a man's weight and the height to be climbed, estimates his efficiency as half that of a perfect heat engine working between the same limits of temperature, and so arrives at the number of foot-pounds, horse-power—hours, or kilogram-calories required. After that only a few notes on times and the various scientific instruments read during the day.

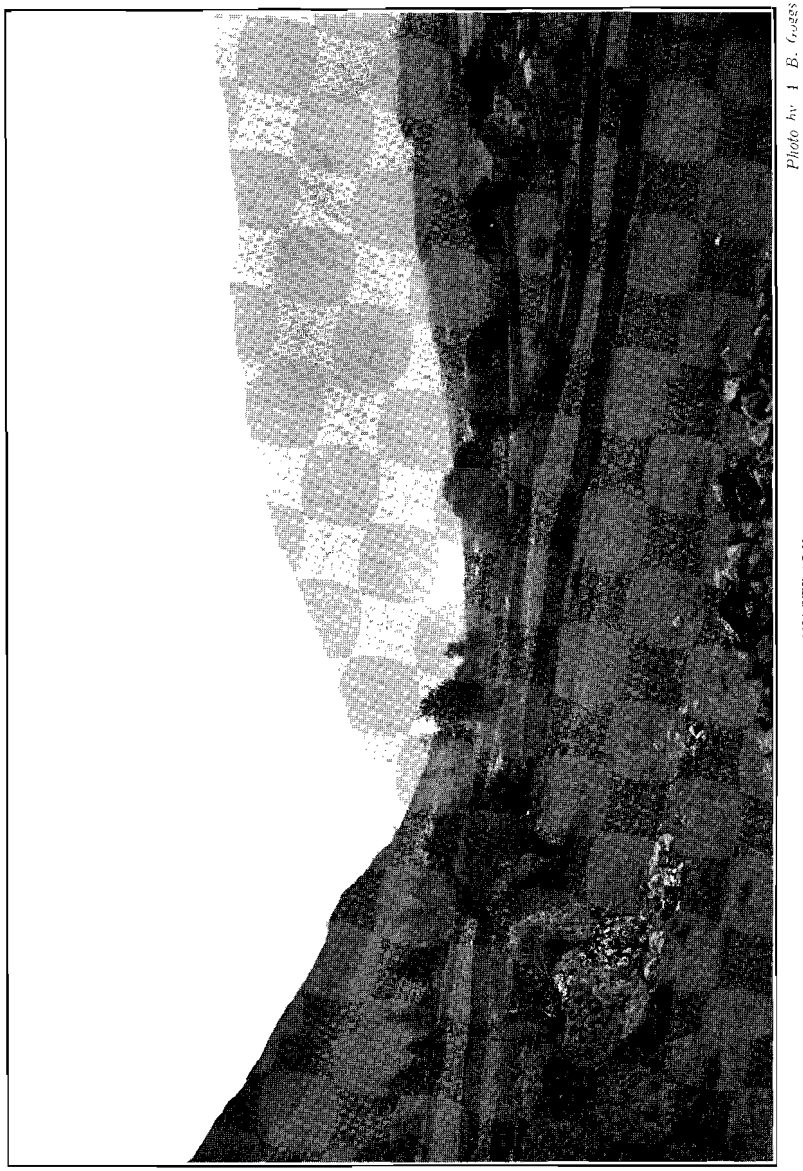


Photo by J. B. Coggs

WASTDALE.

A WEEK-END AT BUTTERMERE.

By W. E. Evans.

Are the " outlying climbs " of the Lake District neglected more than they deserve? Or am I and my climbing companions exceptional in our almost total ignorance of them? I knew that Troutdale Pinnacle was a delightful exercise to occupy a Saturday afternoon in Borrowdale, but a Gable-wet-Scafell-fine programme usually followed as a matter of course.

However, the discovery of the Western Buttress of Eagle Crag on a perfect day in early August, demanded a visit to Birkness Combe again, at the first opportunity. If the weather and the other climbs were at all comparable, the day was an assured success. I found J. amenable to persuasion, and his car capable of tackling the stiff pitch of Buttermere Hause, and so tea-time on Saturday saw us beside the lake. Nowhere in Cumberland, to my mind, do trees, water, and hill-sides come so well together as at Buttermere. That day showed bright gleams of sun and cloud shadows on mountains purple with heather—one in the catalogue of that country's changing moods; who shall say which is the loveliest—February snows, June foliage, August's purple, or the gold and russet of October?

We had decided not to stay at Hotel A, as it would probably cost us eighteen shillings apiece. So we went to Hotel B; but one has of course to pay for acquiring the state of mind after dinner that does not care if it rains all day to-morrow—" Fate cannot touch me " and all that sort of thing,—and on Sunday evening each received fourpence change from a pound note. When, moreover, we discovered that our host was none other than that supposedly mythical person, who not only knew what Gladstone said in '84, but really had climbed with C..... P..... in the cold snap of '95, our delight was immense, and the utter annihilation of a senior treasury note forgotten.

Birkness Combe overlooks Buttermere from the ridge dividing the latter from Ennerdale, and is the first of the large combes reckoning from Scarth Gap towards Crummock Water. Its main feature is the impressive buttress of Eagle Crag, where the climbing is extremely steep and generally

difficult. On the right of the combe, looking upwards, a number of buttresses form a broken line of rocks rising about 400 feet, almost to the summit of High Stile. Here the climbing is of all grades from moderate to severe, and a degree of exposure can be obtained which is not at all obvious from an examination of the rocks from below, for they seem generally laid back at an easy angle.

One hour and a half, says the guide-book, from Buttermere Village to the foot of Eagle Crag; and so it would be in any other month when there are no luscious beds of bilberries to seduce the earnest climber from his upward toil. However, much of the day remained before us when I informed J. that we were now at the foot of the Eastern Buttress, and that he was going to lead me up it. The rocks and ourselves were very wet, and not a little cold, so we found the first pitch interesting, the second difficult, and the third impossible. Thus a deadlock was reached above the second pitch, and we found it necessary to explore every avenue, for I firmly refused J.'s generous offer to allow me to lead the second pitch down. Our "easy way off" gave us an exciting hour on exceptionally steep grass and heather, where each of the few rocks that protuded was eagerly investigated as a possible *abseiling* point, but always without success. I have long admired J.'s pertinacity as a pot-holer, but never more than when he finally made the pitch "go" by excavating from a most unpromising garden of heather and earth, a capacious and unexpectedly sound hand-hold.

It was now time for tin-openers, and suitably fortified, we contemplated our next assault.

Bearing in mind the exhilarating exposure of the Western Buttress—there are places on it where one feels extraordinarily lonely—I felt that it was not the place for us in the strong, gusty wind which had risen, so we moved off towards the west side of the combe, where the Harrow and Mitre Buttresses lead to the summit rocks. On the way, a large party attempting a sort of super-direct route up the Western Buttress claimed my attention. I did not think that they could make a way up, but lest the length of their rope, which was enormous, was a measure of their competence, I asked tactfully if they were making a new route. To which they

replied that they didn't know of any route, and was this Eagle Crag? I indicated the start of the climb, gave it a good character, and the party my blessing, and went on, not without an occasional glance behind to observe progress.

Now, the first pitch of the climb is a 30 foot wall, with good holds, but absolutely perpendicular, and at the top it is necessary to surmount a jammed block, which protrudes from the face; although by test it is sound, it looks hideously unsafe. My astonishment was great to see the leader clutching the face of the block with both arms, both legs, together with such other portions of his anatomy as he could summon to his assistance—a situation which seemed to me to be fraught with the gravest possibilities. He eventually extricated himself from this interesting position, and brought up his second, who wisely assumed the lead. The entertainment was not yet complete, for the original leader, now following, climbed the remaining pitches trailing behind him no fewer than sixty feet of loose rope. We could only assume that he wished to make it harder, but if he hoped that the rope would jam, he was disappointed—and so were we.

After this, our own adventures were unexciting, but we made three or four hundred feet of nearly continuous and very enjoyable climbing, by taking the Harrow Buttress, which is pleasant without being difficult; then crossing the gully and bearing to the right, and up the Chockstone Ridge, which is more difficult and equally pleasant; and, finally, by bearing to the left at the top, reaching a ridge—the "Oxford and Cambridge" climb—which we found too exposed and difficult to be taken direct on wet rocks and in a high wind. The easier alternative to the left has one pitch of sufficient severity to soothe a pride wounded by failure to surmount the arête.

If any be persuaded, like ourselves, to visit Birkness Combe, and afterwards walk along the ridge to High Crag and back to Red Pike, they will be rewarded—so it be fine—with views as magnificent as any that the higher peaks of the Lake District have to offer.

GOYDEN POT, NIDDERDALE.

By H. YATES.

Goyden Pot is situated in the dale of the Nidd north of the village of Lofthouse, 210 yards north of the farm called Limley, 22 miles from Harrogate.

Strictly speaking it is not a pot; it is simply a cave of engulfment into which the waters of the Nidd flow in flood time. During the drier months of the year the river sinks into its bed just above Manchester Holes, 400 yards further north of Goyden Pot, and can be followed a considerable distance underground in a southerly direction, by entering them. During flood times the water, besides sinking at Manchester Holes and in at least two minor sinks, plunges into the main entrance of Goyden, thunders into the Main Chamber via the Window, races along the main stream passage, and disappears at the end to reappear in the newly discovered lower stream passage down which one can follow it for about 120 yards to a walled-in pool, and only comes to light again at Lofthouse, about two miles south.

A close examination of the map will greatly help one to follow the underground meanderings of the Nidd, and the maze of passages formed by its tributary.

The first record that has been noticed of anyone exploring Goyden, is found in *Chambers Journal, May 5th*, 1888. The author of this article (unsigned, but known to have been by Mr. G. V. Gaskell of Chapel Allerton) describes his visit as a fourth exploration, and relates how he and a friend (the Captain and the Skipper) went into Goyden, climbed down a rope—fixed beyond the Bridge—into the Main Stream Passage, and followed it to what he considered to be the end. He must have kept to the right hand wall when the roof flattens out, otherwise, he could hardly have failed to find the Labyrinth Passage. (A lantern slide of a plan by the late S. W. Cuttriss shows that he and T. S. Booth were the first to enter the latter). On the return trip he describes how he found and explored a passage reached by climbing about 12 feet up the wall of the Main Passage. He describes it as sloping upwards and extending in a southerly direction to finish in a pool of extreme depth, near an almost circular

shaft going up into obscurity.

Unfortunately the article gave no hint as to the position of this passage, neither as to its distance from the entrance nor on which side of the Main passage it was. Consequently the Gaskell find lay undisturbed for 43 years, to be rediscovered as shall be described later.

The next important event in Goyden's history was the rediscovery of the Labyrinth Passage and the exploration of the Labyrinth by F. H. Barstow, R. F. Stobart and others, in June 1912, which resulted in a very useful map being published in the *Y.R.C. Journal, No.* 15 (1922). An accompanying article by the Editor, mentions a Y.R.C. meet at which at least 15 men invaded the Labyrinth in October, 1921, but, beyond the release from a timber jam of the direct route to Five Ways nothing new was found.

There is no record of any Y.R.C. men visiting Goyden for seven years (although a party of Gritstone men almost met with a catastrophe owing to the waterworks letting loose a quantity of compensation water and nearly drowning the party), until a detachment from the Wath Meet in 1928 went as far as " Pillar Pot " in the upper passages. A second visit in the same year unsuccessfully searched for Gaskell's Passage. These two visits are mentioned in the *Y.R.C. Journal, No.* 18, *p.* 331.

On March 23rd, 1929, the Club held a Meet at Middlesmoor, at which only four men turned up, E. E. Roberts, C. E. Benson, G. C. Marshall and I. During the course of the day Goyden was visited and two of the party went as far as the Window and were so impressed by the appearance of the cave that they decided to come again in the near future.

Accordingly on June 16th of the same year a party consisting of W. V. Brown, J. Hilton, G. C. Marshall, E. E. Roberts and the writer entered the cave and went via Five Ways, Ten Foot Climb, and " Chert Nodules," to High Rift, the most southerly point of the cave then known. During this visit the nebulous chamber near the Twenty Foot Pitch, drawn with a dotted line in the Editor's version of Barstow's plan, was verified and furthermore was found to have a passage going out of it, which near its end gives a peep down

into Carbide Tin Passage. This chamber has since been called "Worm Pot" and the passage, "Worm Drive" because a number of live earthworms have been found in that district, indicating a connection with the surface.

I have no notes about my next three visits, but if I remember correctly, the first party, A. Butterfield, myself, and about 20 friends and acquaintances met to explore a belfry a few yards south-west of Five Ways. Two ladders were taken in, one of the party climbed the belfry, fixed a ladder to the top, and the rest of the party followed. The chamber we reached was not a large one, and the party *was*, so something had to be done. We overflowed into a most inconspicuous little passage which after becoming still less conspicuous and then positively minute, opened out into a small chamber in which three men could sit comfortably, and in this chamber there was a pitch! As the bulk of the party was by this time down the ladder and preparing to make off, and as it would have been a good two hours job to disconnect the ladders from their belay and fix them up on our new pitch, we decided to call it a day and return some time in the near future to complete the job.

It was not long, and this time H. & W. Armstrong, A. Butterfield, B. Nelstrop and I, complete with two ladders and a suitable quantity of rope, made the second attack on this particular department of Goyden. As before, one man climbed the belfry and fixed the ladders, and the rest of the party came up with ease. The ladders were next rolled and made into parcels as flexible as possible. By dint of easing and coaxing they were brought through the tight and spikey crawl, and forced into the small chamber. The question of belay was answered by a hook made of rock, in exactly the right position and amply strong enough to hold the weight of a man and ladder. The pitch was found to be about 20 feet deep, but in the floor of the chamber in which one arrived was the top of the next pitch. The ladder, which had piled up was thrown down and a man followed. A glance at map will show where we came out! Disappointing—but all new stuff! A short account of both this meet and the next is to be found in the *Y.R.C. Journal Vol.* VI., *p.* 77.

The latter occurred sometime in 1930. Butterfield, Nelstrop and self decided to force "Cap Left" passage to a finish. We arrived at Cap Left via A Junction and the Ten Foot Climb, as being probably an easier way than via Five Ways. Cap Left is about 50 yards of unadulterated crawling to a watersplash, in which one has to get wet, followed by about 20 yards of walking and crawling mixed. The passage finishes by sub-dividing, one branch too small to follow and the other stopped by a boulder choke.

We were all wet, through crawling past the watersplash, so we decided to go and have a look at the Twenty Foot Pot and see if we could find where the water, which drips from the roof, disappeared. We found that the water sinks into the stones a few yards down Carbide Tin Passage, but, more important still we found that an opening, marked down in 1929, could be entered at this point, and along it one could move in a westerly direction.

It started with a pool which if I remember rightly I negotiated fairly dryly (ever since I have got wet at this point). Shortly the route turned south and became rather more commodious, and soon the leading man was able to hear the roar of distant water. The morale of the party immediately mounted to hitherto unknown heights; it seemed almost certain that this was the Nidd we heard! I remember one member stating that should anything happen to turn us back before we witnessed the rushing waters, he would cry! The noise became greater and on turning down a low "side crawl" we found ourselves in the roof of a passage about 8 feet high down which was flowing, not the Nidd, only a minor tributary of that river. Hopes were still high, for surely the stream must flow into the Nidd, which we believed was not very far away; accordingly we walked and crawled down stream for what afterwards was measured as being approximately 90 yards, past two tributaries, to a finish where the stream dropped 2 foot into a sump of "unplumbed depth." We amused ourselves by throwing stones into the sump in the hope of finding shallow water somewhere, but the splash always replied with the same deep bass boom!

We returned up stream, past the passage by which we had

entered, now walking, now crawling, along stream-washed passage, loose boulder jams, pebble beds, past as many as seven passages on our right side, all less imposing than the one along which we crawled, a slow painful progression for 140 yards, finishing in a choked bedding plane which the survey shows to be within a few yards of Labyrinth Passage. The return journey was as uncomfortable as the journey there, but in due course we saw daylight—at the entrance.

On April 11th, 1931, four of us, Dean, Higgins, Nelstrop and I went down the bedding plane into New Stream Passage and along it to the Sump. Dean and I roped up, climbed round the corner, and gained a ledge a few feet above the Sump and south of it. From here it was possible to climb up a muddy rift about 30 feet directly above our heads, materially helped by two chock stones which tended to rotate when trodden on. As we climbed we seemed to be traversing back over the Sump and quite suddenly we found a firm floor under us and the rift, which had become a passage, becoming narrower. There was, however, next the roof a kind of miniature bedding plane along which we crawled with one leg in the crack until we suddenly found ourselves in a fairly large chamber. This turned out to be a passage of fair dimensions along which we walked at a good pace, passing a descent into a pot on our left-hand side, and we were delighted to find that the passage was growing larger. It seemed as if it would go for a long distance and we were eager to follow it to the end, but then came the thought of the other two of our party wet through, sitting on a wet stone in New Stream Passage, patiently (?) waiting for our return. We held a consultation, and decided just to go a bit further—it was fortunate that we did!—for about 20 yards further on we came into a chamber with water dripping from the roof, *and a rope hanging down the opposite wall.* We were back again at the Twenty Foot Pot. It must be remembered that we thought our position was about 200 yards further west, that is, in the neighbourhood of the Nidd. We had been following an obvious tributary of the Nidd, downstream, and I think, had reasonable excuse for thinking that it would flow towards that river instead of flowing as it did, constantly getting further from the main stream. However, having

re-assorted our ideas, we returned to the place from which we had entered the upper passages and shouted down to the people below to return to the Twenty Foot Pitch by the way they had come and we would meet them there.

[The Sump has recently been passed under drought conditions, but the passage beyond immediately closes to a mere crack.—EDITOR.]

We next visited the adjacent Mud Pot and followed the passage out of it, down which the water flows to another sump at the end. We thoroughly examined this pool and came to the conclusion that nothing could be done with it. Higgins, however, noticed a small "rabbit-hole" on the west side of this passage, about 8 feet up from the floor. He disappeared into this hole, head first, reappeared, reversed, and went in feet first, for this is the only way that this particular part of Goyden can be done. No one followed him down this rabbit-hole, but on questioning him afterwards about it we learned that the procedure is as follows.

You enter the rabbit-hole feet first and after one yard, you slide as gently as possible down a precipitous face, coated with mud, hanging on to a leaf of rock, and then climb back about 8 feet of muddy overhang into a second hole on the other side of the leaf. The rest is a crawl and you finish in New Stream Passage. Nothing more was done that day.

On May 3rd a goodly party assembled, but the heavens were unkind to us for they had chosen to loose a quantity of surplus water, and consequently Goyden was flooded. Some of the party, by dint of keeping well on the east wall, at the commencement, managed to get just below the bridge and could have gone on further. One important fact was learned on this occasion, namely, that in flood time the water enters the Main Chamber via the Window and not at all by the rock slopes down which one climbs.

It had been in our minds for a long time to make a detailed survey of Goyden, bringing up to date the plan made by Messrs. Barstow and Stobart, already referred to. Considering the short time which was taken over it, the Barstow-Stobart plan is a remarkably accurate piece of work, but considering the complexity of Goyden, we thought it deserved a more detailed and accurate map. Accordingly, a week after the

flood, Butterfield and I armed ourselves with appropriate tackle and began surveying from the entrance. The whole of Main Chamber and Main Stream Passage and Labyrinth Passage as far as Five Ways was completed that week-end. The low sandy crawl going north from Labyrinth Passage was followed as far as was possible and we had to turn back within a few feet of running water (obviously the same water as that which enters the Nidd just north of Labyrinth Passage). As we were coming out of the Main Chamber, a few yards before we turned the left-hand corner which brings daylight to view, a small hole choked by a boulder was noticed in the floor. We wrestled a bit with the boulder, got it unstuck and rolled it away, and thus were able to descend a steep slope, at the bottom of which a short crawl started, ending in a short pitch, another horizontal passage, and—a fair sized stream. I am not at all certain if I have given the details of the descent into this stream correctly; the effect was most perplexing and we felt that there was some doubt whether we would be able to find our way out, consequently we did not spend much time in exploring, but concentrated our attentions on getting out. We experienced no difficulty but I feel sure that our route down and our route up again, differed considerably in places.

On Saturday evening, May 30th, the same two with Roberts carried on the good work and explored further into this latest stream passage (since named Lesser Stream Passage). We were soon through the boulders and went first of all downstream to find out if, or where, it joined the Nidd. For the most part the passage was low and in at least one place the water very deep. In two places we experienced difficulty in keeping our lamps lit, owing to a full-blooded waterfall coming from the roof. Shortly after passing the last waterfall we suddenly found that we had come into a large chamber which seemed to extend indefinitely into the distance. Hopes and enthusiasm were high until somebody remarked that he recognised it as the beginning of Main Stream Passage. We had entered Main Stream Passage from underneath the bridge, by a passage of a fair size which had never been noticed, lying hidden behind a waterfall. Then, with considerable difficulty we followed Lesser Stream Passage, upstream. It is not the usual type with smooth washed walls and pebbly floor; far from it, it is merely a track which can be followed with difficulty among falls of roof, finally subdividing into a submerged bedding plane from which the stream flows, and a high crack impossible to follow. It was midnight when we came out, and we were pleased to get into our sleeping bags, and listen to the rain which had started before we went underground, beating on to the roof of the tent. It had been arranged that the next morning we were to explore more carefully the New Stream Passage and particularly the Sump; but what is the use of arranging things beforehand, for the weather only comes and spoils all the plans? So the next day, instead of exploring Goyden, we just went a walk.

On July 5th, Butterfield, Nelstrop and self continued the survey, concentrating on Pool and Boulder and Five Ways districts. Higgins was occupied in showing the beauties of the cave to three other men who came with us. A word of warning will not be out of place; whoever takes it upon himself to camp at Goyden Pot at this time of the year, for his own sake should being some anti-midge preparation, though we found that the smoke from smouldering clothing was quite effective.

On July 26th, we again continued the survey and succeeded in completing all the cave below the Ten Foot Climb with the exception of the system of passages near the entrance of the pot, and of course Gaskell's Passage, which had not then been discovered. While looking round among the rocks at the entrance for a suitable place to deposit a tin, Nelstrop made the very interesting discovery of an alternative way into Goyden, which might be useful in flood time. The hole had to be enlarged somewhat before we could get in, and even now it is a tight fit. Owing to the curious manner in which this passage descends, Nelstrop coined the name "Back Steps Entrance," which name it bears on the map.

While we had been diligently exploring and surveying the pot, another absolutely distinct party composed of men from the Pudsey Ramblers' Club had become interested in Goyden. On August Bank Holiday, 1931, Messrs. G. N. Daley, K. Smith, and W. S. Farrar entered Goyden with the

idea of searching for the passage entered by Gaskell in 1888. The Pudsey party passed it just as Gaskell himself and everyone else had done, and only noticed it on the return journey. They climbed the wall to it, and up the spiral 25 ft. climb and mud slope at the end (a horrible place well plastered with very wet mud and decaying vegetation), then up a 27 foot "Spiral," by both good luck and good management finding the small chamber which they named "The Chapel." The finding of the Chapel is the key to the whole situation; it is by no means obvious and entails a short traverse with a knee on each of two ledges, actually returning in the direction from which one has come. From the Chapel a winding passage leads to "The Turf," a vertical pitch of between 40 and 50 feet, 31 feet ladder climb, and it speaks very highly for the men of the Pudsey Club that they should tackle it with such a small party and just one rope. Farrar was lowered down and found himself in a fair-sized passage, a short distance from the Nidd. He followed the Nidd downstream but must have kept too much to the right-hand-wall, for apparently he completely missed the dry passage running parallel to the stream, and finished lying on his back in water with his toes touching the roof. The return journey up the Turf seems to have given a great deal of trouble; two men working in a confined space have not much spare power to haul a third man up a 50 foot pitch over many points of friction. Eventually somehow or other they managed it, and with the rope coiled up two hot and tired men and one cold and shivering man made good speed towards the entrance.

Knowing nothing of the Pudsey discovery, Butterfield, Nelstrop and I on August 30th, again found ourselves in Goyden with the survey work in hand. A short time previously a cloud-burst had occurred in the district but no debris had been left to jam Goyden's passages. There was evidence of the interesting fact that practically the whole of Goyden was subject to flooding (very interesting to any one down at the time). Anyhow, on the expedition in question, we had arranged previously to keep a sharp look-out along Main Stream Passage for Gaskell's, and saw it about 12 feet above stream level on the right-hand bank. The passage starts in a most promising manner with plenty of room for

one to stand up, but after about 40 yards becomes much lower and eventually finishes in a steep decline down to a pool in which a fish was swimming about. Just before the decline, in the right wall of the passage is a low opening which leads to the belfry mentioned by Gaskell. At the time it looked a difficult but possible climb, and as the survey work had to be done, the belfry was left till another occasion. It is curious how Gaskell's Passage had remained undisturbed since 1888 to be rediscovered in 1931, twice in the same month. The survey on this occasion included Cap Left Passage and the passage connecting it with Silcock's Pool.

On 8th November, 1931, E. E. Roberts, Heys, and the regular Goyden party entered by Back Steps Entrance (as a torrent was going down the main hole for the third or fourth time), and went straight to Gaskell's Passage. The Belfry was climbed without any trouble and we found a passage at the top leading to a small high chamber, from which one climbs the "spiral," a curious, almost vertical "S" bend, well plastered with sloppy mud. Higgins and I followed the obvious continuation, a low narrow crawl which becomes higher but narrower, until we reached a point at which we deemed it advisable to stop. On returning to the top of the spiral, had we carried on with one knee on each of the two ledges, instead of going down, we should have come to the chamber named by the Pudsey Ramblers, "The Chapel."

In 1932 we continued our survey by two all-night shifts in February and March, but decided that on our next visit we would have a look at the system of passages which is a direct continuation of the entrance passage. Accordingly on March 20th, Higgins, Nelstrop and I, after an evening meal at Lofthouse, entered Goyden and went straight to the timber jam at the end of the entrance passage; it was surprising how easily we forced our way past the jam, it being all compressible material. We followed the passage thus reached to its end in a 15 foot pot with water of great clearness and considerable depth.

About three yards from this pot we found a low crawl along which we proceeded for some yards and eventually branched off along a still lower crawl to the left, which finished in a narrow passage descending and becoming at once higher

but narrower. A trickle of water enters this passage and a few yards further on it becomes about 3 feet high, only one foot of which is of use, the other two being too narrow. Where this passage eventually finishes I don't know; it is one of the most painful but most promising of Goyden's passages and I will take off my hat to the man who eventually follows it to its conclusion. The fifteen foot pot we have named Pillar Pot because of its fine pillar of eroded stalactite, but this last passage which I have described defies naming, or at least the name which one might give it defies printing; the point we stopped at is named the "Sacrificial Stone."

About mid-way between Pillar Pot and the timber jam is a chamber from which starts a low crawl, in mud, decayed vegetable matter, and fungus. This crawl finished uncomfortably in a shallow pot of about 4 ft. deep, but about half-way along its length is an aven, difficult to enter and difficult to climb. From the top of this aven is a passage leading round right-angle bends to the top of a 15 foot pot with no other exit.

Surveying was continued on April 23rd, at "Break through possible" (I considered this to be a bad misnomer, but the Editor says it was broken through twice in one day in 1921), and then the upstream part of the New Stream Passage was tackled and completed though none of the side issues were surveyed nor, I think, will they ever be. We next surveyed the short piece of passage near Ten Foot Climb from which the stream flows which passes through Five Ways and gets into New Stream Passage.

On June 4th, the whole of the Pillar Pot system was surveyed, and the next day we made a tour of inspection during which High Rift in the far south was climbed about 20 feet, but no passage was found.

On September 24-25th, we had another nightshift to survey Gaskell's Passage, and after a short search found and surveyed The Chapel and the winding passage leading to top of "The Turf." We rigged "The Turf" pitch with the bobbin ladder (a device composed of wooden bobbins threaded at regular intervals on a half-inch rope), and Higgins and Nelstrop descended and explored the passages beyond. On our way out Butterfield and I surveyed Lesser Stream Passage for

about three quarters of its length (the rest on the map being merely guesswork) but absolutely failed to find the way by which we had first entered the passage, so had to retrace our steps to its junction with Main Stream Passage and return in the usual way.

The evening of October 1st was spent in surveying Back Steps Entrance, and on the following day Roberts turned up and we all made an excursion into the Gaskell area. We had two ladders and consequently were all able to get down to the lower Nidd which we surveyed, and, we hope, explored completely. It terminates amid fine rock scenery in two flooded joints. Jammed by flood waters in the roof of the second joint, as if done by expert miners, are two large and two small squared timbers. These are part of the debris of the crane once encumbering the entrance, and in some marvellous way *have passed through the sink of Main Stream Passage.* Another squared timber has passed Ten Foot Climb to near Silcock's Pool

The horizontal survey of Goyden was now completed but owing to some Y.R.C. men crying out for a few vertical readings, we felt it incumbent upon us to provide them with some, so in December Higgins, Nelstrop, Mariner and I, armed with plans and the Club aneroid, descended Goyden and took the first reading at point 9 of the survey (the hole down which we climbed when we discovered Lesser Stream Passage). Twelve readings were taken including two at point 9, one going in and one coming out, which showed a difference of 41 feet between the two readings, a deficiency which was divided out as accurately as possibly over the twelve readings, assuming an even fall in the barometer.

This aneroid survey will probably be inaccurate and I should like someone to re-survey it some time and check over our results. One obvious inaccuracy was in the relative heights of the place where the Nidd eventually disappears and the place at Lofthouse where it reappears, the difference being 33 feet according to our readings!

There is still work to do in Goyden for anyone thin and energetic enough to do it. There are several connections to be made. Pool and Boulder passage is waiting to be connected directly back to the main stream passage; we have

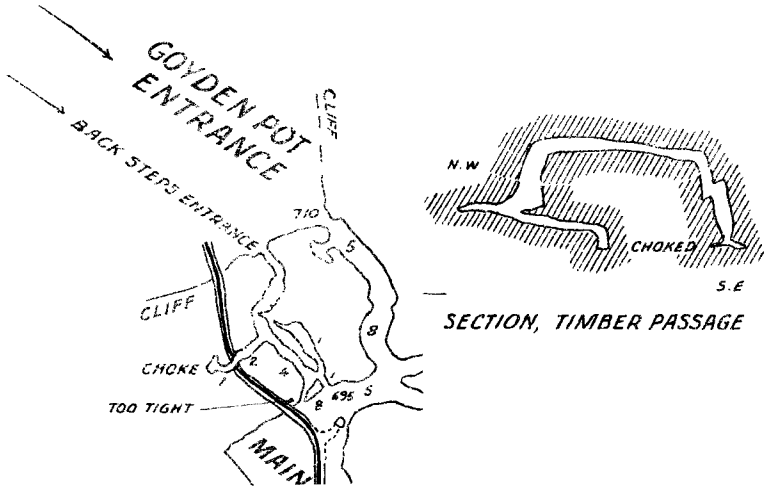
found what we consider to be the two ends but have been turned back in one case by a timber jam and in the other by a well of deep water. There is the connection by mining between Cap Passage and the entrance to be made. Labyrinth Passage should be connected with New Stream Passage and Carbide Tin Passage with the Five Ways System. A continuation of the low crawl in the Pillar Pot district will certainly yield interesting crawling if nothing else. There is still the large opening going east from just south of the Bridge in Main Chamber; all it needs is a 15 feet plank to bridge Main Stream Passage. There is also the barely accessible passage opening in the Chapel, which will probably need a wooden ladder. So we have left quite a lot for the next man.

Our thanks are due to Mr. Rose, chief resident engineer on the Bradford reservoir works, who took a lively interest in our work and assisted us enormously by keeping us well posted as to weather conditions, a most necessary factor in the exploration of Goyden Pot.

It is a fallacy that Goyden is all crawling; it has its share, but I don't think it is any worse than chunks of Gaping Ghyll, and it has the advantage of needing hardly any tackle.

There are two special features which ought to be mentioned as being peculiar to Goyden. Firstly, its chert nodules. Never have I seen in any other pot such an abundance of perfect specimens of these phenomena, some of them actually bridging the passages in which they are found. But a word of warning is necessary, many of them are rotten and absolutely unsuitable for belays.

The other special feature is the curious way in which the stalagmite formation is being eroded. It is obvious that at some time a drastic change has occurred which has stopped the natural building up of these stalagmites and has caused them to be worn away into the curious shapes in which they are found, still exhibiting the concentric lines of deposit in the same way that carved wood shows its grain. I think that this change has been brought about by the building of the farm above the cave, causing the acids from the manure to percolate through and eat away the stalagmite deposits. I have mentioned this theory to a chemist and he disagrees but does not submit any alternative theory.



SURVEY OF
GOYDEN POT
NIDDERDALE

BY

A Butterfield
W.F. Higgins
B. Nelstrop
H. Yates

SCALE 1/1000

0 50 100 200 300

Passages in red are at higher level than passages in black.
Blue indicates water.
Numbers 538 to 710 indicate height above sea.
Smaller numbers, approximate height of passages

GOYDEN POT ENTRANCE
BACK STEPS ENTRANCE
CLIMB
CLIFF
CHOKE
TOO TIGHT
MUD CHOKE
MAIN CHAMBER
MANCHESTER HOLE WATER ENTERS
LESSER STREAM PASSAGE
BRIDGE
644
30 FT UP
UNEXPLORED
MAIN RIVER PASSAGE
15 FT CLIMB
BEDDING PLANE
TIMBER JAM
600
GASKELL'S PASSAGE
STREAM ENTERS
CHAPEL
SPIRAL
THE TURF
568
RIVER PASSAGE ENDS IN POOL WATER MEETING ROOF
STILL DEEP POOL
DRY
LOWER RIVER PASSAGE
538
DEEP POOLS
PILLAR POT
(IS IN water)
TIMBER JAM
STALAGMITE POOLS
TOO NARROW
PILLAR POT PASSAGE
POT 18'
TIMBER PASSAGE
POT 15'
WINDOW
630
CHOKE
TOO TIGHT
5 FT CLIMB
CRAWL
LEFT
HIGH
655
ROOF MEETS WATER
DEEP POOL
UNSURVEYED
CHAMBER WITH STALAGMITES
A JUNCTION
630
609
TOO LOW
CHOKED
CHOKES
CHOKE
LABYRINTH PASSAGE
STREAM RISES IN STILL POOL
FINE ERODED STALAGMITES
CRAWL
602
10 FT CLIMB
POOL AND BOULDER
TIMBER MOT
626
FIVE WAYS
NO CONNECTION
MUD CHOKE
TRICKLE ENTERS
CARBIDE TIN PASSAGE
642
ROOF DESCENDS INTO MUD
SILCOCK'S POOL
SOHO STREET
WATERFALL
LOW CHOKED
WORM POT
20 PITCH
BEDDING PLANE
HIGH FISSURE WITH STREAM PASSAGE
MUD DESCENT PUT
NEW STREAM PASSAGE
580
SUMP
HIGH RIFT
596

TRUE NORTH

N W
CHOKED
S E

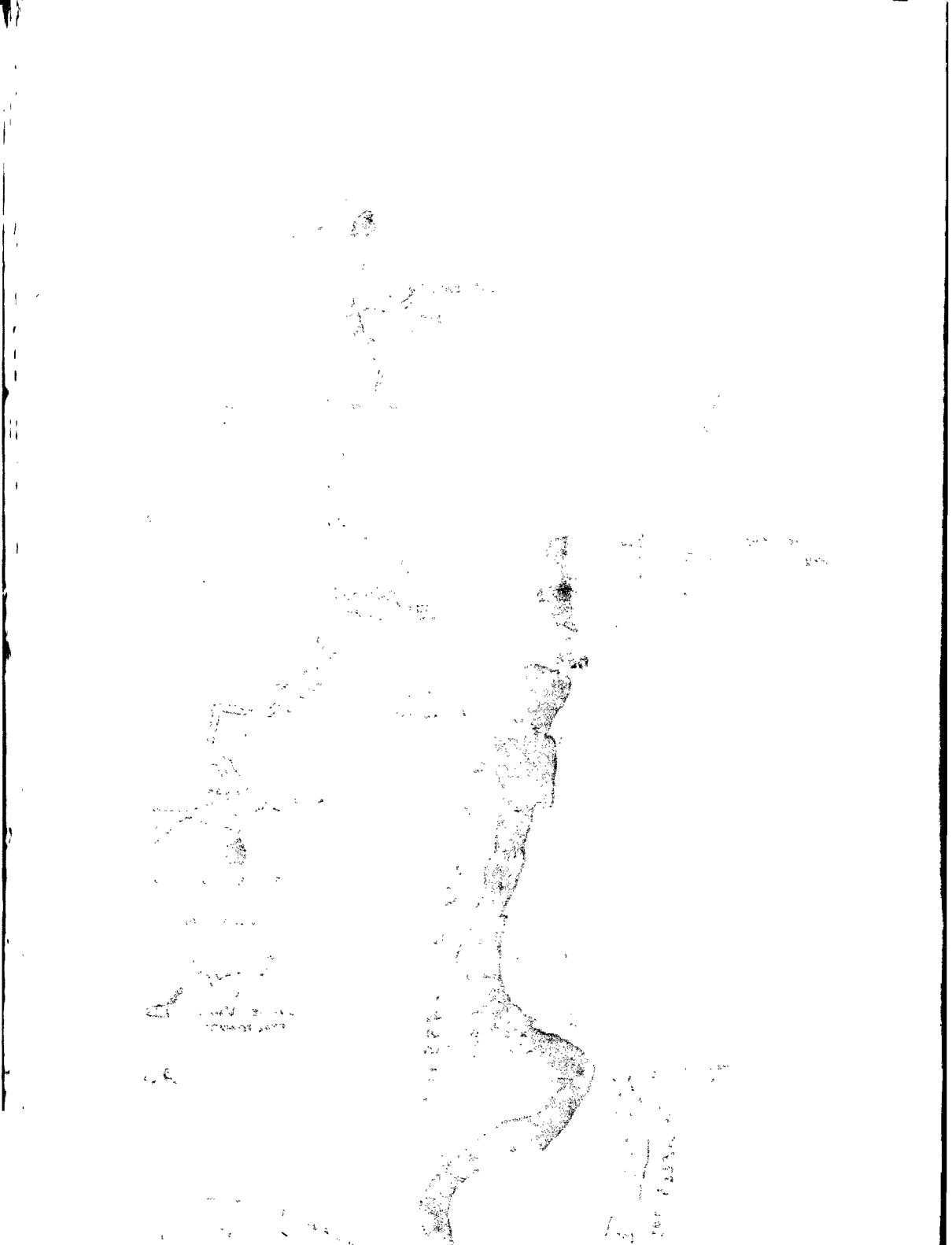
SECTION, TIMBER PASSAGE

SECTION, PILLAR POT

N W
S E

SECTION

HIGH RIFT
NORTH
SOUTH
CHOCK STONES
SUMP



RUMBLING HOLE, LECK FELL.

By The Editor.

Rumbling Hole is one of the four well known open pot-holes on Leck Fell, the Lancashire pot-hole group, reached by 1½ miles of byroad and two miles of hard-climbing rough green lane from Cowan Bridge, a village on the mainroad between Kirby Lonsdale and Ingleton. All four lie in a hollow running down from the track a little below Leck Fell House, Rumbling Hole, 480 yards north of Lost Johns' Cave, being the first met with, a few yards from where the little beck goes underground. Eyeholes, Death's Head, and beyond a wall, Gavel Pot, continue the line, each with its trees. (Map, *Y.R.C.J., Vol. IV., p.* 61).

As far back as 1899 the open shaft of 160 feet was descended in wet weather by Cuttriss, Parsons, Swithinbank, and Woodhouse. Cuttriss notes that a passage, heading east, was followed till the roof met the water, and the impression was formed then that there was nothing doing, an impression so strong that parties in 1908 and 1919 had nothing further to report.

So it comes about that, by accident of chance, the exploration of Rumbling Hole in 1932 can, not unreasonably, be described as the close of "the Golden Age of pot-holing," that is to say, Rumbling Hole has been the last of the great obvious caverns to be followed right down all its pitches.

Late one Saturday in July, 1926, W. V. Brown, J. Hilton, F. Booth and E. E. Roberts finished off the unexplored shaft of Gavel Pot, their first serious work on Leck Fell, with an unexpected dead-end at only seventy feet, and so turned their attention next morning to Rumbling Hole, in gentle steady rain. There was so much brushwood and vegetation round the mouth that to get the ladders down took much time.

Hilton descended the length of three ladders (108 feet) close to the waterfall heard in the shaft, and reported them hopelessly insufficient and the position wrong. The ladders were therefore raised, put over on the opposite, western side, and with considerable difficulty tied to a tree. The top rung was lowered twenty feet, and was reached by an earthy scramble,

up which the ladders came finally in an incredibly dirty state.

Fred Booth went down and up, then I went. At the foot of the second ladder, 75 feet swinging free, *i.e.* about 90 feet down, was a wide platform extending back into a joint under an overhang which gave complete shelter from anything falling. The hole is about 40 feet by 8 feet at this level. From the outer edge of the platform a much narrower crack led steeply to the floor, and was climbed first with the help of the ladder and then on the life line. The bottom is generally rather damp owing to the waterfall, but the rain had not yet set it going hard, so in spite of two dead sheep I climbed down a ten foot cave pitch, and unroping, rapidly followed the narrow but lofty passage, some pools but little stream, for a hundred yards with comfort until it became a narrow fissure. Here after some crawling I gave up, but quite clear that progress was still possible. Discouraged by the rain, we departed.

In the next few years our work on Leck Fell was concerned with the new district in Lost Johns', and with descents of Death's Head and the wet pitch of the former. Except for the actual days underground of the Whitsuntide expeditions of 1928 and 1930, Leck Fell maintained an evil reputation for rain; barring these, I have spent only one day there, intent on underground work, when rain did not fall, heavy rain too. Rumbling Hole would have been cleaned up half a dozen times had we had a fighting chance of using our time, witness the dreadful August Bank Holiday week of 1929.

At last at the end of September, 1931, its turn came. After an early morning wait at Bank Hall for people who did not appear, I drove my car up the awful Fell road once more, and found those determined enthusiasts, Higgins and Yates, had not failed to camp by Lost Johns'. The moment we reached Rumbling Hole we spotted a stake driven in, not far from the 1926 lead, and concluded that the Northern Cavern and Fell Club had been there. So they had, under very wet conditions, and had been turned back in the same belief as the first explorers. Three ladders, all we had brought, were put over from the stake, and a tree at the end of the 8 feet slope was used for a pulley for the life-line. This lead

made the vertical climb to the platform seem quite long, and lands one just below its edge. Yates and I went down and each climb to the floor brought the knot on the 160 feet rope close to the pulley; hence the depth is probably 150 to 152 feet.

There was a good stream falling, but we set off gaily down the passage expecting to be back in quarter of an hour with another pot ticked off, so firmly did we believe in the power of the first generation of Ramblers to make a really good job of exploration. Not a bit of it! Where we had to lie down to the work we got through without any grave difficulty, and at once entered on ground of a character which had never been reported. Almost at once we came to little pitches. Then the water went down a thin slot, we took to an upper route and descended in an amusing way into a parallel dry fissure. The beck fell twelve feet into another slot and the dry fissure ended in what appeared an easy pitch.

We had no rope, so back we went, Yates ascended, and Higgins came down with one. It was soon discovered that the twelve feet waterfall led only to an impossible crack, but the companion pitch was deep and required ladders. Rumbling Hole promised to turn out a "first class pot." A great day!

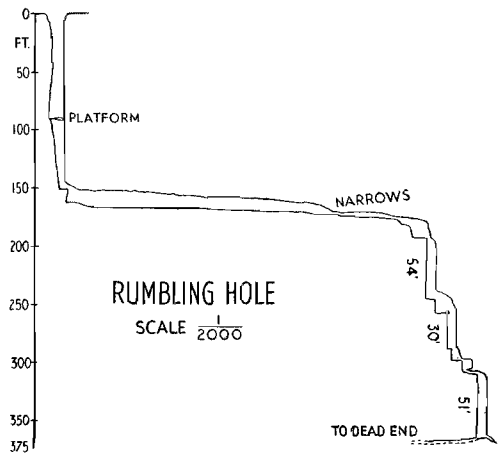
It was a day unique indeed on Leck Fell, warm and dry without a drop of rain, so we lost no time in looking into the connection between beck and pot-hole. The swallet looks most unpromising, but in a few minutes the three of us had each found a way in, and after some crawling emerged into a fine passage, leading quickly to daylight and a glorious view of the picturesque shaft.

At the Dinner in November, Yates and Higgins approached me with a proposal to try again, the next week-end. I declined, on the ground that the place would be far too wet to drive home a grand attack. Undeterred, they and Dean went up and with the aid of a "bobbin ladder" of Yates' invention descended a 50 feet pitch (No. II.) and a ten feet waterfall below, finding more verticals beyond. Of the wetness of that expedition they still speak with horror.

Whit Sunday in 1932 was early, the 15th May, and the week-end before was assigned for the assault. Preceding

days had been cold and miserable, but morning and afternoon of the 7th were fine and warm. I had been up to Clapdale with my tent and G.G. luggage, and was past Ingleton when the inevitable Leck Fell storm smote the countryside in the form of a heavy snowfall which stopped nearly every car for some time. A good omen, for the stars in their courses fight on the side of the big pots! But not for this try! After some hours' waiting at Cowan Bridge to let the snow melt away, I was very pleased to drive up successfully to Lost Johns' gate, with a big load, eight ladders, a long rope, etc., and began portaging to Rumbling Hole. Other people came along, four ladders were tied up during a second snowstorm and left under a cover. The view was extraordinary; to begin with, the moors were covered with snow almost to our level (1,160 feet), and after the second storm the whole country was white for a short time. The other men made the best of it in camp, but I went down on foot to Cowan Bridge in the dusk.

The descent next morning was simplified by using four ladders, the last man coming down in the usual way with his line held below and running through a pulley on the tree. Six ladders were taken down but by some mischance only two ropes. The leading men of the party had got nearly everything through the narrows before the last group reached them. Two ladders were put on the dry fifty-footer and the short waterfall below climbed; no longer was it partitioned off. The third pitch is a characteristic round pot, thirty feet deep, opening into a smaller edition, ten feet. The first landing was swept by the spray, the short bit of ladder had to be taken in the water, and shelter was only found below in a side tunnel. It now appeared that the next stage was down a narrow crack in which one could avoid the water by working far out, but as the sides are undercut the climb is not easy and is decidedly strenuous upwards. A stream tunnel led out of the small comfortable chamber reached, to a pool emptying over a biggish pitch. Everyone of the party (W. V. Brown, Yates, Higgins, Nelstrop, Dean, Vivian and I) was now down and painfully conscious that the snow water was intensely cold, while all pleasure had vanished. As in such a case it is highly improbable that the bottom if



reached will be properly explored, the word was passed to retreat, though Higgins howled vigorously for ladders. The last man was out at six, and home reached at 11.30 p.m.

Rumbling Hole fell at last on 26th June, 1932, to a positive mass attack by ten men with abundant material. Armstrong took the President's place, F. Booth and the Leaches were added to the party, with Butterfield in support and twelve ladders provided. The hot and sunny Saturday settled at five into the usual Leck Fell rain, but the Leeds section arriving first put down two men and lowered eight ladders between 7 and 8.30. The Manchester division had now arrived and the success of the expedition was due entirely to the work done between 9 p.m. and 2 a.m. in moving tackle and rigging the second pitch by Yates, Nelstrop, Higgins and the two Leaches.

First down on Sunday at 10 a.m. the Editor and Booth were burdened with a saw and a piece of timber, for what purpose I cannot recall. The second pitch had been beautifully rigged, and needed no life-line. The third took two of Yates' ladders, and ten of us gathered below the crack with four ladders and three ropes. The final pitch was only 51 feet and nine men were quickly at the bottom. It opens into a fine belfry with one exit, some short winding descending passages, and with a climb, the walls of which in its upper

reaches show much straw embedded in a stalagmitic coating. It is clear that at rare intervals the belfry has filled and the straw has been left sticking to the walls.

Optimistic souls had estimated that we should reach 350 feet in depth (actually we were over 360 feet down) and, the mouth of the pot being well below Lost Johns', should thus be somewhere near the Master Cave, and had speculated on coming out into it, even though the sceptical and often disappointed had commented that nothing likely opens out into the Master Cave. According to the six-inch map Lost Johns' is only ten feet or so above Rumbling Hole, but I fear the 25 feet contours are of little value, as no one can believe that the short level stretch of track between Lost Johns' and the gate rises over thirty feet.

On descending the final pitch I learnt that the only continuous branch had been faithfully dealt with, and after a painful, almost level, crawl of 80 yards found that it closed in hopelessly indeed. Had not the party reached the belfry in good heart, this would never have been forced to the bitter end, and a doubt would always have lingered. The retreat from the snow waters of May was justified.

A retreat with much tackle is always rather tedious; it took quite four hours. A fortunate decision was taken to gather everyone on the ninety-foot platform after two or three men were up, fortunate indeed, for within a few minutes a big rock, dislodged without striking the ladders, fell with frightful crashes to the bottom of the open pot, passing some distance from the sheltered ledge. It was 7.30 p.m. before Dean, the last man, came up.

I know of no conspicuous pot-hole to-day under any suspicion that there is a passage from the bottom which has not really been tried. The Golden Age is over! Lucky people will perhaps uncover more great pot-holes after many a fruitless attempt, another High Hull may open out, but the future seems to be with desperate crawls like Swinsto, chance discoveries like Foley's, or the Gritstone Club's in Selside Washfold Cave, or with excavation wherever there is hope, as Mr. Simpson's in Marble Pot.

We have not done yet. Who comes next?

ST. MICHAEL'S CAVE, GIBRALTAR.

By H. BRODRICK.

The Rock of Gibraltar, according to the late S. Baring-Gould in his excellent book, *Cliff Castles and Cave Dwellings in Europe,* is "too well known to English travellers to need description here." He refers to the Rock as the most complete and marvellous of all Cliff Castles.

On the Rock are several caves through one of which it is said that the apes still to be seen on the rock arrived from Africa! The nearest point of Africa is about fourteen miles away, but one is accustomed to tales of long underground passages in various parts of the world.

As a matter of fact the monkeys are now brought at intervals from Apes Hill on the opposite coast of Africa and are under the protection of the military authorities of the Rock; I am informed that they do breed on the Rock but as there is a tradition that the British will lose the possession when the apes leave, nothing is left to nature in the matter.

The largest cave, now known as St. Michael's, seems to have been known to the Romans as early as B.C. 27.

Captain Webber-Smith of the 48th Regiment in 1840 seems to have been the first to make a detailed exploration and plan of it. I have taken his plan (reproduced in Vol. I. of the Journal of the Gibraltar Society) as the basis of mine, but I take full responsibility for the elevation. Two officers are reputed to have lost their lives in the Cave before 1840, their bodies never being discovered.

There are numerous other caves on the Rock, many of them being simply rock-shelters in which bone-breccia and human remains have been found associated with polished stone implements; others, such as the Genista Cave and Poca Roca Cave, are evidently fissure caves and were found to contain many remains of such Pleistocene mammals as elephant, rhinoceros, leopard, serval and African lynx thus postulating an early land connection with Africa, the adjacent (14 miles) coast of which exhibits a similar geological formation to that of the Rock.

This spring, through the kindness of Lieut.-Col. A. E. Beattie, Colonial Secretary to H.E. the Governor, I had the

opportunity of exploring St. Michael's Cave, the cave through which the apes are reputed to come. Captain E. E. H. Jackson of the Gibraltar Government Tourist Bureau and I with the assistance of two bombardiers of the R.A. spent a long and extremely interesting afternoon in the cave on March 21st, 1933. The entrance, above which is the inscription "St. Michael's Cave 1867," is close to one of the defence quarters, and leads at once into a large chamber with a floor sloping steeply to a depth of about 50 ft. The roof of this chamber is at least 80 ft. high and is formed, not of the usual Jurassic limestone of the Rock, but of an extremely hard limestone agglomerate which is common on the western slopes of the Rock; daylight can be faintly seen through numerous holes in this agglomerate. Immediately inside the entrance is carved:—

ST. MICHAEL'S CAVE.

The exploration of this Cavern by permission of His Excellency Lt.-Gen. Sir Richard Airey, G.C.B., Governor of Gibraltar, commenced 23rd July, 1867, under the direction of the Governor of the Military Prisons at this station—J. F. Brome, Esq., Late 46th Regt.

The first chamber is roughly 55 ft. long and 40 ft. wide, the floor being reached by a steep flight of steps; to the left is the entrance to the series known as Leonora's Cave, while the deeper part of the main cave is reached by a low arch to the right. Facing the entrance and between these two passages is a complicated series of passages and chambers in which are many good stalagmite pillars, but all these passages seem to converge and fall at various levels into the main fissure to the right. Many of them are very low but open out occasionally into fairly high chambers. In this main chamber are several very fine stalagmites and at least one enormous pillar roughly 50 ft. in height and 15 ft. in diameter. One stalagmite has been whitewashed so that it shows up rather well. The stalactitic formations in the cave have long ceased to be active; in fact any such activity is impossible at present as there is no collecting ground for water above the level of the cave, this and the great size of the stalagmites indicating that the formation of the cave must have taken place at a time before the denudation of the overlying strata. The whole of the cave is coated with a thin layer of an

extremely dirty, wet, red clay so that any exploration results in clothing of a super-speleological texture, and photography is practically impossible.

When one turns out of the main chamber to the right one finds oneself in a slightly falling passage some 20 ft. long, at the end of which is a vertical drop of 21 ft. The fissure here is too wide for back and knee work but a fixed rope hangs there, coated of course with the usual slippery clay, but as the rock surface is rough the descent is fairly easy. The less said about the ascent at the end of a long exploration the better, the wall is climbable but the hanging rope is a considerable help. After sliding down this wall we have a crawl through a very low passage about 40 ft. long, falling gently about ten feet, followed by a scramble downwards through a distance of 19 ft.; as the floor here consists of cemented boulders and there is any amount of headroom this presents no difficulties. Here one arrives at the great feature of the climb, a bedding plane slope set at a dip of 60° down which hang two steel cables. Luckily the wall is fairly rough, but as the drop is one of 150 ft. great care must be exercised, a slip might easily have serious results, and we were not using life lines; on one or two ledges a precarious foothold may be obtained but even with this help both the descent and ascent are by no means easy. As I have stated this drop is down a bedding slope and in one place, where the roof comes within five feet of the floor, there is a stalagmite pillar about two feet in diameter which has been fractured through a slip in the strata and has been cemented together again in a manner similar to several which occur in Desmond's Cave, Mitchelstown.

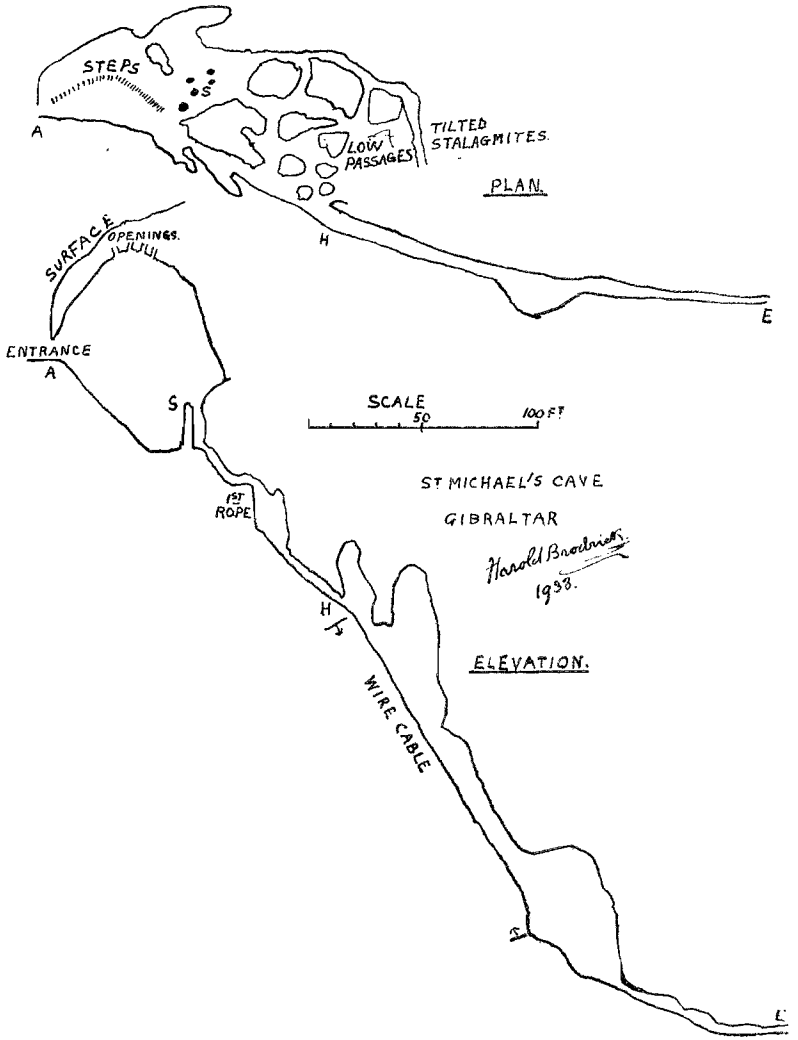
At the foot of this climb we crawled along a very dirty and low passage for a distance of 85 feet, to find ourselves in a chamber about 15 feet in diameter and about the same in height. From here two or three passages radiate, all of which have been explored by my friends the bombardiers; they assured me that all were exceedingly low and narrow and that in each case they had arrived at a point where further progress was impossible. At one point was a draught sufficient to blow a candle out but they could not find from where it came.

After climbing back up the fissure we inspected the other series off the main chamber, entered through an opening which had been enlarged and above which is carved the inscription " To Leonora's Cave, 1867." For a short distance the passage is fairly high, but in several places crawling through muddy pools is necessary ; the passage is not very long and ends in a rather fine chamber, some 40 feet high, in which is a very pretty font with the only clean and active formation which I saw in the cave, an alcove in the wall some three feet high and two feet in width containing a small pool of clear water. A passage runs from here to the right to join the complicated central passages a little further on. It is a bedding cave tilted at an angle of 60°, the floor being level, a condition found in parts of the Great Eastwater Cave, but one curious feature must be noted, two or three stalagmite pillars join the two sides of the fissure in a nearly horizontal position. Evidently after the formation of these pillars there has been some earth movement to alter their position from the vertical ; this is quite in accordance with the fractured stalagmite noted in the big descent.

We arrived at the surface in time to hear the bugles on the warships in the bay sounding the First Post, and to look down on the twinkling lights in the harbour below.

The entrance to the cave is 937 feet above sea level and we descended about 340 feet, so that at our lowest point we were still some 600 feet above sea level.

ST. MICHAEL'S CAVE, GIBRALTAR.



CAVES IN THE DOVE AND MANIFOLD VALLEYS.

By H. YATES.

The Manchester Contingent of the Y.R.C. has from time to time concentrated its attention on the two above named valleys, attention largely due to a booklet entitled "*Some Caves and Crags of Peakland,*" written by The Rev. G. H. Wilson who has spent considerable time in the Manifold Valley as a bone-digger. The whole book has been written merely for bone-digging enthusiasts, more conventionally known as archaeologists or speleologists, but we thought that there might be something of interest from a pot-holing and cave-exploring point of view. What I can now say about the matter is that if there is anything of the kind, we did not find it.

In the valley of the Dove we came across practically nothing; several large important-looking cave entrances finish after a few yards; most of the punctures in the sides of the dale are merely rock shelters and I am of the opinion that digging would not improve matters much. The largest actual cave we found was the northern branch of Reynard's Cave, which finishes in an amusing climb into the roof, up which, I take it, the goose of fiction flew on its subterranean wanderings to Peak Cavern, Castleton—or am I confusing two different geese? The longest cave-cum-mine we found is immediately below Reynard's Cave at the bottom of the cliff. We estimate its length as about 45 yards.

Dovedale is a magnificent dale, but the caves in it are, to pot-holers, pretentious frauds; to bone-diggers, probably very useful.

Concerning the dale of the Manifold there is a slightly longer tale. Starting at Wetton Mill we have a curious limestone hummock which is literally riddled with holes, but as they are quite small affairs there is no necessity for lighting. It is highly amusing exploring this petrified sponge as one is apt to emerge at most unexpected places. The name of this well-known conglomeration of holes is Anna Woman's Hole or Old Hannah's Cave.

Continuing down stream for about 300 yards we find Darfur Crags. Here is a "cave of engulfment" almost at

water level, consequently only practicable when the river is low. It descends about 15 feet to 20 feet in a length of about 33 yards (paced), and finishes there as far as we are concerned in a pool of very deep water. Mr. Wilson mentions a hole near Darfur Crags 85 feet deep finishing in water; we have been unable to find it but have noticed several places along the dry river bed where extensive concreting has been done, presumably by the owner of the fishing rights in an attempt to keep the river above ground.

From Darfur Crag one sees across the valley, about a quarter of a mile further down stream, an imposing portal near the top of a crag. This is the famous Thor's Cave. Thor's Cave is really the intersection of two caves, a large opening, such as is found in Dovedale, and a narrow rift cave, a type which seems to have more penetrating power in the district in question. So large is the entrance of Thor's Cave that it is only necessary to use artificial light at the far end where the cave bends to the left.

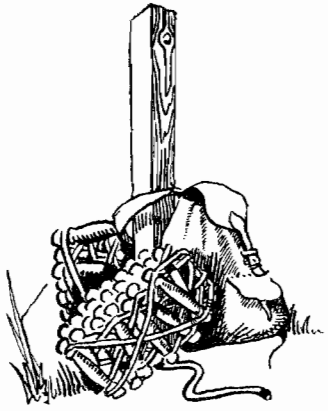
At river level, directly below Thor's Cave is a small group of caves which I understand have been used as stables at some time. They are all choked but one, and that one, after becoming a very narrow crawl opening into a small chamber in which two men can stand up, suddenly becomes exceedingly narrow and develops a wet floor (6 inches of water) on which one would have to lie if there was any chance at all of getting through. We have not seriously attempted it.

We have found nothing between this cave and Beeston Tor about a mile further down stream. At Beeston Tor there is quite a colony of caves; we found in all twelve of them, that is counting everything except the smaller entrance to St. Bertram's Cave. Undoubtedly the most interesting cave on Beeston Tor is St. Bertram's Cave, which unfortunately, the Buxton Archaeological Society have reserved for their own use by putting a door on the entrance, but luckily there is more than one entrance to St. Bertram's Cave, so we can still get in without "breaking and entering."

The cave which is second in interest to St. Bertram's is Lynx Cave. The chief fun to be got out of the exploration is the negotiation of the crawl at the end. It nearly always

happens that people try this crawl with their full complement of clothing and it is amusing to watch their efforts. The only satisfactory way of tackling the squeeze is to disrobe considerably first and then slowly work your body through. I personally am in favour of doing it head first, although I have seen it done, quite satisfactorily, feet first. The squeeze leads one into a nice little stalactite chamber where people have been busy at work recently with saw and hammer removing what stalactites and stalagmites they could find. So my advice is that, if you want to see this small chamber, you go fairly soon, or the gentlemen with destructive tendencies will have removed the beauty of the place.

We have searched but have failed to find the cave found by Mr. Wilson in May, 1925, in which he reports fine calcium deposit. I have a feeling that this cave is not very far from Beeston Tor, although he does not actually say so. From Beeston Tor to Ilam Hall we have found no caves other than those made by hand for the purpose of extracting lead. In the grounds of Ilam Hall there is a cave at water level which we saw from the opposite bank but did not enter.



CLAUDE ERNEST BENSON.

IN MEMORIAM.

CLAUDE ERNEST BENSON.

As a literary man by profession Claude Benson seemed to us one of those fortunate people whose work led them to the mountain country. He became widely known by the publication in 1902 of *Crag and Hound in Lakeland*, a happy mixture of information and humour which charmed even those to whom fell and crag climbing and fox-hunting made no appeal. His last book, published some years ago, was *Mountaineering Ventures*, delightful accounts of great climbs little known to the general public, an amazing effort for one who had never climbed abroad.

Benson was at Harrow and had been a First Division Civil Servant, but left the War Office for writing. He contributed any number of articles and stories to the *Cornhill, Windsor,* etc., wrote *British Mountaineering, This Fair Outcast,* and *Miles Ritson,* and did much guide book work.

He became a member of our Club in 1905, was on the Committee 1912-15 and Vice-President, 1927-29. A number of articles and verses from his pen have appeared in the *Journal,* vivified by his quite unusual powers of whimsical expression, which testify to his exceptional and exact knowledge of the mountains of Great Britain. He practically rewrote Ward Lock's Guide to the Lake District, and his painstaking and accurate work made their Guides to Oxford and Cambridge a conspicuous success ; the excellent revision and additions to the Thorough Guide to the Lake District after Mr. Baddeley's death are also his work.

Benson was a deeply religious man, actively connected with altruistic organisations in Harrogate, a man of wide sympathies, never happier than in the company of men interested in outdoor sport ; his enthusiastic love of the hills and the recollection of his cheery and amusing companionship will remain his enduring memorial. He died 30th March, 1932, and his widow, also a great lover of the hills, has followed him within the year. Books bought for the library in pursuance of a bequest in his will have been suitably inscribed.

JAMES HENRY BUCKLEY.

On 25th April, 1932, the Club lost a staunch supporter, and many of us an old personal friend, by the death of " Harry " Buckley.

From the day of his election in 1901 to the day of his death, the Club, its members, its activities, held a prominent place in his thoughts and affections. He was Vice-President, 1911-13, but for 20 years he was Librarian, putting in much work on the *Journal*, and continuing to the very last proof-reading of the most vigilant and critical kind. He seldom missed a Club Meet, and to the Club he left a bequest.

Cycling, walking, climbing, pot holing, fishing, sailing, followed in accordance with his bodily strength, all contributed to his pleasure. It seemed that every hill and dale and moor of Yorkshire, and every county from the Orkneys to Penzance was known to him, and varied experiences gained while exploring them stored his memory. Whilst Harry was a man of few words he could relate his experiences in a way which made him a delightful and cheerful companion.

Those of us who had his companionship years ago, on long days of tramping, and who after a good meal in caravan or tent, have sat and talked with him under brilliant starlit skies, will not easily forget how the serious side of his character often showed itself and how he would root out an old Bible and read in sonorous tones passages which confirmed a statement or supported a contention.

In later years we recall him as Master of the Ceremonies, and as C-in-C of many a Gaping Ghyll camp. These are pleasant memories, the wise word of advice to the chairman, the man at the telephone through many a long day, undertaking trouble and work that the Yorkshire Ramblers might do their job below. In his day Buckley claimed at least one fine expedition, Short Drop to Gavel Pot in 1898, and began his Gaping Ghyll descents with 1903, the first after 1896.

Happiest of all, I see him conducting at each Dinner, " Ilkla Moor," back and back into the days when the song was almost unknown.

He has gone from us, but by those who valued his friendship, and by those who received his generous help and assistance, his memory will long be retained and treasured.

JAMES HENRY BUCKLEY.

SAMUEL WELLS CUTTRISS.

SAMUEL WELLS CUTTRISS.

Sam Cuttriss joined the Club in the year of its formation and was the first to treat cave and pot-hole explorations from the scientific point of view, and to make permanent records by photograph and plan.

But long before that he had been very active, had done what was possible in exploring caves, and was a very keen cyclist, even a C.T.C. Consul, riding in Norway for instance, which later he crossed on ski. Cuttriss and his little green bag of apparatus were prominent in all the great achievements of the first wave of pot-holers, and his companions recalled with amusement the great discussion which had raged, as to whether a mere cyclist should be elected.

He was a keen geologist, wrote several papers for the Yorkshire Geological and the Leeds Geological Societies, and was a member of the Underground Waters Committee. His *Notes on Caves* have been collected and bound for the Library. Some of his MS. material is in the Editor's possession, but unfortunately few of his plans have survived.

By profession he was an engineer and produced the first electric motor made in Leeds. In all the Club's work he was very active till about 1908, when, on gold-mining affairs, he spent twelve months in the wilder parts of Northern Russia and Siberia, of which he wrote in this *Journal*.

Cuttriss was always cheerful, never tiring, at all times ready to take his share of hardships, and a thoroughly good friend. By his passing, 25th April, 1932, the same day as Buckley, the Club has lost a great and loyal member.

EDWARD ANDREWS.

By the death of Edward Andrews, towards the end of 1932, the Club has lost an honoured member whose name appears in the very first list. For many years he had not associated himself with our activities, but he stood faithfully by the Club.

His old friends remember him with affection, and his presence will be missed at our annual social gathering.

LEWIS MOORE.

By the death of Lewis Moore the Yorkshire Ramblers' Club loses one of its earliest members and one of its most devoted supporters—in fact it may be truthfully said that the Club owes much of its success to his steadying influence, to his sage counsel, and to the unstinted and valuable service he gave to its development in the early years of its history.

His name appears in the first list of members, and as Vice-President in the second year; for many years he served as Secretary, and was prominently associated with the first Annual Dinners of the Club. In the arrangements for these no detail escaped his notice and no trouble was too great to ensure that the Club's personal guests had their wishes and their comfort anticipated. But it was in the conduct of the committee meetings that he was at his best. His clear methodical mind, his business acumen, and, above all, his genial humour and his ever ready wit frequently saved a situation when difference of opinion might have developed into personal feeling.

In 1909 he was—to the delight of all the members—elected President of the Club, a position he filled for three years with credit to himself and honour to the Club.

Moore was a man with a high sense of social and civic responsibility. In earlier life he gave much of his time and energy in the development of the Market District Boys' Club, and after the War took on municipal responsibility to the great advantage of the Community. As Chairman of the Leeds Watch Committee he was a conspicuous success, and it is safe to say that but for his unfortunate breakdown in health he would have attained the highest of civic honours.

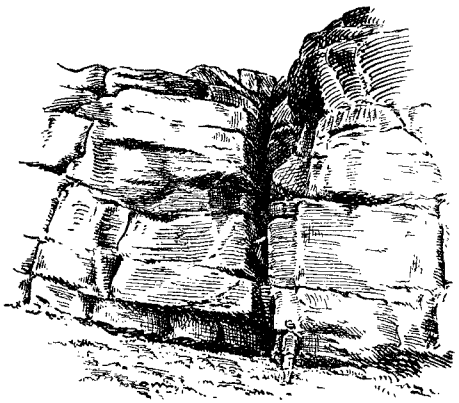
It is for this sad reason that to the youngest members of the Club Moore was, to their misfortune, little more than a name; but to all others he was a very lovable character, with a keen sense of humour—as is evidenced by his contribution to the *Club Journal* under the pen-name of "A Silent Member"—a very ready wit, a delightfully even temperament, and a remarkable capacity for making and

LEWIS MOORE,
President 1909-12.

maintaining friendships. Of him it may be truly said that he never made an enemy and never lost a friend.

Many of us will long cherish the memory of one who was such a cheerful companion either on a fell walk, a mountaineering or a pot-holing expedition. One of the few men who knew the hills of Ireland, his article on " The Ancient Kingdom of Mourne " should be read.

The Yorkshire Ramblers' Club, and in a wider sphere, public life in Leeds, are poorer by his death.



CHIPPINGS.

BEN NEVIS HUT.—It is no longer necessary for parties using the hut to include a member of the S.M.C. Not more than four members from kindred clubs may apply through their secretary to the Hut Custodian, Mr. R. R. Elton, 43, Peel Street, Glasgow, W.1, but to allow of priority for the S.M.C., permission will not be given more than a week before the date. Applications to use the Hut for Meets should be made to the Hon. Secretary, Mr. Alex Harrison, 21, Rutland Street, Edinburgh, 1.

Charges :—4/- per head per night ; coal, 5/- per measure ; oil, 6d. per half pint ; firelighters or wood, 6d. per bundle ; meta, 1d. per stick.

SWITZERLAND.—If you want sunshine, go, but if you don't want heavy expense, stay away. With the exchange at 16 to 17.50 francs the fact that Swiss prices have risen of late years, to equality with English prices at the old rate, converts a holiday on the move at present into one on which a pound a day is inexpensive.

Except that in 1933 railway travelling *in Switzerland* was reduced 30 per cent., no yielding in Swiss prices is to be noticed, but there are rumours that if you walk boldly into a big mountain hotel and offer 9 francs a day you may compound for a surprisingly low figure. English people do not care, however, for this form of bargaining, particularly with hosts who are doing them very well, nor is it applicable to what are now very expensive items, tea, odd meals, and drinks.

The charges for registered luggage appear to have been raised and are simply exorbitant. The postal charges continue quite reasonable, a fixed charge of 2 francs (2s. 6d.) up to 33 lbs., but become heavy above that weight for long distances.

The plain fact is that unless a centre is used on cheap *pension* terms, a Swiss climbing holiday is too expensive for all but prosperous business men. It looks as if Austria is going to be the only possible country for a time.

CAVING IN FICTION.—Ever since John Buchan stayed at the Hill Inn in 1925, some of us have been expecting to find

pot-holing introduced into a novel. Mountaineers have long been sufferers, but the flood of sensationalism is now upon *us*.

Our London friends were the first to be hit. In a crude sleuth story about dene-holes, *The Green Check Jacket*, the writer clearly makes use of Bonner in the days before he used Botterill ladders, and of Baker when he had a beard. Bonner, who is libelled by being said to have written a book to prove dene-holes were prehistoric flint-mines, his nephew, and Baker, buy a rope, proceed to a shallow shaft, and tie the rope to a fence post ! Baker goes down first, stabs Bonner as he lands, shoots the nephew, ascends, and to enable the sleuth to identify the hole, severs the rope with a handsaw he has brought along. Returning to town without using a clothes brush, he takes other steps to incriminate himself, and is duly arrested, etc.

Now comes a sensational story, quite a good yarn, *The Subterranean Club*, in which the author makes more skilful use of her or his material, and displays much more art in creating an illusion of reality. The scene is a combination of Angram, Tan Hill, Kingsdale, Hawes, and Chapel-le-Dale, and the club is clearly the Y.R.C. The writer has not much knowledge of the technique of pot-holing, for she or he makes us use rope ladders with hooks, and paraffin flares, and drag a winch and crane about the moors. The artist of the cover goes one better, for he depicts a nicely dressed fellow sliding gaily down a rope into Long Kin West, caring nothing about getting up, but sure to burn himself with the torch.

Fortunately the author has not used the personnel of the Club as characters, for in the book we include a lovely lot of crooks, financial, gunman, etc. The President, a Secretary and the Treasurer do one another in, the final scenes taking place in Yordas. The sleuth party's ability to dry soaking clothes at a fire, in a cave which a tremendous waterfall fills with spray, in something under an hour, is an art the average pot-holer will admire.

The internal evidence shows very clearly that the author is one of two visitors to the Hill Inn in 1925, who were first taken down the stream channel of Rowten Pot and then accompanied the party who made the first descent into

Yordas Cave by the upper entrance. For one mercy we owe thanks, the Ramblers are not called speleologists!

FOOTPATHS.—The hiking movement would be of immense value if it did anything to arrest the decay of ancient trackways, but confined as it appears to be to certain popular routes near large towns it does not seem to get so far. One of the most striking instances of decay I have noticed is the old road between Settle and Otterburn. On a long stretch in the middle the route is barely traceable; over two large pastures only gates mark the line. I had not been on this road for ten years, and found it more difficult than ever in 1932. Another instance is the footpath over Flasby Fell, near Skipton.

As for most of the paths east and north of Leeds they will soon have disappeared completely, except those used for motor cycle trials. Some of the parish councils are refusing to enforce public rights, through the idiotic notion that walkers are a nuisance, so carefully fostered by the Press. It is not surprising that young people starting on a footpath and losing it after two fields finish across country; even an Ordnance map used with all the tricks of long experience is not always an adequate guide.

The closing of footpaths sometimes cuts both ways. One would like to know the secret history of the sudden appearance of a delightful Washburn Valley path, which no one suspected to exist, from where the paths strike uphill to Snowden and Timble to the Swinsty embankment, where however, it is camouflaged by passing through the garden of the embankment house.

SARTORIAL.—Motor cars are at present in an extreme phase of fashion, and climbing costumes abroad seemed in 1932 to have reached a similar phase. Once upon a time pot-holing rig and Alpine rig were at opposite poles, but as people sat and watched the procession into Zermatt, they could not help noticing a curious resemblance between the pot-holer ready for the fray and not yet muddied up, and the old clothes and singular array in which the climbing crowds of 1932 were got up.

The principal cause seemed to be the whole-hearted adoption of plus fours by the Continental climber with an equally whole-hearted and logical acceptance of the only way in which they can apparently be worn on the mountains, that is down to the ankles or as ski-ing trousers. The effect is ludicrous; perhaps we shall all come to it. Anyhow the first Britisher who wears out his plus fours thus underground cannot be hailed as a pioneer.

"THE LIFE OF JOHN BUNCLE."—Baker in *Caving* refers to this amazing collection of disquisitions on theology, science, mathematics, literature, etc. published in 1756, as containing early descriptions of cave-exploring. The Editor bought the work hoping to find some particulars of interest, even though it is a work of fiction. Amory clearly knew what he was talking about on pages 76, 89, 93, 145, 162, 180, and 316, but his rambling narrative can be in no sense autobiographical, and nothing can be localised. He gives quaint old particulars of Eldine Hole and Penpark Mine, three miles from Bristol.

When his hero enters a cave there is something in the details which shows that Amory had explored several caves and used a tape. Buncle is half an hour being lowered down a pot, goes through the mountain and stops away a week, but Amory does not, like the inexperienced of modern times, give two or three miles as the distance underground—no, the cold dawn of science had touched him and he sets down 708 yards!

Despite an interesting account of Harrogate and neighbouring places in 1731, the book is now for sale at a sacrifice.

PLANS.—Hitherto plans of caverns have been drawn and reproduced to no standard scale. It has been decided that the scale $\frac{1}{1000}$ should be used as far as possible. When unsuitable, it can be replaced by $\frac{1}{500}$ or $\frac{1}{2000}$.

ON THE HILLS AND ELSEWHERE.

Everest.—The Club had the joy of entertaining to dinner in November, 1933, Messrs. Hugh Ruttledge, J. L. Longland, and its Vice-President, F. S. Smythe, and of welcoming them back safe and sound from a great adventure. A year before we had given them a send-off, and had provided 120 ft. of rope ladder for possible use on the awkward bits of the North Col.

Before the climbers reached Tibet we were much interested in the Houston Flight, which was very awkwardly limited by having to promise to keep off the Tibetan side of Everest. Although only the *Daily Telegraph*, *Manchester Guardian*, and *Glasgow Herald* seemed to consider the mountaineering expedition of sufficient news value to pay for its reports, all the other papers ran the flight. The first lot of photographs was very puzzling. It was pretty clear that several mountains were labelled Everest, but one was distinctly Everest from well inside Tibet. When the second flight was made, the idea spread, one of those impressions which will crop up for decades, that the first had never found Everest. The truth seems to be that the *Times* sent out the pictures with the name attached wherever it seemed to suit,—a newspaper office has to get a move on, or so it thinks—and the recognisable photo appears to have been a 1924 picture.

Now the book is out, one is forced to the conclusion that while magnificent views were obtained of Makalu and Chamlang, nothing equivalent was obtained of Everest, and that topographical ideas for an ascent from the south will have to be gleaned from distant pictures. The strip of verticals reached the lower peak of Lhotse.

We are all familiar with the course of the attack on the great mountain and with Smythe's great effort alone. The climbers made a great fight and had some very narrow squeaks, but were fairly beaten by conditions on the very peak. It is a great thing for future attacks that there were no casualties.

As reports came through, we gradually gained the impression that Ruttledge's men were having a particularly bad time, and finally there came a letter from Smythe to the Editor,

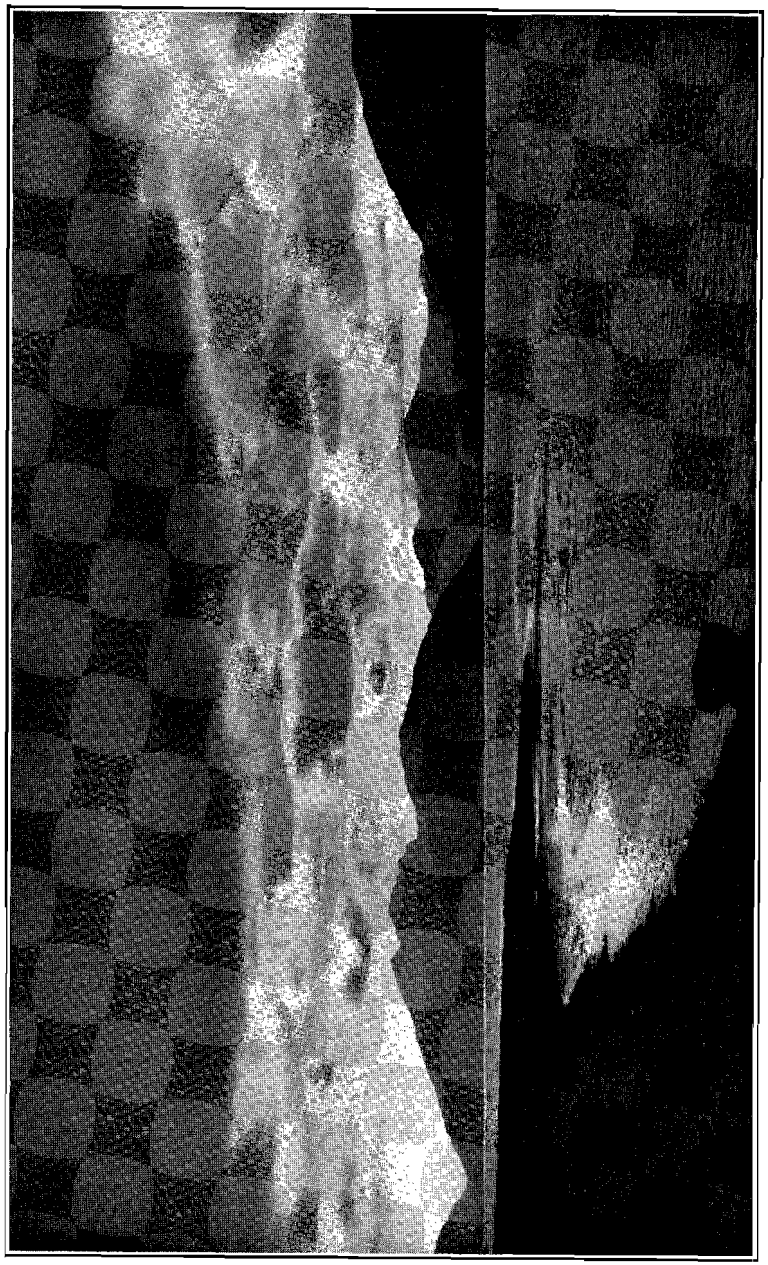


Photo by C. E. Benson

LOCH LINNHE AND THE MORVERN HILLS

in which, provoked by jesting references to rash words about cups of tea and Himalayan camping, he described in burning words what he had been through. Most of this letter was circulated to the Club; I cannot find it, but I remember some striking bits about never being able to stop to eat, and about the unpleasantness of the slabs.

The expedition was well served by its equipment and the courage of its leader in scrapping the cinematograph and the idea of survey work. The first thing is to explore and to get up. The economy of porters created by this bold and criticised action was just enough to carry the expedition through, and the evidence is that but for adequate force and the warm Arctic tents, which even reached the North Col, they would never have been able to stick out the continuous blizzards. Wager's film with a small camera gives the only truthful picture of movement on a mountain I have ever seen, at its proper pace.

The idea that Everest is easy is exploded; one writer talked about Olympic athletes "walking up." Hazard's views of its difficulty have been proved correct. What a pity he and Odell had no chance of a shot at it! On its day Everest will go, but it will, like a big new pot-hole, require a fourth, perhaps a fifth, or sixth expedition, to beat the elements, and then fall easily on the second ascent.

Meanwhile the Dalai Lama has died within a year, because of the interference with the spirits of Everest, as the Tibetans must think, and I suppose another expedition is off until something happens in Tibet. Perhaps Nepal, having been complaisant about Kangchenjunga and the flight, may allow approach from the south.

Skye, Sron-na-Ciche, Engineer's Slant.—(E. H. Sale and D. L. Reed, June, 1932). If one looks at the excellent diagram of Sron-na-Ciche in the S.M.C. Guide to Skye, one will notice a series of parallel lines sloping down the crag from left to right, at an angle (on the diagram) of 45°. Following the line which marks the West Central route, upwards from the foot of the crags, a branch line is seen to diverge to the right, just below the second "n" on the drawing, marking a cleft which rises at a steeper angle than the other,

and then bending a little to the left runs to a point near the top of the Amphitheatre Arête, crossing on its way the Arête of the upper part of the West Central Route.

A small cairn marks the foot of the first chimney, reached by scrambling up the easy rocks at the foot of West Central Gully, past the sloping grassy ledge followed by the West Central route, to a corner higher up. The cairn marking the start of the Parallel Cracks Route is lower down. Once up the chimney the way can hardly be missed, as the line of the rift runs straight ahead. After about seven pitches, the Median route is crossed. Above number ten is a ledge for lunch, and the steepness is varied by a short walk between pitches. Here, too, the Zigzag is joined, and two more pitches lead to a ledge above an overhang on the West Central Arête.

From the ledge a traverse into a basalt trough, and a scramble of 100 ft. or so lead to the final chimney, which runs up to the left of Mallory's Slab and Groove Route, and comes out on the skyline of the Amphitheatre Arête. The problems encountered are of all sorts, chimneys, cracks, and face climbs, but though all are entertaining, there is nothing that can be called severe. (See also *S.M.C.J., Vol. XIX, p.* 382, *etc.*).

The Alps.—F. S. Smythe had poor weather in July, 1932, but climbed the Weisse Frau, Blumlisalphorn, Gspaltenhorn, the very stiff South East Ridge of Baltschieder Jägihorn, Bietschhorn East Face, etc.

E. E. Roberts, driven abroad by hopeless weather at home, had glorious weather in August, ascending Bieshorn, Matterhorn, and Dent Blanche with Smith and Sutcliffe (Gritstone Club), and Allalinhorn with Turnbull (S.M.C.), with the Rawyl Pass walk as finish.

In 1933 F. S. and H. S. Booth, Reed, Cooper, H. L. and F. W. Stembridge went to Arolla, climbed Petite Dent de Veisivi and Pigne d'Arolla, attempted the Za by the face, crossed the Col d'Hérens, and got most of the way up the Trifthorn, all without guides.

Albert Humphreys, besides making the ordinary tour in the Eisriesenwelt, climbed the Gross Glockner over the Pfandlscharte, and the Wildspitze via Partsch Weg.

Norway.—W. V. Brown and Beetham in September, 1932, spent five days of cloud at Turtagrö, and having ascended Skagastolstind in despite of conditions, done some of the Dyrhaugstind Ridge, and walked up Fanaraaken, fled home.

Slingsby was also out, but says he did nothing but a huge walk from Fortun, past Turtagrö, over to Krossbu Hut (closed), and on to Bovertun. In 1933 he got up Skagastolstind and some minor peaks, besides doing several big walks in wretched weather.

W. V. Brown and E. E. Roberts had one really sunny day out of eighteen. One chance was lost through a minor accident, and they were only able to do the spikiest, and easiest, peak, Store Riingstind, using crampons on a bare crevassed glacier, with walks in the clouds on to the Soleitind and Fanaraaken. From the Munkegg above Balestrand there was at least a superb fiord view. Norway is an entirely different country to Switzerland. Worthy mountain groups are few and far between. No doubt the climbing would prove first class, but the depths the weather can sound are British; clouds are the curse, not storms. There is little attraction in tramping through dry clouds over stony uplands, but still Norway is for the walker and traveller, not for a climber on a short holiday. Charming valleys, charming people, excellent food but not in the international style.

To-day it has the stupendous advantage of exceeding cheapness, but the Editor will not dare the North Sea again!

Other Holidays.—Nelstrop has been a tramp in Rheinland, starting at Cologne, and putting up at Youth Hostels along the Rhine and Moselle.

J. K. Crawford, September, 1932, was in Arran, walking along the Goatfell Ridge, and the Ben Nuis-Cir Mhor-Castles Ridge. Last year he was in the Glen Affric and Glen Cannich region and walked up the Larig.

G. Platten made a pretty clean sweep of the Mendip Caves last March; Coral Cave, Denny's Hole, Eastwater, Read's, Aveline's, Plumley's Den, Piney Sleights, Long Rift, Gough's beyond the public tour, Green Ore, Shute Sheave, Emborough.

On a camping tour last June, Reed and Goggs bagged

Liathach, Ben Eighe, Suilven, Stac Polly, and Shichallion.

There have been many visits to Skye, and it has become known that at some time Sale and J. D. Brown broke the record along the Skye Ridge, seventeen hours in thirsty weather from Garsven to Sgurr nan Gillean.

The Editor, last Easter, accounted for An Gearanach and Garbhanach, Ben Do and Ben Doran, Cruach Ardran and two satellites, and Ben Eunaich by the Black Spout, and at other times Broad Law and Lochnagar.

CAVE EXPLORATION.

I.—New Discoveries.

Ingleborough, Gaping Gill Hole (1,300 *ft. above sea*).—June 4th, 1933. The last hope of further discoveries ceased when J. D. Brown was lowered to the bottom of the very narrow rift inside the Lower Letterbox, below the chockstones reached by Frankland and Hilton in 1924. Digging has been begun at points in the Main Chamber.

Ingleborough, Allotments, Marble Pot (alt. 1,350 ft., 1 mile from G.G.).—17th March, 1933. Messrs. E. Simpson, Waller and Clarkson. The crack which swallows the water at the bottom of the open pot-hole was cleared, a very tight squeeze forced and an internal pot, 49 ft. deep, descended. Four feet above the floor is a well marked bed of shale and clay. In a big recess, one side appears to be a pipe of conglomerate and the roof a mass of jammed boulders.

By the 5th June the tight place had again been sealed, but was reopened and the descent made by Yates, Higgins, Nelstrop and E. E. Roberts.

Ribblesdale, Selside, Washfold Cave (alt. 1,200 ft., 1,000 yds. due north of Alum Pot).—11th June, 1933. Griffiths, Sutcliffe, Gudgeon, Barrow (Gritstone Club). A bedding plane had been found by Binns, eight feet up, which turned the obstruction and led to a pitch. This shaft, 105 ft. deep, opened into a chamber at the bottom, 18 ft. wide, from which a stream passage (fissure type) led straight and fairly comfortably for 80 yards.

It then narrowed and descended in 10 and 15 ft. pitches with many jammed stones. The party were stopped by a very narrow section, 150 yards from the shaft and 60 ft. below it, at a point estimated as 250 yards from the entrance and 220 ft. below it (alt. 980 ft.).

Leck Fell, Rumbling Hole (alt. 1,160 ft., near Kirby Lonsdale, 3½ miles from Cowan Bridge, last two up a rough grass road).—26th June, 1932. Yates, Higgins, E. E. Roberts, Dean, Nelstrop, Vivian, H. Armstrong, F. Booth, H. and E. Leach. The existence of pitches beyond the open 160 ft. pot was discovered in 1931 by the first four. New ladder descents of 54, 40, and 50 ft. lead to a final, almost level, passage of about 80 yards. Total depth over 360 ft.

Leck Fell, Lost Johns' Cave (alt. 1,190 ft., 480 yds. south of Rumbling Hole).—August and September, 1933. Messrs. E. Simpson, Waller, Clarkson and others. Cave resurveyed, results confirm Foley. At the upper end of the Master Cave a short climb through the boulder roof was cleared, leading to the Lyle Chamber, 100 ft. high, 100 ft. long. On 3rd September, a narrow channel was followed into an upper extension of the Master Cave. In 200 yards it degenerates and is flooded. On 10th September the passage was regained by an up and down climb, and the party with some Northern Cavern and Fell Club men waded a long way till a small passage was reached which stopped in a belfry, a total addition of about a quarter of a mile. A few hours later three Y.R.C. men reached the same point, but at the start they did not do a lengthy branch passage with stalactites.

Gragreth End, Marble Steps Pot (alt. 1,250 ft., reached by a track from Mason Gill).—Easter, 1933. The Craven Pot-hole Club devoted several days to the cavern, and succeeded in exploring the narrow passage at the bottom of the " hole in the floor " above the 90 ft. shaft. An eyehole pitch of 20 ft. was followed by a pot requiring a 30 ft. ladder. A twisting passage led to a point from which a handkerchief was dropped into the " sump " at the lowest point, and to another from which a 20 ft. chimney was climbed to the bottom of the big shaft.

Barbon Fell, Bull Pot of the Witches (alt. 990 ft., rough grass road 3 miles up from Casterton, near Kirby Lonsdale, or half a mile from good road, 2 miles from Barbon).—May and June, 1932.—Messrs. E. Simpson, Clarkson, and Waller completely surveyed this cave, and in the upper regions near the entrance, noted as doubtful, discovered a large chamber, the Thirty-Two Cavern, following this up by finding a way in from *Hidden Pot*, by another route apparently than through the unsafe area which forced back Woodman and Roberts. Falls of debris in *Hidden Pot* have now covered up both holes.

They also dug one passage through clay from the open pot into Thirty-Two Cavern, and cleared another on the opposite side which led to a point whence one ladders into the 1926 cavern. The plan shows that chambers and passages lie in a remarkable manner along closely parallel joints.

Whernside, Bruntscar and Boggart Hole Caves.—Sept., 1932. The Editor found *Bruntscar Cave* all the 550 yards reported, but with the advantage of others' labours penetrated into very narrow regions beyond all trace of previous parties. At a fork, a broken stalactite on a ledge now points to the accessible left branch. In the next 30 yards many "rags" were broken off. Free use of a hammer will enable the next man to force himself further than the candle on the left bank.

By lowering the pool inside the difficult part of *Boggart Hole* (Ivescar) he was able to make the through trip.

Littondale, Penyghent Gill, Giant's Grave Group (alt. 1,300 ft., on the road between Halton Gill and Stainforth).—1st May, 1932. Yates, Higgins, J. Williamson, E. E. Roberts. Through routes, in spite of total immersion by the first two, could not be forced in the upper parts of the *Giant's Grave Caves*, but the longest and pleasantest portion under the house and the road offered no difficulty to the other two. *Lockey Cave*, just below the bridge over the adjacent tributary, was also explored, ninety yards crawl.

22nd May, 1932.—Yates and Butterfield discovered a little lower down the Gill, *Penyghent House Cave*, 110 yards, and quarter of a mile lower on opposite banks, *Upper Hesleden Caves I. and II.*, 40 and 70 yards. These three caves discharge

very cold little becks, and finish in the same manner, each in a belfry with a fall from high above.

Kidstones Pass, Bishopdale Gavel Pots (alt. 1,840-1,650 ft., extend for two miles, high up on east side of Bishopdale).—Referred to as *Buckden Pike Pots, Vol. VI., p.* 155. Two fenced pot-holes were discovered and descended by Messrs. E. M. Hindle and F. Heys (Northern C. and F.C.) in 1930. It is surprising that I. has not been noticed before as it is not far north of the county boundary, one mile west of the Pass.

No. I. is in several pitches, one laddered, and finishes at 90 ft. after 20 ft. down a sort of "chimney flue." No. II., three quarters of a mile north, reaches 75 ft. with a similar "flue." No. III., a very fine hundred-foot pot close at hand was dug out in June, 1932, and almost descended by Hilton and C. E. Burrow, being finished off in July by W. V. Brown, Hilton and E. E. Roberts.

Within half a mile north, just beyond a watercourse continuous through a dip in the escarpment, a rill disappears into No. V. A rift, 15 ft. deep, was opened out in April, 1933, at the end of which a narrow crack now offers further possibility. No. VI. is in a fine big rocky sink, 200 yards north of the swallow-hole of the waterfall of the beck pointing directly to Smelter Plantation. No. VI. contains a fine belfry.

All these pots are much safer now and very different to what they were.

Wharfedale, Birks Fell Cave (alt. 1,100 ft., one mile from Buckden on the path to Litton, 100 yards north of shooting house).—18th June. W. V. Brown and E. E. Roberts. Entrance now clear and obvious. Extremely easy going, 12 ft. high, 4-6 ft. wide, one stretch 50 yards dead straight. Suddenly closes down to a bedding plane at 350 yards. Half way across from the house, the *Walled Cave*, entered by a little climb, becomes a painful crawl through a low canal and seems to continue.

Swaledale, East Gill.—A cave of 100 yards has been found by Goggs on the left bank, close to a rising.

Nidderdale, Goyden Pot.—The very curious connection between the belfry in Gaskell's Passage and the further reach

of the Nidd has again been detected, and in October, 1932, the new area was completely explored to a second dead end, as described in this number.

Somerset, Wookey Hole (near Wells).—The three long exploited chambers are now magnificently lit up by electricity. In January, 1934, Mr. Balch and the owner, Capt. Hodgkinson, took advantage of the exceptionally low water level to visit by boat the Holy Hole and the Fourth Chamber, usually cut off, and were able to push their craft into an unknown fifth chamber.

A 90 ft. scaffolding in the Second Chamber reached a short passage in the roof, and across the river in the First a way was blown into a space 35 ft. by 12 ft.

Mendip, Green Ore Mine (100 yards south of Green Ore crossroads, 4 miles from Wells).—A narrow shaft, of which there was no local mining record or tradition, opened out recently and was heard of by Platten. In March, 1933 he and two others were lowered in turn by rope 140 ft., the shaft being probably 250 ft. in all. A Y.R.C. party in September put over ladders and found a choke at 120 ft., probably owing to the curious throwing down the many large stones lying handy. At 80 ft. communication by sound was cut off, and a telephone would have been necessary.

II. Other Expeditions.

Ingleborough, Gaping Gill Hole.—In 1932 and 1933 six or seven descents have been made. In June, 1932 the Northern Cavern and Fell Club went in and out by Flood Entrance between 8.30 a.m. and 4.30 p.m., a strenuous day, twelve out of fourteen reaching the Main Chamber.

The Craven Pot-hole Club camp in 1932 covered the week-ends 24th and 31st July. Number of descents, 79. On the 27th Fell Beck was in flood, 18 inches up the wench, and again on the 29th. The telephone was swept from its usual place and found ten feet up the East Slope. A primus stove was found on the West Slope.

Ingleborough, Allotments, Rift Pot.—Direct descent from Long Kin East.—2nd July, 1933. Hilton, Yates, Higgins, J. D. Brown, Nelstrop, E. E. Roberts, supported by W. V.

Brown and Wood. After years of incredible fatality the Yorkshire Ramblers have at last managed to get at this grand 200 ft. ladder climb (actually 190 ft. from the boulders, 12 ft. below the working chamber). Yates and Nelstrop crawled along the lowest waterlogged passage for 100 yards.

For a serious expedition in a single day, it was unique in the Editor's experience in having brilliant weather from first to last.

Ribblesdale, Selside, Diccan Pot.—12th June, 1932. The water was dammed off and the round trip through Alum Pot was made by members of the Craven Pot-hole Club and others, Messrs. Haighton, Thrippleton, Waterfall, E. Simpson, Waller, E Smith, and Nield.

Stockdale (Settle), South Bank Pot.—3rd September, 1933. W. V. Brown, Hilton, F. Booth, J. Williamson, Roberts. Third descent. All the holes at the bottom were descended, deepest 36 ft. The extreme depth was made 125 ft., which agrees with Mr. Simpson's survey on the second descent, 133 ft. with 32 ft. from entrance to moor level.

Wharfedale, Hubberholme, Jingle Pot (half a mile above the church, 50 feet above the Wharfe).—June, 1933. W. V. Brown, F. Booth, E. E. Roberts. Name carved on a tree. A natural cavity 35 ft. deep broken into by miners. A charnel house which requires a large packet of chloride of lime instead of the twopenn'orth provided.

Greenhow Hill, Stump Cross Cavern.—The Editor's attention has been drawn to an article in the *Yorkshire Weekly Post*, 12th December, 1903, which gives an account of the work done in two visits the previous July by F. Botterill, H. B. Jesper, and E. Simpson, with a plan of the Old Cave drawn by Mr. Simpson. The latter has also procured a plan of the new portion from Mr. Raistrick, which entirely confirms the Editor's estimates, the Old Cave being 1,040 yards including everything, and the New Cave 960 yards.

In view of Baker's remarkable discovery of the Irish *Poulnagollum* with its two miles of continuous watercourse, *five miles in all*, it is very annoying that grotesque figures should have got into Kendall and Wroot's *Geology of Yorkshire*.

Derbyshire, Monyash, Hillock's Cave.—Yates, Nelstrop and Dean spent six hours in a mud choked cave, partly dug out by miners, possessing two ladder pitches. In the large bottom chamber were an old family Bible and twenty hymn books. An old mining authority says this must be due to the miner's reluctance to burn religious books.

Mendip, Eastwater Cavern.—In October, 1932, Devenish, Platten and the Editor, with a large party, had an amusing day in the upper reaches, going in by the Traverse, the scene of Baker's escape from below. Devenish did a fine climb, last down the chimney into the Canyon. There is another very interesting climb, up the great rift which is to be found by keeping to the right above the first vertical pitch.

Mendip, Stoke Lane Swallet.—This swallet takes a considerable stream, is frequently entered, and reported as anything down to a mile long. In September, 1933, Platten, Devenish, Roberts, Wigmore and Boucher, junior, did all that can be done, and after arduous crawling reached a dead end. Owing to the use of sixty yards of string, cold science guesses a length of 200 yards for three hours of toil.

Eisriesenwelt (Werfen, near Salzburg).—Albert Humphreys has followed Puttrell's example, and describes the visit as well worth the journey for itself. The cavern is not occupied by ice throughout. The guidebook is of 44 pages, published 1928, but the plan is brought up to 1933. The main passage runs something like two miles, and the total in the extraordinary labyrinths shown on the plan seems to exceed six miles.

A total of 18 kilometres (not 18 miles) is claimed, that is 11 miles. The cavern must be one of the biggest things in Europe, but before going out, Humphreys advises that enquiry should be made about seeing the inner portions and that the book should be obtained from Eisriesenwelt Gesellschaft, Imbergstrasse 20/2, Salzburg, Bavaria.

REVIEWS.

KAMET CONQUERED: by F. S. Smythe. (*Victor Gollanez*, 1932, 420 *pp.*). F. S. Smythe, the author of "The Kanchenjunga Adventure" has contributed another worthy volume to the attractive literature of mountaineering by the publication of his new book.

Climbing is itself a sport which appeals to the few. Yet there must be large numbers of men and women, whose nearest approach to snow-capped mountains is the Gornergrat, who have read this book with real enjoyment. To please the expert and the novice is a difficult task, but one which Smythe has accomplished. The story he tells is Aeschylean in its setting—for surely Aeschylus could have found no better background for his plays than the Himalayas. It also has the simplicity of the Greek Drama and, like Greek Drama, concerns itself with the struggle of man against the forces of nature. Fortunately the analogy ends here, as Smythe, unlike the Greek Dramatists, can tell us of a happy and successful ending.

The narrative is for the most part simple and always clear. One reviewer took the author to task for sometimes using what he termed "flamboyant" language. In judging the style of the book, however, it must be remembered that the scenery which Smythe is describing is on such a colossal scale as almost "to beggar all description." Indeed, the subject calls for something abnormal. It ill becomes one who has only seen a mouse to criticize another's description of an elephant. The style of the book as a whole is admirably clear.

And what can we tell of the author from his book? Certainly that he is very modest. Secondly that his consideration was always for others. It is not every leader who, in the excitement of victory, would step aside to give the greatest honour to one who had served him well. He must also be a shrewd judge of men. He says himself that the personnel of the climbing party is the key to its success. Then, a successful leader must also know how to handle his men. The loyalty of the porters and the fact that they gave of their best are proof positive that not only Smythe, but his colleagues too, are excellent psychologists of the native mind.

In "Kamet Conquered" the general public finds a good story well told. The expert looks deeper and asks himself what lessons the book can teach him. There can be little doubt that members of the Everest Expedition read it with care and respect. In many cases Smythe makes his points by contrasting the ice and snow, climate, etc. of the Himalayas with those of the Alps. Here his information should be useful. But it is clear that his ideas on the technique of Himalayan climbing are proving the most valuable—the abandonment of the rush tactics of assault for siege operations based on acclimatization,

His theory, too, of the essential part played by rhythm in climbing at high altitudes is very interesting. Every expert oarsman says that rhythm is the driving force in rowing, after the first minute, one is told, the mind becomes sluggishly conscious only of a white blur ahead, with which it instinctively knows it must keep in time. Again, in the case of machinery, when rhythm ceases there is something amiss with the engine. It may be that in formulating these last two theories Smythe has discovered the missing link between failure and success at the highest altitudes.

The expert will also read the appendices, which contain much useful information. Dr Greene's contribution on the medical aspect of Himalayan climbing is particularly interesting.

As for the illustrations, one is reminded of the saying, "good wine needs no bush." They speak for themselves. It is easy to see why Smythe is inevitably lured back to these mountains.—D.H.L.

CAVING, by Ernest A. Baker (*Chapman & Hall, 1932, 252 pp., many illustrations, 8 plans, 15s. net*). Dr Baker is, with the exception of Mr. H. E. Balch, the only Englishman who has written a book on cave-exploration. It is good that he has written a successor to *The Netherworld of Mendip*. good too that he has given it, as title, a word we have long wanted. Some will not like it, but as a pundit of English Baker can stand up for himself, and he has killed the invention of a ghastly word I only hint at.

The book, dedicated to M. Edouard A. Martel, and provided with a jacket which is an impression of Gaping Ghyll, covers a vast field, is in fact Baker's caving autobiography, and is most readable and enjoyable.

To Eldon Hole, tackled in 1900, their first really formidable problem, Baker and his friends of the Kyndwr Club applied rock climbing methods and were successful in their exciting adventure, but I have always understood that the party ran even more risk on their second descent, through the fearful strain put on the cross cable in trying to keep it taut.

The first distant expeditions were to Somerset, and a thrilling account is given of the Eastwater Flood of 1910, with the desperate escape through the Traverse, an account which has hitherto only appeared in Balch's *Wookey Hole*. Let me assure the veteran Rambler that here are no spacious belfries and that the two tight places are serious, while the bedding-plane is 45° and the possible route has to be selected.

It is always a matter of regret that Baker was not the first to reach the end of Swildon's Hole, and failed by ten yards to reach Barnes's Loop; owing to his initiative all difficulties had been passed; it is

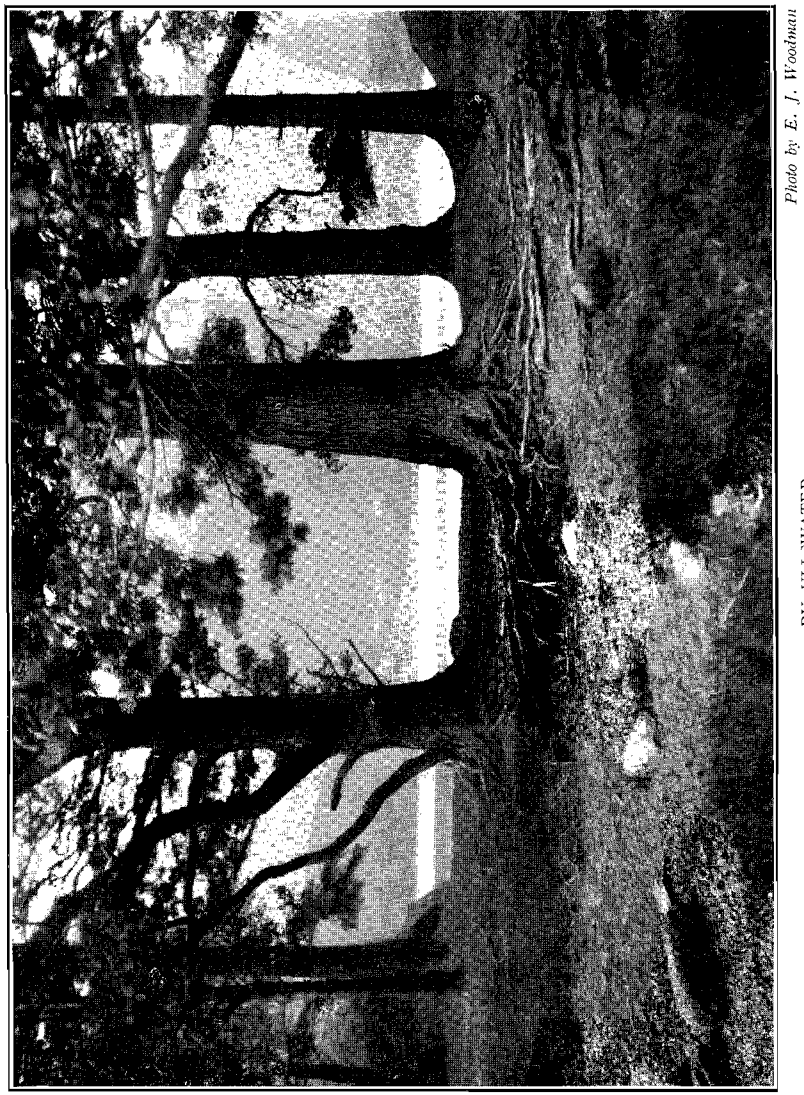


Photo by E. J. Woodman

BY ULLSWATER.

the first step that costs. The marvellous beauty of the Stalactite Chamber is now soiled by the unthinking use of flares.

There are joyous reminiscences of Ingleborough, and a most amusing chapter on dene-holes and the Chislehurst caves which might have been called " The Destruction of a Myth."

Quite thrilling chapters follow on the work done in Ireland with Hill, Kentish, Wingfield, and Brodrick. It is great to have the whole gathered into one connected story of the years before the War. In them came the discovery of the Lisdoonvarna or Burren group of caverns, and the dramatic journey with Kentish a good mile into Poulnagollum. It was only fitting that in 1925 Baker and his party should be the first to reach the end of two miles of watercourse. Despite fantastic claims this cave stands absolutely alone among British caverns *with five miles of passages.*

The close of the book, sightseeing mostly in France and Belgium, is a valuable summary of where to go and what to see, but exploration is not for foreigners, on the ground where Martel and his successors have worked so strenuously.—E.E.R.

ON FOOT IN THE HIGHLANDS: by E. A. Baker. (*Alexander Maclehose and Co.*, 1932, 200 *pp.*, 5*s. net*). This is an excellent book from which to gain an idea of what glorious walks can be taken in the Highlands and of what beautiful glens and hills there are to visit. It is not a list of routes as Smith's *Hill Paths in Scotland* or a guide book like Baddeley's, but it tells the visitor about each area in such a way that he can plan his tour on foot to the best advantage.

Baker does not mince his words about the strange social position in the Highlands, but as owing to a loose use of the word " Scotch " at times, he is liable to be misunderstood, I should like to make it clear that in my experience his complaints and those of other Englishmen are peculiar to the Highlands. Otherwise the Scotch hills are freer than in England, the keepers more friendly, and prices no higher, or less, for the same class of accommodation.—E.E.R.

SPELUNCA (*Bulletin du Spéléo-Club de France*, 1931 and 1932)—1931. The enormous field of activity open to our French friends is exhibited in striking fashion by a diagram showing the depths to which Spéléo-Club parties, led by the President, M. de Joly, descended during the year. A rough count shows that over a dozen involved ladder climbs of 200 ft., and that two were pot-holes of staggering total depths, 550 ft.

An unusual type of success was the climb of the subterranean Gave (Val d'Ossau, Basses-Pyrénées), to a height of 770 ft. in 1,300 yards. Another cavern, *Aven de Hures* (Causse Méjean) went down 670 ft., with enough pitches and enough transport of tackle to satisfy any Yorkshire Rambler.

The famous *Trou de Toro* on the Spanish side of the Pyrenees has been dosed by M. Casteret with a cwt. of fluorescein, which coloured a tributary of the Garonne for 40 miles. A question of international rights thus looms in the future.

M. Casteret's daring methods of solitary exploration are again confessed to in his account of the *Grotte de Cagire*. He must be a gymnast of the first rank, for he thinks little of seventy feet up or down a single rope, obviously not a cable.

M. Balsan reports on ten good pot-holes and on other caves near Millau, and Mr. Johnston on three caverns in Alabama, one of them, a pot-hole of 220 ft., being described in a note as the first of the type reported from the U.S.A.!

1932. The various articles describe half a dozen pots up to 130 ft. within 12 miles of Montpellier, numerous pots up to 230 ft. near Millau, another 230 footer in Hérault, and more caverns in the Jura. There is a cavern near Ponte Leccia (Corsica) and a much larger one, *Grotta Marmori*, in Sardinia. A solitary explorer invites the club to good sport in Dauphiné.

There are 35 pages summarizing the activities of the Spéléo-Club; 54 explorations, 25 of them new, caves and pot-holes in astounding numbers and of great depths.

M. Balsan makes a vigorous protest against the complete neglect of the peasants to observe the law against throwing down carcasses, which pollute the water of neighbouring springs.

Our *Journal* is reviewed at length; M. Joly considers it insufficiently technical. He recommends *briquets* of ferro-cerium instead of matches. Enquiries so far suggest that, if to be procured commercially, they are in the nature of flint-lighters.

Strictly scientific though *Spelunca* is, it contains much which fires the imagination of the "cave-man." The Editor has received a most friendly letter from M. de Joly, and it is to be hoped that someone may feel able to do a little exploring in France.

MODERN MOUNTAINEERING: by G. D. Abraham. (*Methuen and Co.*, 1933, 198 *pp.*, 7*s.* 6*d. net*). To men who do not go abroad regularly and who do not read much climbing literature, the contents of this book should be an interesting summary of things as they are and of what has taken place since the War, throwing light on, say, the Matterhorn North Face Climb, the Flying Dutchman, *karabiner*, Girdle Traverses, etc.

The author gives some account of the amazing bivouac efforts of German climbers, and of the extensive use of *pitons*, a practice which originated, we believe, in the Kaisergebirge.

It is difficult to avoid writing an essay on the many points raised

by perusal. The dangers and accidents in mountaineering are continually stressed, to no effect that we can see. Apart from post-war indifference to smashes, it is certain that the ordinary man regards his business life as the risky part, and his mountain vacations as safety from the other motorist.

The growth of mountaineering legend is curious. The expert Irving party in L'Evêque accident are assumed to have failed to plunge their axes into deep good snow! Mr. Abraham cannot know the leader.

ALPINE JOURNAL (1932 and 1933).—So much climbing is being done up and down the world that every number contains something which must be read if any touch is to be kept with the history of mountaineering.

In the two 1932 numbers are accounts of the second Bavarian attempt on Kangchenjunga in 1931, and of the climb by the brothers Schmid of the Matterhorn North Face. The Bavarians were actually above 6,000 m. (20,000 ft.) on the North East Spur for six weeks, literally excavating a path in the ice ridge. Further there are recounted Watkin's Greenland Expedition, and the struggle of the Germans with Nanga Parbat.

F. S. Smythe describes briefly his climb of the very difficult south east ridge of the Baltschieder Jägihorn, Miss O'Brien the risky ascent of the Finsteraarhorn North East Face, Madame Debelak new expeditions in the Julian Alps, almost unknown to the British, and Ruckmers gives a valuable account of Cantrabia, with the astonishing and reassuring information that the people, however poor, are clean.

In 1933 the great events related are the attack on Everest, and the German doings in the Cordillera Blanca (Peru), the range of Huascaran. Besides these have occurred, another expedition to Mount Mackinley, a Belgian ascent of Ruwenzori from the Congo side (west), and a determined American ascent of Minya Konka (24,900) in West China, which among summits reached must come next to Kamet.

There are also recorded more stiff expeditions by Graham Brown, and times by Eustace Thomas which make the Alps sound very small.

Of great interest are the quotations from the diary of a botanist, Blanke, who not only came into intimate touch with the Paccard family in 1775, but was taken out by the famous Paccard, then eighteen, on expeditions which show the latter to have been the first great amateur mountaineer.

BRITISH SKI YEAR BOOK (1932). There is little enough to be said about the season 1931-1932 from the British skier's point of view,

but Mr. Arnold Lunn is to be congratulated on the production of a Year Book no slighter in girth and decidedly more Imperial in character than those of previous years. This is in no small degree due to the original and—except in so far as snow was concerned—highly successful Oxford and Cambridge tour in Canada, where a combined team defeated McGill University in a *langlauf* and a *slalom*, McGill having just returned from winning the Canadian and American Inter-Collegiate Championship at Lake Placid. It was unfortunate that they suffered from lack of snow—a complaint apparently as common in other parts of the world as in Scotland that season.

There are three interesting articles dealing with the Canadian Rockies, and a description by Niall Rankin of the Skoki Valley Ski Camp, forty miles west of Banff, has a strong appeal to the downhill runner with a Swiss education. Mr. Rankin first tried the Laurentian Mountains in Eastern Canada, where the Oxford and Cambridge meeting was held, but he failed to find a real downhill run.

It was at Banff in Alberta, the headquarters of the Ski Club of the Canadian Rockies, that he finally found what he was looking for. This club has recently developed a ski camp in the Skoki Valley, at 7,500 ft., near the source of the Red Deer river, fully *bewirtschaftet*, and possessing its own experienced Austrian instructor and guide. Here there are unlimited facilities for short runs, long tours, glacier, ski-ing and ski-mountaineering, on snow which is in excellent condition from February till June. The article is illustrated by some excellent photographs.

"The Scottish Season, 1931-32," by Captain Sir John Forbes, takes the form of a diary of expeditions made in the Cairngorms, starting from Strathdon. There were 15 days on which ski-ing was possible, some of them very cold and stormy; six fell between October 25th and February 14th, five in April, and the remaining four between May 8th and 15th. The best day of the year was May 8th, on Ben Avon, 4,000 ft. of running in perfect snow and faultless weather conditions. On May 14th an expedition to the top of Bynack More gave 1,300 ft. of running over spring snow.

Sir John Forbes makes two remarks, which sum up what we read in the newspapers about Scotland last year:—

> "Wait till the snow is there and then come up and enjoy it."
>
> "Anyone who comes to ski in Scotland must be prepared for temporary defeat from the weather, but one good day in the Cairngorms will make them forget ten days of vain endeavour."

There are several accounts of new, or rather, unfrequented ski-tours, always interesting to those who have the leisure and the inclination to wander from the more populous stamping-grounds, which include many useful hints about those very necessary adjuncts to ski-touring,—

hotels, huts, villages, trains, sleighs, itineraries.

"Overtime in the Oberland," by Frank Elliott, is a description of a number of ways of spending sixteen hours a day on ski, including a three day tour from Villars to Adelboden, via Bex and Montana to the Rohrbach Haus (9,495 ft.), 1st day—over the Wildstrubel and the Gemmi Pass to Kandersteg, 2nd day—over the Bonderkrinden to Adelboden, 3rd day—the plan to return from Adelboden to Villars in one day being unfortunately frustrated by a heavy snowfall.

"Equipment Section." There are no revolutionary innovations to record this year. The deluge of new bindings produced in the last ten years seems to have spent itself and the "Alpina" to have become the generally accepted one for most purposes. The new spring heel-strap for the "Alpina" is achieving some success this year, and has been praised in *Ski Notes and Queries* by Miss Doreen Elliott.

A discussion on reinforced edges hesitates to make any definite recommendation, as these edges are still in the experimental stage; on the whole, however, brass is preferred to steel, as steel becomes very slow on cold snow.

"On Choice of Turn" and "Vorlage," by Vivian Caulfield and Arnold Lunn, are two articles on technique which are of as great interest to the beginner as to the more experienced skier.

The first is a vindication of the telemark as a heavy snow turn, and compares its usefulness with that of the stem-turn and of the christiania, (*a*) it has a greater range of snow, being easy in crust, where the christiania is impossible; (*b*) it has a higher speed limit and is therefore much more useful for stop-turning. There are indications that the hitherto strong taboo against the telemark by the Arlberg school is breaking down, and it seems likely that before long the turn will be introduced into the Arlberg curriculum.

The second article holds that *Vorlage* (literally-forward position) is a misnomer, and that the term does not mean "forward leaning" but the maintenance of a neutral position at right angles to the ground over which the skier is travelling. In the case of a novice the importance of leaning forward has to be stressed to the utmost by the teacher, as the novice tends instinctively to lean backwards. To pretend that *Vorlage* is *the* secret of good ski-ing is absurd.

(1933) "An Examination of Snow Deposits." A most valuable monograph on Dr. W. Welzenbach's and other glaciological researches, with particular reference to snow-cornice formation, by Gerald Seligman, is continued in 80 pages of this number. Mr. Seligman begins by asking the practical ski-runner's obvious question, "How will a knowledge of the inner structure of snow deposits help the man on the spot?" He answers it with a quotation from Mr. Geoffrey Young's *Mountain Craft*

" As it is certain that we cannot do much route-inventing or advanced climbing upon rock without knowing something of the different sorts of rock and their meanings, so it is far more certain that in really big mountaineering no one will get far or go secure whose knowledge of ice and snow is limited to the mere physical ability to climb upon them."

The other important article is by Col. Daukes on his experiences round Nanga Parbat.

There is much technical and racing matter. Mr. Colin Wyatt has made the splendid jump of 38 metres on Holmenkollen, the famous Norwegian hill.—H.C.W.

SKI NOTES AND QUERIES (3 times a year).—Number Fifty appeared in May, 1933, and we congratulate Mr. G. Seligman, the Editor. Short touring articles, personal sketches, all the news of the moment, lively correspondence, with numerous beautiful photos, make up the numbers.

JOURNAL OF THE FELL AND ROCK CLIMBING CLUB (Nos. 25 and 26 for 1931-32, published 1932 and 1933). The articles range from Lakeland over many parts of the world. In No. 25 the Rev. W. T. Elmslie tells of another adventurous journey to the Balkans with Sleeman, Ellwood and Storr, this time to ascend Musalla (9,631 ft.), S. of Sofia, the second highest summit in the Peninsula. The peak was not hard to get at, but their travelling experiences renew one's admiration for their enterprise, without rousing any wild desire to follow them, unless a master of the language.

Wood-Johnson's Kangchenjunga Diary is important and intensely interesting.

No. 26 contains a delightful article on the Diamond Mountains, Corea, by Miss Pilley, and a useful one on the Pyrenees by A. E. Storr. The latter was evidently the leader in the expeditions related by G. R. Smith in " Peaks and Porterage in the Pyrenees," *Y.R.C.J.*, 1927.

There are notes on a new crag in Long Sleddale, Buckbarrow Crag, on a new climb to the left of the Pillar North-West, and others, with a particularly successful set of winter pictures from Kirkfell.

It is curious that the Rev. W. T. Elmslie in commenting on our last *Journal* dislikes not only the Red Coolin picture, so disappointing in reproduction, but the Liathach picture, described by other critics as magnificent.

Other reviews are held over.

CLUB MEETS.

1932.—After the February Meet at Chapel-le-Dale the next was at Easter, at Strands near the foot of Wastwater. The place was found to be quite suitable and the weather was not quite so indifferent as in North Wales.

May was a wet month and Whitsuntide very early, 15th May. We were extremely fortunate in suffering no interruption at Gaping Ghyll, though there was forty-eight hours rain in the district finishing on Friday morning. The ground was never dry, and after the severe storm before dinner on Sunday and again all night, the working area on Monday was trampled into horrible mud. The nights were singularly warm and still.

The mysterious expedition of the Stockton group the previous week-end was explained, when Fred Booth, the first down, was found to be returning, but was recognised as Sale. What Booth fancied was a phosphorescent corpse had turned out to be a light in a tent occupied by Sale and Crowe, who had come in with a supporting party by the Flood Entrance and had been waiting since 8 a.m.

Some Wayfarers were in camp with us and one party went to the end of the Flood Pot Branch, making also the second visit to Sale's passage. Booth, Armstrong, Yates and Marshall put in a night-shift trying in vain to dig out Booth's new passage in the first aven beyond the Floot Pot, and were raised in the early hours by C. E. Burrow and Hilton.

A better sketch of the topography of Stream Chamber was made; Nelstrop and Watts resurveyed the West Chamber; two separate surveys were carried into the South Passage to the Pool Chamber, the results showing that what stands in the plan must be a sketch, 28 years old! Parsons' route into Mud Pot was rediscovered.

The beck ran high on Monday, and operations were limited to recovering the Flood Pot ladders, and to a journey along the East Passage by the President's party. The gear was left in position for descents the following week-end by the Rucksack Club, and I am told that the Rucksackers displayed remarkable efficiency in taking it all down.

The unusual expedition to Flamborough (Thornwick Hotel), 4th-5th June had quite sunny weather with a decidedly cool wind. The main body spent Sunday with Sam Leng; ten men were lowered down Bempton Cliff and attempted to gather seabirds' eggs. The work of Leng's gang was a treat for well-drilled pot-holers to watch. Contrary to the usual story the method is the sound one of hand line and body line, a method once often used in pot-holes, but found frequently unsuitable.

Two men studied the coast line from High Stack, south of the

Lighthouse, to far along Speeton Cliffs. North of the Lighthouse there appear to be no possible descents, except the three bays, until a point is reached approaching Speeton Top. The only caves which could be reached without a boat were Common Hole (Sel'icks Bay), two caves east of North Landing and one to the west. Hundreds of dying sea-birds littered the coast, giving the lie to interested statements that oil discharge is harmless to-day.

The Meet with the Derbyshire Pennine Club at Braida Garth, Kingsdale, 9-10th July, had as its aim a descent of Rowten Pot. It was found to be too wet on Saturday night, and so fifteen men on Sunday went down Marble Steps as far as the long straight passage.

I have no news of the August camp at Heathwaite Farm, Coniston, but a dozen men gathered at Kirkby Stephen, 10-11th September. Davidson, Hilton, Bristol and H. Booth went to High Cup Nick and against a terrific wind on to Crossfell. Five others also climbed Crossfell, of whom H. Buckley went on south until he reached High Force, after the waiting car had departed. He returned over Mickle Fell, next day

To Buckden, 22nd to 23rd October, thirty men came up on a wonderfully clear afternoon through gorgeously coloured woodlands. A new cave was noticed, and in wretched weather on Sunday ten or eleven men swept the Bishopdale limestone platform for more until all hope ceased, finding four. A crowd went over to see High Waldendale and many men did Buckden Pike.

1933.—Owing to frosty nights and a reluctant thaw a small snowfall lay all down the east of England for a fortnight, in the last days of which, 28-29th January, hopeful ski-ers attended the Hill Inn Meet with their implements, to no purpose. There was no doubt about the bitterness of the south-east wind, and the President's party enjoyed some hours of skating on Greensett Tarn. Some forty men sat down to dinner, and were livened up afterwards by a treasure hunt, and guyed in the performances of the "Stockton Players."

In the lovely weather of February, the idea of ski-ing up Teesdale passed into a joke. However there was a real fall of snow in Leeds on the 19th, but during the next few days one read with amazement of daily falls all down the east coast from Durham to London. To the sceptical who regard ski as a certain insurance against snow, the heavy fall of Thursday night was merely an interference with motoring. Only two men, however, Fred Booth and the Editor, left Leeds on the morning of the 25th for Weardale by train. At Darlington was a rapid thaw, but they detrained at St. John's Chapel in a storm which continued without ceasing till Sunday night. Although the Midland main line was blocked, the snow did not extend to the stretch from Settle to Dumfries.

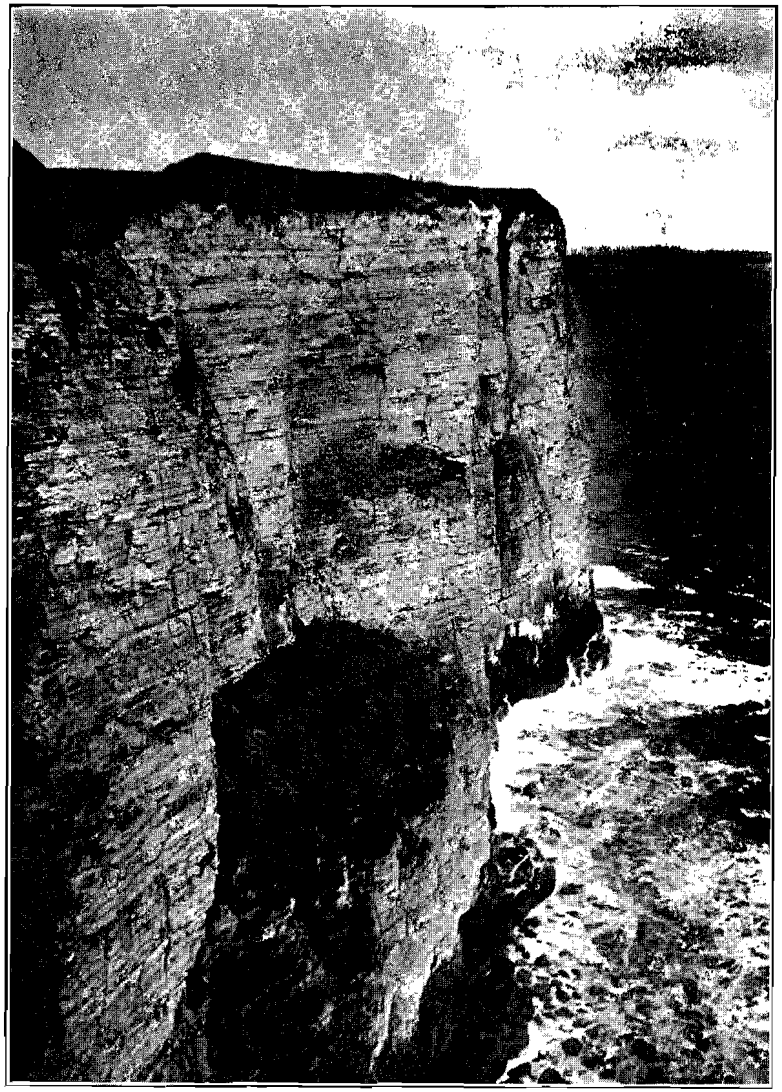


Photo by G. C. Marshall

BEMPTON CLIFFS, FLAMBOROUGH.

Over the fell road (now converted into a motor road as high as Nenthead, 2,056 ft.) to Langden Beck was quite a struggle, and one glance at the Teesdale highroad, clear 24 hours before, showed that the return via Middleton was going to be no joke. About 7 p.m. James Brown and Lees arrived on ski, having abandoned their car one mile above High Force.

On Sunday the first two miles of drifted road below the Inn were passed by laborious detours in the fields or by staggering along the tops of the badly built walls. The ski-ers had much the best of it, but their car was stuck hopelessly and was not retrieved for a week. The ploughed road of Saturday had taken on two feet of snow, but High Force was reached in two hours. At Newbiggin the plough was met, but before that the foot-sloggers had been heartily thankful for the trench cut by the skis. The party are prepared to sign any amount of certificates that the storm was from the south-east (not the north), and that it was mostly sleet.

The four did not get a train from Middleton till 11 a.m. Monday, Darlington and ten miles south were then clear of snow. The rest of the Stockton party did not get beyond Barnard Castle.

Dunsop Bridge in the Forest of Bowland, but still in Yorkshire, 18-19th March, was almost new ground to all eighteen of us. Mellor Knoll was done on Saturday evening, and on Sunday one party of eight had a very delightful moorland walk up Whitendale, and over Wolf Hole Crag to the highroad at the Trough of Bowland. The drive beyond Skipton was one of the most enjoyable parts of the excursion.

On 2nd April there was much pleasant climbing on Stanage Rocks with the Derbyshire Pennine Club. Exaggerated and grotesque stories have been related to the Editor of vain wanderings on the previous evening behind our hosts in search of a mythical Trey Cliff Cavern.

Easter gave us hope that we should at last have a fine summer in which all the good weather was not confined to working days. Some fifteen men met at the Waverley Temperance Hotel, Fort William, and had a splendid time. One day, Saturday, was wet, of course, and Monday was cloudy down to 3,000 ft., but the air was so calm it was possible to light a pipe with ease on almost every top, and except for those two days the clouds kept high above the peaks from the 13th to the 23rd April.

On one perfect day six men were on the Tower Ridge, others on the North-East Buttress with the rocks in summer condition, while three more and their friends were on the snow in the Tower Gully.

At Coniston were eight men, who report good weather, excellent catering, and grand climbing on Dow Crags.

The weather seems quite determined that no Meet shall ever do Rowten Pot. Frightful storms on 6th May put it quite out of the question, but nine dauntless people got on to the Bridge on Sunday, and some even to the next ledge, 180 ft. down; the rain never stopped till we were far on the way home.

One has to go back to 1922 for any Whitsuntide to match the gorgeous sun and heat of June 2nd to 6th at Gaping Ghyll. After the last party came into camp towards 11 p.m. on Friday, declaring that they had driven from Leeds in heavy rain and had come up through the woods in a hot stuffy drizzle, there was no further thought of anything going wrong. The boards for the dam were never placed in position; the waterfalls inside shrank and one could contemplate the Main Shaft as something only 340 ft. high; people went up and down without oilskins, and breakfasted and worked in airy costumes. Loafing was a delight.

Ladders were put over for any who desired to go that way, but to the disgust of Tom Booth, in a degenerate modern fashion, one length to the Ledge, and another length below on long ropes. There was an air of finality about the proceedings. "Do you know anywhere else where there is a possibility?" J. D. Brown was lowered into the Lower Letterbox rift and brought up by a dead haul of 30 ft.; two parties on separate days combed the left hand area beyond the Sand Cavern to the Mud Pot in vain, but found that it was far more intricate than had been suspected; anyone could go and hunt where he wanted. So it came about that excursions were made over the moor to Nick Pot and to the new pitch of Marble Pot, while the scientists demanded that each should toil for a minimum time at digging in the floor of the Great Chamber.

Only two members attended each of the next two fixtures, the 7th July with the Wayfarers at the Robertson Lamb Hut, and Bank Holiday at the Tal-y-Braich Hut of the Rucksackers.

The Roman Wall Meet, 16-17th September, being after the holiday season, tempted nineteen to undertake the hundred mile drive. It is thirty years since the Club had a Meet there.

Rosedale, 22nd October, and Malham, 3rd December were both very enjoyable Meets which the writer was compelled to miss owing to the call of official duties, public and Club. E.E.R.

CLUB PROCEEDINGS.

1932.—The Week-end Meets held during the year were:—7th February, Chapel-le-Dale; Easter, 27th March, Strands (Wastdale); Whitsun, 15th May, Gaping Ghyll (with the Wayfarers' Club); 5th June, Flamborough; 10th July, Kingsdale (with the Derbyshire Pennine Club); 29th July to 2nd August, Heathwaite Farm, Coniston; 11th September, Kirkby Stephen; 23rd October, Buckden.

The twentieth number of the Club Journal was published during the year.

With deep regret we record the deaths of S. W. Cuttriss, of J. H. Buckley, and E. Andrews.

1932-33.—At the Annual General Meeting held 12th November, 1932, the following were elected to hold office during the year:—President, W. V. Brown; Vice-Presidents, G. L. Hudson and F. S. Smythe; Hon. Treasurer, B. A. Bates; Hon. Secretaries, D. Burrow and F. S. Booth; Hon. Editor, E. E. Roberts; Hon. Librarian, J. Buckley; Committee, H. Armstrong, C. C. Bristol, C. E. Burrow, R. F. Butler, J. Hilton, D. L. Reed.

The twenty-sixth Annual Dinner took place at the Hotel Metropole, Leeds, on 12th November, 1932. The President, W. V. Brown, was in the chair, and the principal guest was Mr. Hugh Ruttledge (leader of the Everest expedition). The kindred clubs were represented by Mr. J. L. Longland, Alpine Club; Mr. C. E. E. Riley, Scottish Mountaineering Club; Mr. Eustace Thomas, Rucksack Club; Mr. Wayfarers' Club, Mr. R. G. Plint; Mr. F. Oakes Smith, Gritstone Club; Professor J. Husband, Derbyshire Penning Club; Mr. C. Downham, Northern Cavern and Fell Club; Mr. A. Mitchell, Craven Pot-holing Club. One hundred were present to give "God-Speed" to the three Everest climbers.

1933.—The Week-end Meets held during the year were:—29th January, Chapel-le-Dale; 26th February, Langdon Beck (Teesdale); 19th March, Dunsop Bridge (Bowland); 2nd April, Stanage Crags (with Derbyshire Penning Club); Easter, 16th April, Fort William and Coniston; 7th May, Kingsdale; Whitsun, 4th June, Gaping Ghyll; 9th July, Great Langdale (with Wayfarers' Club); 6th August, Tal-y-Braich (with Rucksack Club); 17th September, Wall (near Hexham); 22nd October, Rosedale; and, 3rd December, Malham.

On 6th December, F. S. Smythe lectured to as many as the Y.M.C.A. Hall would take, on "The Difficulties of Everest." Though the date was midweek, the distant members came in great numbers, and were rewarded by a brilliant technical lecture and the exhibition of Wager's film, for I believe the second or third time only.

Mr. H. H. Bellhouse, formerly President, and one of Founders of the Club, has been elected an Honorary Member.

With great regret we record the death of Lewis Moore, President, 1909-12, and for many years Secretary.

1933-34.—At the Annual General Meeting held 18th November, 1933, the following were elected to hold office during the year:—President, W. V. Brown; Vice-Presidents, F. S. Smythe and J. M. Davidson;

Hon. Treasurer, B. A. BATES; Hon. Secretaries, D. BURROW and F. S. BOOTH; Hon. Editor, E. E. ROBERTS; Hon. Librarian, J. BUCKLEY; Committee, H. ARMSTRONG, C. C. BRISTOL, C. E. BURROW, J. HILTON, D. L. REED, H. L. STEMBRIDGE.

The twenty-seventh Annual Dinner took place at the Hotel Metropole, Leeds, on 18th November, 1933. The President, W. V. Brown, was in the chair, and the principal guests were Messrs. Hugh Ruttledge, F. S. Smythe, and J. L. Longland, on their return from the Alpine Club attack on Everest. The kindred clubs were represented by Mr. E. W. Steeple, Scottish Mountaineering Club; Mr. J. H. Entwisle, Rucksack Club; Mr. A. R. Edge, Climbers' Club; Dr. J. Dawson, Gritstone Club; Mr. W. O. Duncan, Midland Assoc. of Mountaineers; Mr. G. Surrey-Grant, Northern Cavern and Fell Club; Prof. J. Husband, Derbyshire Pennine Club; Mr. J. Wray, Fell and Rock Climbing Club; Mr. F. J. Guest, Wayfarers' Club. One hundred and twenty-eight members and guests were present.

NEW MEMBERS.

1932.

KEIGHLEY, GILBERT, 58, Seventh Avenue, York.
RUSTON, ARTHUR GOUGH, 15, The Drive, Adel, Leeds.
WATTS, HAROLD GARFIT, Flowerdale, Bank Road, Billingham.
VIGERS, BRIAN EDMUND ALLEN, Oswald House, Seaton Carew, Durham.

1933.

HASLAM, EDWARD MARK, 78, Sharples Avenue, Bolton, Lancs.
STEMBRIDGE, FRANK WILLIAM, Sun Hill, Huby, Leeds.
STEMBRIDGE, HARRY LEIGHTON, Sun Hill, Huby, Leeds.
LEES, DAVID SAVIDGE, Thorpe House, Norton-on-Tees.
NORRIS, WOODFORD STANLEY, 1, Linden Avenue, Stockton-on-Tees.
HIELD, PETER DOUGLAS, Summerfield, Ilkley.
EDISON, GEORGE, 295, Burley Road, Leeds.
PLATTEN, GERALD, Rotherfield Kennels, New Milton, Hants.
