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## Yorksbire Ramblers' Club Journal

| Vol. III $\quad$ No. 909. |
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## EDITORIAL.

The absence of Mr. Thomas Gray's name from the first page of this issue will bring home to members that they can no longer count on his services as Editor of their Journal, services which have in fact been coëval with its life, and of which the magnitude is evidenced by the eight numbers for which he was responsible. Si monumentum requiris circumspice!

A Club like ours, limited alike in members and habitat, imposes special difficulties on its Editor, and the place which our Journal holds amongst kindred periodicals was largely due to the energy and literary skill, aided by a practical knowledge of mountaineering, which Mr. Gray brought to his work.

Nor did those difficulties diminish with time. At its inception in 1899, we were alone in the field of, at any rate English, mountaineering journalism. Now we share it with a band of sturdy rivals, all eager to print the, by no means unlimited, literary output of English climbers, whose zeal and numbers seem to increase in inverse ratio to the crop of work still ungarnered.

That we welcome such friendly rivals goes without saying, but we do not disguise from ourselves the increasing difficulties imposed by their presence. At the same time we gratefully recognize the wide scope conferred, as well by the title of the Club as the proclivities of its members, and not limited, as witness the current issue, to the Four Seas or even to the Upper Regions; and on behalf of the Club we confidently bespeak of members a continuance of those efforts, physical and mental, which Mr. Gray turned to such good account.

The Editor.

## THE POPULATION OF THE ALPS.

## By Reginald Farrer.

The younger Dumas, long ago, pointed out the extent to which one's own particular professionalism influences one's attitude towards the most obvious objects of general interest. And, reading the essays of mountaineering Ramblers-and of all mountaineers in general,-I seem to see that a mountain is, to such aspiring souls, merely a thing to be got up,-or fallen off, as the case may be: an inanimate opponent, seemlily provided with couloirs and snow-slopes, and other conveniences for the climber. In the personality of the rock-mass one finds but little evidence of interest: the professionalism of the climber tends to blind him to the very existence of the mountain except as an object ascendable or not ascendable. Now naturally one reads accounts of mountaineering for the sake of the ascents, and not for any geological or botanical analysis of the peak in question: yet it would add enormously to the interest and catholicity of his work if the climber found time to note a little what the victim of his efforts was like in itself: and what small brilliant inhabitants he may have remarked in its crevices and gullies as he went. But, too often, the narrowness of his professionalism prevents him from seeing (or at all events from noticing,) all such details as flowers or insects by the way as are not immediately relevant to the actual details of the climb.

So here as a counterblast comes in the value of my own professionalism, which is no less virulent than any one else's. Perhaps it may come merely as a shock and a heresy to my fellow Ramblers when I make the confession that to me the mountains (apart from their dominant personal and spectacular attraction) exist simply and solely as homes and backgrounds to their population of infinitesimal plants. A stone-slope wakes my emotion only as a possible residence for Iberidella rotundifolia: a high granite ridge as a sure seat for Eritrichium nanum. And my special zeal even compels me to find vast joy and
stimulation in moraine slopes,-which, from diligent study of mountaineering works, I do not gather to be altogether dear to the heart of the climber.

Of course my enthusiasm halts, together with my feet, at the precise point where the climber's best energies are first called upon. For I will go with him up to the last of the stone-slopes and ridges, to where the final peak begins: but above the first station of Eritrichium nanum I know there is no more need for me to mount: above that magic point the stark precipices will have no new things for me: though the persevering climber may still be enlivened as he swarms by fresh tufts of Eritrichium or Androsace in crevice or cranny of the cliffs. If only he would perceive them and record them! It breaks my professional heart when I read long accounts of climbs in Caucasus or Himâlya without ever a word said of all the rare and priceless plants which must occur to the mountaineer as he goes, and which I would give all the less valued portion of my soul to see for myself. I don't ask him to know the species accurately or at all: but, Oh dear, if he would only note that here he saw a pink flower, and here he came upon a blue, then $I$ should know, on the slightest specification, that his unworthy eyes had probably been blessed by Primula concinna or Gentiana Kurroo. And also, how vastly would the humanity of his own work have been widened: for surely the specialised eye should also be the eye-catholic? Never may I myself collect a plant without remarking all its mise-en-scène and its circumstances in detail: and the man to whom the climb itself is the protagonist would equally find its dramatic value heightened, if he attempted a complete presentment of all its decorations.

Of Caucasus and Himâlya I can say nothing: which accounts for my envious philippic against unseeing eyes that pass (and feet that very possibly trample,-horrid thought) upon Primula bella and many another princess of the hills, that I myself have vainly longed for years to see and introduce. But a little of the Alps I do know, from my own peculiar and particular standpoint; and if any mountaineer feels fired by my appeal with any wish to
remark the population of the peaks he climbs, then I can lighten his labours by assuring him that such duties will not attack or distract him in the difficult and precipitous moments of his ascent, while he is shinning up a trackless cliff, or impending helpless over the vast inane: but will merely diversify his path at duller moments, lending colour and variety to his preliminary "stodges" up over stone-slope and moraine. For the high-alpine flora centres itself at such points: and, of the most gorgeous treasures, most have their radiant point between nine and eleven thousand feet. Indeed, eleven thousand feet, in the European Alps, is probably an extreme estimate: true it is that Ranunculus glacialis climbs (unlike me) to within a few hundred feet from the summit of the Finsteraarhorn, and that Eritrichium mounts probably to 12,000 feet or so on the cliffs of the Bernina range. But all these occurrences are merely pleasant $\pi a \rho \epsilon \rho \gamma a$ to beguile your climb: the glacial Buttercup, huge pearlwhite flower, fading to a rusty rose, has the centre of its distribution in the wet shingles under the naked peaks, and to whatever height it may climb, I do not expect that those exalted shoots in the final arête of the Finsteraarhorn are much better than dwarf and morbid sprouts, incapable of blossom. As for the Blue Moss, the azure ecstasy of Eritrichium nanum begins on the high granite ridges at about ro,ooo feet: and, though I have no ocular experience, I would bet that it has no such climbing propensities as the far easier and robuster Glacial Buttercup. See it you must, though, in all the granite ranges, about the height I quote: I defy any man, not blind from his birth, to pass, unseeing, on those primary arêtes, across the splashing glory of that minified, glorified Forget-me-not: but where, in a mountaineer's documents, will you find the slightest allusion to it? "Not relevant" you say? No, perhaps not, in a rigid textual sense, yet how illuminating a touch the allusion would give, and how very brief a space it would consume! And mountaineering accounts are not usually so fiercely strict on relevance as all that comes to: I have known the most august of climbers diversify their story with little comic
prattles by the way. Surely, then, they could profitably find time to enrich the grey picture of ice and rock with a touch of rose or azure in some cranny as they go ?

Oh mountaineer, your way is strange to me: you leave me at the cliff's foot, gazing up at you with wonder (but not with envy) as, like a fly on a wall, you steadily climb the patently unclimbable. Therefore of what plants peep out at you from those microscopic chinks which offer you your frail chances of survival I have no experienced tale to tell. Nor, when you get into such straits and points, should I be so inhuman as to expect your notice for anything but the possible handhold or foothold of the next advance. Indeed, as I say, you are by now too high for floral novelties: the royal alpines preferring to congregate on cliffs and slopes at rather lower altitudes (on those elysian desolations of stone, indeed, where you have left me behind so happily to browse). Perhaps, if your cliff be of granite, you may still be gratified with the ash-white cushions of Androsace imbricata in the sunbaked crannies. But this is a rare privilege: on the sheer limestone you will far more easily and universally come on the similar, but woolly-green sponge-masses of A. helvetica; Eritrichium you will only find on granite: on granite also most luxuriate the golden suns of Geum reptans and the pearl cups of Ranunculus glacialis,both of these being plants of the highest moraines, which become crevice plants, rather abnormally, as you ascend, in their laudable determination to grow wherever they can, failing the opportunity of growing where they would naturally choose. Occasionally, I fancy, you might also see the flat wide stars of electric blue Campanula cenisia, astray from the moraine shingles which it loves: and on the sternest and "most care-take-ful" (as Sündermann calls them) rock walls of the Fassa Dolomites you may be privileged with a sight of the rare and lovely Campanula morettiana, which never condescends at all upon moraine or shingle, but remains constant to the most impracticable crevices of the high limestone Alps. In these same Alps the silver-grey sheets of Potentilla nitida climb far, and faithfully abound in their
great pink blossoms; but Androsace glacialis, rosy rival of Eritrichium, which rollicks on the highest moraine shingles as a rule, (abundant in Engadine, Oberland and Ortler ranges: curiously lacking, so far as my experience goes, in Dolomites and some parts of Austrian Tyrol), with Geum reptans and Ranunculus glacialis, apparently never, at least in my experience, becomes a crevice plant like its neighbours, though you might possibly come upon it in slopes of fine detritus at great elevations. As for ridiculous grey-flannel Edelweiss, you will never find this base impostor from Siberia among the real mountain aristocracy of the peaks and high moraines: it belongs to grass-lawns and stone-flats some five hundred feet below the rich shingle-beds under the cliffs; whence it seeds itself down on to all sorts of odd places, even into the river-beds far away below in the valleys; but it never seeds up into the neighbourhood of the real nobility. There are mats and masses of it, for instance, like daisies in grass, among the scant herbage and beautiful purple Mountain Asters all over the ridgy bed of that extinct glacier which one surmounts to reach the foot of the Schwarzhorn from Rosenlaui. A little higher up you arrive at a wonderfully rich tract of shingle, filled with true princes of the Alps,-Ranunculus glacialis, Campanula cenisia, Geum reptans, Cerastium latifolium, Viola cenisia, Ranunculus alpestris, Gentiana brachyphylla, Androsace glacialis. But there you'll never see a trace of Edelweiss. The best company into which I have ever seen the Flannel Flower admitted is on that shingly ridge which connects the Drei Zinnen with the Cadinenspitze. Here, on these flat banks, the Edelweiss grows literally in a lawn: its neighbours are Potentilla nitida in wide sheets, the Gentians clusiana and verna, (it is evident that you are not very high, for, above 7,000 feet Gentiana brachyphylla replaces $G$. verna; and sometimes G. imbricata, G. bavarica), alpine Peaflowers, the golden Primula bellunensis, Ranunculus Seguieri (the Dolomite version of $R$. glacialis) and a glorious great form of Ranunculus parnassifolius white as snow. But, of the nobility, only the Potentilla
condescends to consort with the Edelweiss: the Buttercups sit selectly alone in an undisputed mud-pan all to their two selves, and the Primula prefers a slope just over the ridge, where Edelweiss does not care to intrude. The Edelweiss, in fact, is much happier lower down, on ledges and crags where it can germinate among plebeian plants and pretend to be patrician itself,-an assumption in which it is helped by that stupidest of all legends which asserts its rarity and impregnability, so that annually many silly people go falling off cliffs in pursuit of it,-not knowing that it forms the staple herbage on flat stony banks and lawns a little higher up.

All this, you will notice, applies to the ground immediately under the great peaks where mountaineering begins. It is here mainly if not solely, that the observant climber could so profitably enrich his experiences with a little floral colour. On his way down perhaps, exhilarated by success, and not yet jaded into blindness by miles of subsequent moraine, he might with joy and lightness respond to the cheerful appeal of those brilliant dwellers on the high shingles. This need not sadden his report of the day, and, in known lands like the Alps, would rather diversify his story. But, in other ranges, in Caucasus, Norway, Himâlya, how priceless to many a reader, how vivifying to all readers, would be the occurrence here and there of a remark as to some blue or yellow flower noted with pleasure. At once the arid (to outsiders) description of rock or couloir takes life, one is more than before linked in sympathy with the Climber: and very often, while the unmountaineering, unhorticultural reader is pleased by some such touch, the practical gardener also receives a stimulus either to his knowledge or his imagination. Often, indeed to his real knowledge: the mountaineer must certainly be a man of widish general education (or he couldn't have the money to mountaineer) -and nowadays a general education usually enables a man to know at least Primulas, Gentians, Buttercups, l'orget-me-nots. So that the mountaineer's Horal comments might possibly enlighten, as they would certainly enliven, his readers.

Speaking from my own narrow and basely egoistic standpoint, I crave unutterably for new plants and for new information about plants,-such as the climber in Caucasus or Himâlya must constantly be running the chance of acquiring. And it never seems to come! In vain is Primula pulchra rosy and brilliant, in vain is Meconopsis aculeata like the sky at dawn: all that the climber sees, and says, is that rocks are grey and ice cold. Is one asking too much if one suggests that surely he must see a little more than that, (even without any special knowledge), -and that therefore, he ought to find a line of space to say so, even if he cannot, from time to time, pluck up a rosette or a pinch of seed as he goes, wherewith to enrich the gardens of the faithful at home? And if anyone answers that flower-time is not seed-time, so that what a man notices in bloom he cannot possibly get seed of: then to that I urge that the curious lover of life will gather seed as he finds it, flower or no flower, on the gambler's chance that something beautiful will spring up when he gets it home. Often, indeed, he will have backed a loser, and only a hideous weed will result (for among the high-alpine beauties there are many dull little high-alpine dowdies too): but on the other hand he will now and then know the triumph of all triumphs, when a new and glorious species unfolds, and brings Caucasus or Himâlya into our gardens, and a trebly vivid pang of recollection to the mind of the collector himself. Who was it who first brought us Primula rosea from the high moraines of Himachâl, to make increasing tufts of glory by our streams: who gathered us Campanula collina from the sunny slopes of Caucasus? They deserve public statues, both of them, and lettering of fine gold upon the plinths. And it was only a chance pinch of seed that acquired them this merit! Let all climbers then fare forth in the determination to go and do likewise.
4. NOTES of a few good Alpine rambles, with their plants: (obvious and universal species, such as Arnica, not noted).
Rosenlaui (Bernese Oberland) to Schwarzhorn. Primula viscosa.
Edelweiss in abundance. Lloydia serotina, Anthericum liliastrum
(rare), Aster alpinus, Androsace helvetica, (on one great boulder), Anemone vernalis, Ranunculus alpestris, Soldenellas; and then on the last shingles under the Schwarzhorn and the Wildgrat, Ranunculus glacialis, Androsace glacialis, Aronicum glaciale, Viola cenisia, Campanula cenisia, Cerastium latifolium, Geum reptans, Gentiana brachyphylla, Beridella rotundifolia. (An extremely brilliant collection, in a small space, of the most typical high-alpines).
Rosenlaut, King's Peak, (Engeihörner.) Aquilegia alpina (on the upper slopes), and on the rocks themselves, Dianthus sylvestris, with Aster and Edelweiss and Androsace helvetica in the crevices.
PIz OT, (Engadine). Campanula barbata. Senecio abrotanifolius, Dianthus superbus, Gentiana acaulis. On higher slopes, Oxytropis montana, Linaria alpina, Daphnestriata; then, Ranunculus parnassifolius, Gentiana verna and G. bavarica, Viola calcarata, Primula graveolens (rare and isolated), P. integrifolia, Dianthus glacialis, Saxifraga oppositifolia. Geum reptans occurs, and Androsace helvetica abounds, about the summit of Piz Padella. Ranunculus ${ }^{\text {silacialis }}$ has a station in moraine shingle down between Ot and Padella, together with the Geum and Androsace glacialis; and Eritrichium nanum (absent from the calcareous Padella) begins on a stony shoulder about half-way up the peak,- at the same 10,000 feet elevation or so at which you begin finding it on the I, anguard-as, probably, on all the other granitic masses of the Bernina range.
Scilerrn Summit (Fassa Dolomites: from Bad Ratzes) Primula lonsifiora (only one plant seen), Potentilla nitida, Edelweiss, Genliana angulosa, Androsace vitaliana, Ranunculus rutaefolius. On the steep face descending to the Bärenloch, Valeriana Saliunca, Androsace helvetica, and A. pubescens (?). Campanula morettiana scems to live higher than I ever got, in the stark face of Rothwand. probably, and the the other pinnacles above the Val di Fassa : and I do not believe, in spite of Haussmann, that Eritrichium can ever well have occurred on the summit of the Schlern, which is of Dolomitic limestone. In any case, it is clearly extinct.
Cima Tombea, (S. Tyrol) You drive from Riva di Garda to Storo: whence the ascent of this high long limestone ridge is made: Cyrlamen europaenm, Helleborus niger, Primula auricula, $P$. spectabilis (P), Lilium bulbiforum, Carex baldensis (?), Genista radiata, Phyteuma comosum (in perfectly unnegotiable crannies); then, on the summits and ridges of Tombea itself, Saxifraga arichlnoidea and S. tombeanensis (both, probably, extirpated by collectors), Sax. caesia, Daphnnc striata, Linum alpinum, Viola Inlerophyvla, Silene Elizabethae. Ranunculus crenatus. Primula rperiabiris, and Daphue rupestris (the sole raison $d^{\prime}$ être of the Cima T'umbea).
Ilomion, (Maritime Alps, from St. Martin Vésubie). Dianthus serotinus (ز), $/ 1$ ypericum coris, Campanula macrorhiza (throughout the region), Alruprone alpinn, Saxifragra hypnoeides, Primula marginata, $P$. tutifalia, P. Auricula, Dianthus moglectus, Viola woysi, Saxifraga Inntoscana, S. aecisoon, and Saxifrayn forulenta (occurs only in this Hed distriat, and only in a few localities high up, on Northern rock fincons). In sumy crovicos Viola nummatariacfolia may be found, whilo, amous ollowr raritios, bolh tritrichium "anum and Androsace gimimatio wewe cortainly on the Balloure, it not on Ho Roreon. This
 lrue si lim: whata.

THE SOUTH EAST ARETE OF THE NESTHORN.

By Geo. T. Lowe.

(Read before the Yovkshive Ramblers' Club, November 27th, 1906.)
The summer of the year 1895 was nearly run and late in August I was still without any definite plans for my annual holiday. Just when I had begun to think seriously about the question a letter from Slingsby, like "a bolt from the blue," settled the matter for me. "Would I like to join him to meet the Hopkinsons at the Belalp for some easy climbing?" Of course I liked, but felt doubtful about the "easy" as applied to climbing by our President.
I joined Slingsby in London on Thursday, the 29th of August, and next morning we travelled straight through to Brieg, in the most delightfully clear weather. With a a little difficulty we hired a porter and mule to carry our luggage to the inn on the Belalp, and arrived there very sleepy at II o'clock on Saturday night.
Next morning found us much fresher and at breakfast I met the late Dr. John Hopkinson and his family and two brothers, Dr. Edward Hopkinson and Mr. Edwin Hopkinson. The awe-inspiring feeling which one experiences in the presence of great amateurs who climb without guides soon passed away and I felt relieved. I had been worked up to a high pitch of excitement on the outward journey by our jovial and ever youthful President who never sets out to the Lake District, Norway or other climbing playground without a nice little climb or two up his sleeve, which only requires doing, the Dent du Requin, or Mouse Ghyll, to wit. The "doing" may be severe and so you'll find; but you'll arrive all the same.
I will not dwell on the few days we spent on various expeditions, including the first traverse of one of the many Rothhorns, the culminating point of the Fusshörner ridge, from the Triest Glacier to the Oberaletsch Glacier. From the Rothhorn the Fusshörner looked wicked enough to dismay the most enthusiastic rock-climber; but on Friday, September the 6th, Messrs. J., E., B.,
and J. G. Hopkinson made the first ascent of the middle point.* The steep western ridge of the Rothhorn was a most exciting climb, terminating in a chimney by which we gained the glacier, more like the Great Chimney on Almescliffe than anything I have seen in the Alps. Slingsby was lucky enough to find a fine crystal, a fitting souvenir of the climb.

On Wednesday, the 4th of September, we were up at 3 o'clock, and at $4-25$, in the chilly darkness the Hopkinsons, Slingsby and I, with a local porter, descended the rocky path round the foot of the Sparrhorn on to the Oberaletsch Glacier. A little before we reached the ice the shrill whistle of a marmot attracted our attention, but in the morning mist it was impossible to catch sight of the little animal. For the same cause we were not able to enjoy the magic effect of the sunrise on the mighty peaks, the most delightful and entrancing effect a lover of the Alps can experience. Soon the air cleared and bright warm weather favoured us as we began to move up the almost uncrevassed glacier, which provided very easy walking over comparatively level ice, broken by small pits and narrow channels for the most part like the limestone terraces of our Craven Highlands. As we advanced towards the Nesthorn at the S.W. corner of the valley the surface became more rugged and broken. and frequent moulins suggested the pot-holes of our Yorkshire fells. On the right the broken ridge of the Fusshörner, then almost unclimbed, stretched like a huge wall guarding the north, $\dagger$ and on the south the jagged ridge extending from the Unterbachhorn to the Nesthorn seemed to challenge our efforts.

From the Sparrenhorn to the Unterbachhorn the ridge has been climbed, and on August 29th, Messrs. J. and B. Hopkinson had been along the Unterbachhorn ridge towards the Nesthorn almost to the gap marked 3533 on the Siegfried map.

Leaving the glacier, we approached the Nesthorn from the first couloir from the Beichfirn. The gully was steep and narrow with séracs commanding the top on both

* Alpine Journal, vol. xvii., p. 588.
${ }^{+}$Alpine Journal, vol. xix ${ }_{1}$, p. $3^{16 .}$
sides, and evidently avalanche-swept, for great heaps of broken snow marked the centre, and, higher up, the tottering humps seemed ready to follow. Far above on the upper snowfields two parties, including ladies, were swinging with sinuous motion towards the summit. One of these was in charge of the guide lmboden.

From the couloir we used the steps of the advanced parties, or relied upon spikes screwed into the soles and heels of our boots: three in each sole and one in each heel. On the névé we found them splendid holdfasts; but for this purpose the snow must be of the right consistency, not soft enough to clog the boots and not too hard to prevent them sinking to the leather. I am decidedly of opinion that light crampons easily and securely fixable are useful aids on many snow mountains.

Several very steep and long snow-slopes brought us to a steep icy precipice which curved at the bottom to a rocky ridge and then down over beyond sight. A glorious view burst upon us over the Gredetschjoch, peak on peak in endless range, and far away to the south-west Mont Blanc in all his majesty:
"High o'er the rest, displays superior state,
In grand pre-eminence supremely great."
Our leading party, consisting of the three Hopkinsons, had turned from the beaten track and struck along the face of this cliff, cutting steps for the feet and tureenshaped holds for the hands. Slingsby, who had not been in his usual form during the ascent, now seemed to revive suddenly at the prospect of some excitement, and for the reminder of the expedition was very much alive. He cheerfully observed as we commenced to crawl along the traverse, " If you slip here we shall all go to eternity!" Sic itur ad astra, indeed! The downlook was uncanny and the "starward-way" appealed more strongly to my fancy. However his inspiring observation braced me up. Beyond the wall of ice we followed the fringing rocks through a shallow trench to the rounded summit, which we reached at 10-30 a.m.

Just before we arrived at the top, Imboden and his lady climber stopped on their way down to have a few words with Slingsby.

On that Olympian height one would have thought there was no room for envy, hatred and malice and all uncharitableness! Wherefore "grieving cruel Juno" should have twitted Æneas, our great President, I cannot tell. Or was she "disguised Iris" intercepted in arcu montis eager to wreak "Saturnian Juno's" vengeance on the tiny "Trojan band"?-Thus she accosted us-". I thought you were climbing without guides! Why use our footsteps instead of cutting your own?" Tantane animis ccelistibis irc? We trembled in that awful presence like guilty children conscious of our misdeeds, and, Slingsby with a mighty effort succeeded in suppressing his risibility. Imboden uttered kind soothing words and referred to his own ascent of Skagastölstind. Slingsby's Norwegian reputation is pretty wide among mountaineers and the implied compliment was very gratifying.

Nothing was said about our plans and no reference was made to our deviation by the ice-wall overlooking the Gredetschjoch. We had had our "dressing down " and fled to laugh at her twittering.

Over the snow mound of the summit we stepped on to a sun-warmed ledge where we spent upwards of an hour and enjoyed
"To sit upon an Alp as on a throne,
And half forgot what world or worldling meant."
Here we lunched and admired the wide-extending view which included the untrodden arête. Just before high noon we removed the spikes, re-roped, and began the new work by descending the steep granite rocks down a shallow couloir in a projecting ridge. The rocks were dry and sound, and afforded good holds. Great care was needed on account of the small loose stones which however were occasionally dislodged as the rope had to be frequently hitched. I managed to make a few small cairns on the ledges while waiting my turn to move. Slingsby in the rear skilfully performed the part of "player in hand."

At the foot of this couloir a gully ran downward to the north and our porter, who was leading, could not manage to cross it. I told him to stop and Slingsby came up to
him while I got over and once more we resumed the old formation. A little beyond the gully Dr. John Hopkinson unroped and came back to us and pointed out the way over loose rocks to the south-west face to the foot of an awful chimney, high and narrow, which required back and knee work, until we reached the main ridge itself above the Gredetsch Thal. The rattling of the stones as we crunched them down the terrible precipices is to be remembered with awe even now, more than ten years afterwards. The other side was evidently climbable by zigzags and Slingsby tells me a difficult pass has been made since, from the north-east to the south-west.

For some distance the arête was pretty good and we made fair progress, but not equal to the Hopkinsons, who were moving in first-rate style. About half-way between the Nesthorn and Unterbachhorn we came to a dead stop in front of a lofty pinnacle haud partem exiguam montis --"No trifling chip of the old block," which appeared impassable on the south side. On the north we saw the tracks of our leaders. The porter moved forward and found the steps cut into hard snow standing up as a huge flake a little apart from the gendarme. The little crevasse formed by the snow shrinking away from the sun-warmed rock afforded a safe anchorage for the right arm. With this purchase he got past and up into an opening beyond the rock spear and protected from the long fearful slope which extended sheer down to the Oberaletsch Glacier. I followed and when I got half way the man was "chuntering" like one possessed. He was simply lying down and had not made fast in any way. I had all the rope Slingsby could spare and remain in a secure position. There was nothing else for it, he had to move up towards me, to enable me in turn to get to the porter, pass him and get a safe hold while Slingsby joined us. Slingsby's vigorous expostulations had failed to arouse him to a sense of insecurity or to induce him to take action. For my part I did not like the incident and I have never climbed in more uncomfortable circumstances. It was the porter's first big expedition and though he went remarkably well the


Photo by Allfird Holmes.
unusual surroundings and conditions at close quarters unnerved him.

We got along better after the last episode. The ridge, in places very narrow, was exceedingly rough and the gendarmes numerous; but we kept moving and no serious obstacle intervened. This portion of the climb reminded me strongly of Crib Goch. The rocks were loose and we had to cling with three limbs as each of us in turn dislodged stone after stone the clashing of which produced distinct sulphurous fumes. The ridge seemed interminable though exceedingly interesting and night was falling fast.
" Night, sable goddess! from her ebon throne,
In rayless majesty, now stretches forth
Her leaden sceptre o'er a slumb'ring world.
Silence, how dead! and darkness, how profound!"
The porter piloted us splendidly but kept up a continual grumbling which only ended when we got off the mountain.

At last we reached the top of the Unterbachhorn and beyond, it appeared practicable to descend to the glacier to the south, but there seemed to be plenty of opportunities of getting crag-fast and a night out was not an inviting prospect as the darkening shadows obscured the face of the mountain. Even the company of our president, an expert in such affairs,* did not make me look forward to this delightful event with any pleasure.

We shouted to the Hopkinsons who had already reached the glacier marked Unterbächen on the map, and they struck some matches and yelled instructions which the rising moon enabled us to follow and by 8 o'clock we were off the rocks on the level glacier and on an easy line for home. We unroped and had a snack of food, and I revelled in glacier water at every pool. Never have I had a more awful thirst; like the Yorkshire farmer who rode up to a village inn famous for its brew, sampled two quarts, decided it "wor gooid stuff," dismounted, and then went inside "to hae sum." At IO o'clock we arrived at the Belalp Hotel, arvo optato, thoroughly tired out.

[^0]The last portion of the arête consisted of very loose volcanic rocks which tore the lining all round my Norfolk jacket, and my knickerbockers were like unto those affected by our ardent pot-holers. A kindly porter at the hotel effected some repairs and for the remainder of my holidays I rejoiced in the possession of two blue patches staring from the neutral brown of my Harris tweed continuations.
The memory of the expedition is almost as vividly fresh in my mind as at the time it was accomplished, and writing this account of the incidents of the climb has renewed the pleasure I experienced on that memorable day-

## Hoc est

Vivere bis, vita posse priore frui.
"The present joys of life I doubly taste,
By looking back with pleasure on the past."

IN NORTHERN SIBERIA.
By S. W. Cuttriss.
(Read before the Yorkshive Ramblevs' Club, January 25th, 1910.)
Siberia! The very name makes one shudder, conjuring up visions of a snow-clad land, the home of ravenous wolves, across whose barren wastes fettered convicts clank their weary way to a lingering death! Have not all of us been taught to think of Siberia only as a land to be shunned ? And I am sorry to say that even in these days of enlightenment, this false impression is still fostered by the fiction of a sensational press. Whatever may have been Russia's errors in the past she is now doing her best to atone for them. The emancipation of the serfs, the establishment of the Douma, the abolition of transportation of criminals to Siberia, the rapid improvement of transport throughout her vast domains and the desire to foster the delevopment of the untold wealth of her natural resources, all these are quietly but surely working together for the good of the people and the elevation of the once despised country to a position of honour and commercial importance among the nations of the world.

From childhood Siberia * has always had a strong fascination for me and I gladly availed myself of an opportunity which occurred about twelve months ago to take part in an expedition to Sukorinsk in what is

* In I582, a fugitive Cossack, Yermak Timofeyevitch, set out from Perm at the instigation of a wealthy family of traders, as leader of an expedition to chastise and subdue the nomadic Tartar tribes on the east side of the Urals who were harassing the settlements upon the Russian border. All they knew of the country was that the friendly tribe of Ostyaks, who might be made to pay tribute in furs to the Tsar, was being pressed northwards by a powerful tribe advancing from the south. Yermak began his journey in a fleet of boats up the Karma river and when the water became too shallow he dammed the stream with the sails to increase its depth, and when this expedient failed the boats were dragged across the intervening land to the head waters of the river Tura, upon the banks of which Tiumen now stands. The Tartar prince oceupied Sibir, a small city on the Irtish, not far from the present city of Tobolsk but as the Tartars had only bows and arrows they could not prevail against the firearms of Yermak, and his capture of the city was the first step in the conquest by the Russians of the vast arca now known as Siberia.
practically an unknown part of the country bordering on the Northern Urals, and 4,550 miles from London. My friends were not slow in pointing out the possible dangers of such a journey and cheeringly prophesied for me a death from frostbite or at the hands of the garrotter.

Two of our party had been in the same district the previous year and now took the parts of leader and interpreter respectively. We had intended to make the journey overland in the winter by sledges, but after arriving at Ekaterinbourg by train unexpected delays occurred, and as we could not then reach our destination before the thaw commenced, when land travelling is practically impossible, we had to wait until the rivers opened, and complete the journey by way of the river Ob and its tributaries.

I had read many books of travel relating to the country and they all spoke in disparaging terms of the Ural Mountains as mere gentle swellings of such slight elevation that it was difficult to tell when they were being traversed. Such is certainly not my impression, and, in fact, the country between Perm and Ekaterinbourg is not unlike our own northern Pennines, but on a far wider scale. Many a black ravine is crossed and rounded hill top passed as the train slowly creeps up the inclines, or rushes at express speed, (36 miles an hour), down the corresponding descents. The further we travelled inland the lower fell the temperature and on our arrival at Ekaterinbourg the thermometer stood at 20 degrees below zero, (Fahr). But what delightful weather! For weeks we had clean crisp snow underfoot, a cloudless sky above and no damp wind to make the teeth chatter.

With the exception of important buildings in the large towns, the houses in Siberia are constructed entirely of wood, generally unpainted, but with brightly coloured ornamental casings round the doors and windows, tin waterspouts terminating in dragon's heads and other fanciful designs. The peasant's house usually consists of one room, of which the most prominent feature is a huge brick oven, which serves for heating the house and
baking the bread, and during the long winter nights furnishes a warm sleeping place upon the top. It can be used, on occasion, to provide the weekly steam bath, by the bather lying down inside and throwing water on the hot bricks. The Siberian woman is fond of house plants and their bright flowers and green leaves adorn every window sill, lending attraction to the outside as well as the inside of the most humble dwelling. Among the first objects to attract attention are the ever present gilt ikons or holy pictures. The strongest trait in the Russian character is his intense religious sentiment, and it is surprising that the men are generally more punctilious in their observance of the prescribed formalities than the women. It is a mark of respect to recognise the sacred ikon on entering a building and this custom is so universal that in all public buildings, stores, banks, etc., the men invariably uncover their heads while transacting business.

The Government of Tobolsk occupies the central and northern portions of the basin of the Ob , and has an area of 440,000 square miles. The central portion, occupying the intervening space between the Irtish and Ob rivers, is a vast morass covered with immense forests, which in winter can be traversed over the frozen soil, but in summer is practically impassable. The southern portion of the Government, however, possesses some of the finest agricultural land in the world. The climate is extreme, varying from 95 degs. F . in summer to 50 degs. F. below zero in winter. In the southern portion the rivers freeze early in November and remain closed until the beginning of May. When the thaw once commences the change is very rapid, the unpaved roads become quagmires and as there exists little or no system of clrainage or scavenging, the result, after five months frost, is not very salubrious, to put it mildly. As the lower reaches of the rivers still remain icebound, the water cannot get away, and the country is flooded for miles around, and the rivers are in many places more like large inland seas, a line of bushes or trees, and here and there a partially submerged hut or village, being the only indication of the course of the river. For scores of miles
the same unvarying landscape is passed, and although the monotony soon becomes tedious, there remains an undefinable fascination, which keeps one perpetually pacing the deck as the steamer slowly makes its way down the river. In autumn the river banks stand twenty to thirty feet above the water and the effect is like sailing along a deep cut canal. Dredges are constantly at work keeping a fair way open for the steamers, and the channel is indicated by red and white buoys.

The only certainty about steamer travelling in Siberia is its uncertainty. You never know when a steamer will arrive or how long it will stop, and, while you may have to wait for several days, you must be prepared to embark at any moment of the day or night. After a fortnight's waiting we left Tobolsk on board the first steamer going down the Irtish to Samarawa and the far north. In addition to the ordinary passengers we had eighty "Politicals" (i.e. exiles) on board. They were mostly of the peasant class and seemed quite happy-singing, dancing, and playing games most of the daytime. The promenade deck was free to all classes, and we were constantly in their company, but as a matter of policy thought it better not to have any conversation with them. Transportation is now confined to political and religious offenders, and ordinary criminals are retained in the Russian prisons, except murderers, who are still sent to the island of Sakhalin for the remainder of their lives. To-day the exiles live under conditions much less rigorous than those of ten years ago, and railways and steamboats have removed most of the terrors of the journey.

Travelling with us was a Russian baron who must have been gifted with a strongly developed imaginative faculty, for in reply to some question by a lady, (all Russians are very inquisitive), he informed her I was a learned professor of great renown in England, and the Yorkshire Ramblers' Club badge which I wore was a medal presented to me personally by the King in recognition of my services!

Below Samarawa we entered the mighty Ob in a gale of wind which sent the waves dashing in spray over the
bows of the steamer. Stopping twelve hours at a small Ostyak village to discharge flour and vodka, we made our first acquaintance with that nomad race. They are allied to the Finns, and are small in stature, with a Mongolian type of face. In the southern portion of their territory they have adopted settled life, but further north they are still nomadic, supporting life by fishing in summer and hunting in winter. They are very skilful in carving wood and bone, in the tanning of leather and the manufacture of artistic utensils from birch bark. Theý still hunt with bows and arrows, but these weapons are gradually being superseded by firearms. Their religion, so far as it exists at all, is mainly Shammanistic, in which sorcery and witchcraft play a leading part, with some survivals of ancestral worship. One of these survivals is bear-worship, which is connected with the idea that the spirits of the deceased are re-incarnated in bears, and they celebrate the slaughter of a bear with worship and feasting. While we were in Sukorinsk a bear was killed, and we saw its head in one of the Ostyak huts, gaily decorated with coloured ribbons and rags, and the festivities were kept up for a couple of days without ceasing.

As we made our way slowly northward down the river, the days gradually lengthened until the nights were lost in the golden glow of a continuous twilight from sunset to sunrise, and for hours I used to pace the deck, watching the glorious play of colour on water, trees and sky. As the brilliant orb sank slowly behind the firs they looked blacker by reason of the contrast, while the golden rays of the sun glinting through their higher branches, struck the tops of the opposing birches, clothed in their mantles of young green leaves. We did not cross the Arctic Circle and so were denied a view of the Midnight Sun, but for six weeks the daylight was practically continuous and I was able to photograph at midnight without much difficulty. This unending daylight has its objections, as one never feels disposed to go to bed, except from sheer fatigue-neither do the mosquitoes-and one is apt to be uncertain at times whether to-day is yesterday or to-morrow.

Saram-paool at last! After weeks and months of uncertain waiting and slow travelling, we had arrived at the base of our operations, the most northerly goldfield in the world, if we except Klondike, which is little, if any, further north. Many people are surprised to learn that Siberia is one of the largest gold producing countries in the world, despite the fact that the methods of extracting the precious metal are mostly of a very primitive character. But it is no exaggeration to assert that gold is found practically everywhere and in every form in Siberia, in fact the very name "Altai Mountains" means " Gold Mountains." The principal source of the gold worked at present is the auriferous gravel taken from the bottom and banks of the rivers, bat in North Eastern Siberia, where the ground is perpetually frozen for severảl hundreds of feet in depth, the work is carried out by mining, and wood fires are employed to thaw the ground.

While approaching the village, we caught sight of the snow covered tops of the Northern Urals, and at once my heart went out to them with an intense longing, but as they were some forty or fifty miles away, through trackless forests, I had little hope of being able to set foot on their untrodden summits. True they are not giant peaks, the highest not being much over 5,000 feet, but they are still strangers to the ice-axe and nailed boots of the mountaineer, and when we consider the difficulty of approach through primeval forests, along swift rivers and in an uninhabited country, they will no doubt afford as many opportunities for persevering effort and mountaineering skill as many a more majestic and forbidding looking mountain range. I had, later, an opportunity of travelling through the foot-hills and reaching the base of the main chain, but Father Time was inexorable and insisted on our return when probably a couple more days would have allowed me to bag a peak for the honour of the Club.

Finding that Sukorinsk, a small village three miles up the river Sukoria and the last inhabited ground towards the mountains, would be a more convenient centre from which to work, we packed our belongings on to two boats


Photo by S. W. Cuttriss.
NATIVES AT SUKARINSK VILLAGE, N. W. Siberia.


Whoto by S. W. Cutriss.
and rowed up to that village, and pitched our tents on the open ground on the river bank. The natives soon gathered round and were greatly astonished at the speed with which the tents were erected. We had brought with us a good supply of eggs and butter, but in the morning when we looked forward to poached eggs for breakfast, we found both eggs and butter had disappeared and one of the numerous half-starved dogs was suspiciously licking his lips. The lesson was not lost and none of the canine inhabitants again indulged in a free meal at our expense. After a few days we rented some of the native houses and I was installed in a comfortable log cabin containing the usual large brick oven at one side. I carefully placed the bedstead which I had made well clear of the walls and surrounded the feet with a good sprinkling of Keating's, but both here and throughout the journey I experienced remarkably little annoyance from Cimex Lectularius. A more prevalent form of insect life were the Tarakans, a species of small brown cockroach, very rapid in movement, which tickle but do not bite, at least they did not trouble me in that way. It is a common occurrence to see them running about the walls and even over the table while at meals. The Siberians, in fact, rather like them and I have heard it stated that when a peasant moves into a new house he takes a handful of the interesting little creatures with him for luck. We English are evidently too fastidious!

The inhabitants of the village consist of two distinct races, Ostyaks, already described, and Ziryains. The latter are said to be allied to the Finns, but are more like the Russian peasant in many ways, though their language is quite distinct. They are decidedly shrewd, have a keen regard for the kopeks, and are exceedingly expert in the use of the axe; but this is characteristic of Russians as well as natives. The Ziryain women are active, strong and willing workpeople, and for real hard work under trying circumstances can give points to an ordinary English labourer. They will work all day in heavy rain, sleep in their wet clothes at night, protected only by a bit of canvas, and turn up smiling in the
morning. No wonder they look old and wizened at an early age.

A camp was established some seven miles up the river, where good prospects of gold had been found the previous year, and two sluice boxes were erected to make a practical test of the gold bearing value of the gravel. Our workpeople were chiefly Ziryain women and girls, but as there was also a Samoyed girl with them, there were five distinct languages spoken-English, Russian, Ziryain, Ostyak and Samoyed. Between the lot I had a busy time endeavouring to make myself understood.

It was a three hours hard row to the camp by water, but a short cut through the forest could be made on foot in a little over an hour, which involved crossing what we imagined to be a tributary of the river and it had either to be forded on horseback or crossed in one of the Ostyak canoes. It is about as difficult for the tyro to maintain equilibrium in one of these canoes as it is to walk along a greasy pole, but the natives are quite expert at it and I have seen them racing at full speed while standing up; in fact, they generally assume that attitude when paddling. My companions had all gone away on other business and I was left in charge of everything during their absence. At first I tried the journey to the camp on horseback, but found that owing to the dense undergrowth and tangle of fallen timber I could do it more comfortably on foot. It was with some trepidation that I made my first attempt to negotiate the river in the canoe, but beyond a partial upset as I was getting out, I had no mishap. On one occasion, when the river was swift and flooded after heavy rain, I did not care to trust my own lack of expertness, so engaged an Ostyak to go with me and take me across. After a wet and roundabout journey through the flooded forest, where we had several times to make precarious bridges with fallen timber over water-logged gullies, we reached the canoe, but to my surprise, instead of making for the opposite bank of the river, the native paddled off up stream. At first I thought he was merely looking for a convenient landing place, but as he took no notice of my persistent indications of a
desire to land and only said "Lardna! Lardna!" meaning "All right!" I accepted the situation and awaited developments. At times it was with the greatest difficulty that progress could be made against the current and more than once we were carried back some distance. The only reason I could think of for this apparently strange conduct was that we were ascending a branch of the Sukoria river and not a tributary, and that the camp was really on an island, and this proved correct, as we ultimately reached the main river and floated down to the camp. Owing to persistent floods the camp had eventually to be abandoned, and the ground was under a foot and a half of water when we left.

Another man and myself were told off later on to make a trip up the Mania river on a rapid surveying and exploring expedition of about sixteen days. This was the opportunity I had been ardently wishing for, as it would enable me to make a closer acquaintance with the mountains I so much desired to set foot on. We took with us three Ziryain natives, one boat and a small canoe, and as we were going into an entirely uninhabited district, where no food could be obtained, we had to take sufficient provisions to last throughout the journey. The rivers wore still in flood when we started and there was a constant stream of drift wood and spume floating down. The natives jocularly called the large trees parahods i.c. steamers. On turning into the Mania itself we soon lound it impossible to make any progress by rowing ugainst the swift current and had to pull ourselves along by the overhanging branches of the trees and laboriously thread our way through the undergrowth of the submerged land. Occasionally, where the banks allowed, the men would get out and tow the boats by a line uttached to the top of the mast provided for that purpose, und at one place we were able to save two miles of hard work by forcing the boats through the flooded forest for about 200 yards and thereby cut off a long loop of the river. On the fifth day we neared the foot-hills and although the river decreased in volume it became more impetuous and began to form rapids. It was now
altogether a matter of towing, and it repeatedly demanded the utmost energy of two men on the line, with two others poling and one steering, to make any progress at all. "Now!" "Again!" "There she moves a foot!" "Again!" Snap goes the line, the boat swings round with the current, and we fly to the oars and pull for dear life to bring her to the bank again, at the same time shipping a lot of water and wetting the food and bedding! Twice did this occur before a suitable camping ground was reached. After dinner I took a short walk by the river, and the low hills reminded me more of dear old Yorkshire than anything I had yet seen. For the seventh day my diary entry is brief but to the point; "Led towing all day, boots given out, foot-sore, tired." On the tenth day the water became too shallow for the boat, so we left it and continued on foot, only taking with us the surveying apparatus, a sleeping bag and sufficient food to last until we reached the boat again. Late at night on the second day of walking we arrived at the base of the main range of the Northern Urals, wet through and thoroughly tired out. Although anxious to continue, we could not afford another day and started after midnight on the homeward journey, floundering through bogs and tripping up over invisible stones in the darkness, until after several hours tramping we reached our previous camping ground. A cheerful fire was soon burning, and getting into the sleeping sack in my wet clothes, with a ruicksack (not unknown to certain members of the Club) for a pillow, and mosquito net over all, I enjoyed several hours refreshing sleep. Oh! those mosquitoes; they never gave us any peace, day or night. Upon reaching the boats again we found our remaining stock of provisions unpleasantly scanty, and to make matters worse, the loaves of bread on which we principally relied had become a mass of blue mould, and we were only able to save a few fragments, which we made passably eatable by toasting. Fortunately the Ziryains found plenty of mushrooms, and for several days we lived on those delectable fungi and dried bread-rings, rice and cocoa. We noticed several bear tracks and one of our men saw a bear

cross the river a little lower down, and we followed its track for some distance, armed with several weapons of offence, and possibly of defence, but were not successful in obtaining an interview. The return journey down the rapids was our most exciting experience, and considering the frequent bumps we got on the submerged boulders and the heaps of water we shipped, we were fortunate in getting through without mishap. The way Pankalay, one of our Ziryains, shot the canoe down the seething waters was wonderful. On the fifteenth day we had to abandon the survey and had a glorious run down to Sukorinsk, doing in ten hours the journey which had taken us eight days hard work coming up.

Home! That was our next objective, in fact it was that which made our return from the Mania by a given date necessary. The only steamer likely to visit Sarampaool again that season was a small Government boat, the "Ostyak," which was supposed to call once a month with the mail; I say "supposed" advisedly, as the result was not always in accordance with anticipation. The steamer was expected within a couple of days of our return, so everything was packed up in readiness and I went down to Saram-paool to be able to send word to the others on the first intimation of the steamer's approach. After a considerable wait some natives arrived in a canoe bringing the mail, together with word that the steamer was not coming at all, having been ordered to Obdorsk. Here was a pretty plight! We were not prepared to stop the winter, and it was 330 miles to Berezoff on the Ob, the nearest place where we should be likely to catch a steamer returning from the fishing grounds at the mouth of the river. Our only course was to row down to that village in a small boat and wait. Accordingly we secured the most suitable boat we could find, covered over the middle with a roof made out of part of one of the tents and supported on birch branches, and there stowed our baggage and food, just leaving sufficient room for two men: at a time to crawl under and sleep. A couple of natives were engaged to assist in rowing and act as pilots, and by taking spells of four hours each at the oars and
eight hours steering, we kept going both day and night, and did the journey in four days.
On the way down we made a short call at the fishing station of a Russian, Alexander Ivanovitch Trontheim by name, who had been of great service to several Arctic expeditions, notably Nansen's, and had procured for that explorer all the sledge dogs used by him. The fishing season had been a failure owing to the abnormal floods, and he was anxious to dispense with one of his men, a "Political," for whom he had no further use; and he pressed us so persistently that at last we agreed to take the man, although we did not really need extra help; but we found him useful and trustworthy. When we came within a few miles of Berezoff, late at night, we saw the lights of a steamer coming towards us, apparently bound for Saram-paool. The river at that point is very difficult, being a network of channels between wooded islands, and as we were anxious to hail the steamer, a long game of hide and seek in the darkness followed. In the end, just as we were giving up the chase, we found the vessel in an inlet, with her lights out and busy loading wood for fuel. To our surprise she turned out to be the "Ostyak" bound for Samarawa, half way to Tobolsk. This suited us exactly and although there was no passenger accommodation, the captain agreed to take us on board, so we bundled all our baggage on the fore deck, paid off our men and congratulated ourselves on our good luck.
It did not take us half an hour after the steamer was under weigh to discover we were in for a lively time. The first officer was in charge, and he was still under the influence of-well, say frequent "leave takings" at Berezoff, with the natural result that he soon had the vessel aground in one of the shallow channels. This difficulty overcome, he forthwith vented his spleen on our 'Political,' whom he probably regarded as the Jonah of the party, and an appeal to the captain, who was below, suffering from neuralgia, resulted in orders for the man to be put ashore at the first stopping place. But this the man refused to do, saying he was our servant and was going on with us; and as we at once appointed him cook, nothing more was heard
of the matter. His first dish was distinctly original and I christened it "Ob Pot"; the recipe was:-Take such scraps of meat as can be collected and place in a large pan, add a sprinkling of preserved vegetables together with rice, macaroni, dried milk and eggs, fill up with water and stew over a slow fire for two hours. Serve hot with breadrings.
There was no accommodation below and we had to eat and sleep among our baggage on deck, and as the weather was very boisterous with thunderstorms almost every day, our journey up the river was not particularly cheerful. The boat was under-engined and top-heavy, and to keep her in trim, an anchor and large coil of rope had to be constantly moved from one side of the deck to the other; when the wind was particularly strong everyone had in like manner to help to trim the boat by the addition of their own weight. It was not surprising that under such circumstances we were two days behind time in arriving at Samarawa, where we hoped to pick up another stcamer bound for Tobolsk, and had the mortification of hearing that a steamer had left only a few hours before. "Nichevo!" "It is nothing, another will arrive tomorrow, or the day after, at the latest," we were assured, "What need had we to be troubled about a trifling delay like that?" "Zavtra," i.e. tomorrow, is a very convenient word in Russia, and was thoroughly impressed on our memory before we got away again. Day succeeded day without any sign of the expected vessel, until on the night of the eleventh day we were awakened by the whistle of the s.s.s. "Evan Colchin." Then followed two hours of scurry, as all our baggage had to be carried a third of a mile to the steamer, mostly over mud, and at last we were off. The: vessel was crowded and we had to content ourselves with third class accommodation, which may be considered Mulivalent to stecrage, and bad at that. Men, womer and children were all huddled indiscriminately together on (lwille ticrs of wooden benches between decks, the utter durkness being barely dispelled by the light of a few lifkering candles. The sailors rigged up some forms for IIII in in corner whare we could sleep and eat, so we
managed very well, especially as the captain's cook took us under her charge and provided most unlooked for sumptous meals. In three days we were in Tobolsk and felt as if we had reached home, although that longed for haven was still over 3,000 miles distant.


## THE LOG OF THE BERTOL.

## By F. Botterill.

" But if Fate is havd on him, if he must earn his daily bread cooped up between the high walls of some great city, he will try in his distress to stavt a little farm for himself, and begin with a couple of pigeons and then buy a hutch for a few vabbits." Gustav Frenssen in "Jörn Uhl.'
"The Bertol" is the name of our caravan. As private vans go it is small; for a gipsy van it is large. In it is centred, for us, all that goes to make what we call "home." It has become the focus of our lives. If we are overtaken by storm, feel wet and cold, or lose our way, our thoughts spontaneously turn to the Bertol and its pleasant interior as a panacea for our discomfort. We acquired it as a toy, an experiment, a step beyond a tent; but impalpably it has grown upon us, from a toy it has become a part of us, inseparable from our lives, and our thoughts are reluctant to dwell upon any period when we shall re-enter the "high-wall" state. Just when the change has taken place we cannot say-it has ingrafted itself. Sometimes we wonder if we are not simply obeying some primæval instinct. We English spring from nomadic races; Yorkshire people, more than their neighbours, have retained racial memories, customs and speech; we Ramblers most of all. Do we not adapt ourselves without complaint to the actual state of things? Failing inns we have dwelt in tents; failing tents we have dwelt in caves. Is it to be wondered at, when we find a method of living which brings us nearer to all that we call happiness, that we should adapt ourselves unquestioningly to it? The discomforts of the "Bertol" life may be counted on the fingers of one hand. It would require many hands to count the discomforts of the "high-wall" home, with its limited sky, its lack of sun, air, and light, its dust, its cleanings-that labour of Sisyphus-its frozen pipes, its gas-polluted air, its coughs and colds.

Not least of the "Bertol" pleasures is the scope it gives for our inventive faculty. With limited weight and space, the great question is "What can we do without?" Day by day we think of new methods of space-economy and stow-away room. For us there is no joiner, painter, tinker or tailor; we must for ourselves, and the joy thereof is unknown to the "high-waller."
Much might be said of the preliminaries, but let us break in at Drigg Station, and putting back the Bertol on to its wheels, see it slowly dragged by two powerful horses up to Wasdale Head, and fixed in its quarters, near the Schoolhouse and facing the Lake; there to commence our summer life in real earnest on the morrow.
March 22-27:-These days have been spent alternating between climbing and work at home. We have painted the outside, and re-upholstered our camp chairs. We have made a footstool and sewed an awning for the front. We have climbed Central Gully in Great End, (in ice), and vanquished the Needle Ridge. We have spent two days in Moss Ghyll, being beaten on the first day by the traverse from Tennis Court Ledge. We have failed to do Piers Ghyll in spite of 25 feet of snow, a bergschrund at the Great Pitch being too much for us. We have seen tons of ice and rock fall spontaneously from Gable Crag. The working days have been as enjoyable as the climbing, and stand out in our memories. We have had a pride in our work and the shade from the awning seems a better shade, or, shall we say, a shade better, because it is of our own handicraft. It begins to dawn upon us that one great joy in life is the joy of making things for oneself. We conceive the wish to cut down trees and build ourselves a hut in the wood; a wish so strong that we are learning the properties of timber, the correct time to fell and how to get rid of the sap.
March 28:-We are awakened somewhat abruptly this morning to the fact that another Rambler has arrived. The van shakes terribly and there is a violent kicking at the panels. The noise comes from outside and may best be explained by the following entry in the log:-


Photo by Dorglas Haslett.
WASDALE HEAD.


Photo by the late \%. /. Remuson.

It is here at last-The Caravan Traverse! After a week spent in reposeful peace it came upon us this morning like a bolt from the blue(s). "The great difficulty is avoiding the owner of the van. The start, which is not easy, consists in getting out unobserved. An alternative route is to take the can and say you are going for water. If this "Can Route" is taken the can must first be filled. This will no doubt deter most parties from attempting it. During the first heavy rain after the traverse was accomplished, the roof of the van, after ten minutes, leaked in two places. The owner says if the traverse is attempted again the party may as well take the whole "darned" roof home to practise on. Only a rope's end was used. The climb is likely to become more difficult as the owner is about to place spikes on the handholds. If, as is threatened, the owner uses his revolver, it will become an exceptionally severe course."
March 29-April 6:-We are experiencing many days and nights of rain. One eventful day we have guests. We are turned out during cleaning operations and lunch under the van between the wheels, pretending it is the Tennis Court Ledge. H. discovers he hasn't had. a slave for ten days. Miss Plues, the Vicar's daughter, and Mr. and Mrs. Whiting of the Hotel, take tea with us. The entry in the log is:-"Chess, music, rain." Our little Irish harp, (4 octaves), with its simple music, seems (1) please our guests. They do not realize that the surroundings have much to do with the effect. Another day is spent in the Wood, ascending by one tree and dcscending by another-an old-fashioned feat. Another in trying a new buttress on the Napes. The weather is clearing and we are having one of life's greatest joysmeals in the open. We sit out in our pyjamas and eat our breakfast in the grateful warmth of the sun. How beautiful Gable looks-and the Lake shimmering in the hent-Yewbarrow with a hundred hues-Burnmoor a mysterious beyond, in the dazzling sun-the Pillar deep purple-the sky brilliant green! There is too much to look at-our brain whirls with an excess of delight and
shutting our eyes we settle down in our chairs slumberously. Oh, the charm of it all! Our cup of happiness is full to the brim! To speak would break the spell.

April 7:-We make the first ascent of the Abbey Ridge.

April 8-13:-Our Easter guests and the fine days have come and gone. The lamp hung outside to guide them, the dancing lights of the vehicles far down the lake, the midnight arrival with its noise and bustle, and the late supper are things of the past. How different from the last few weeks are these few days of holiday! The rocks are crowded and we meet many old friends on the climbs. How pleasant it is to meet them! We seem to have been away years. How much longer our lives are here and yet every moment brings its own enchantment. Is it true that joy is fleeting? Say rather, it is everlasting. Ask the clerk with a fortnight's holiday! For him three hundred and fifty one days have merged into one long working day; the fourteen will live in his memory for ever.

April 14-19:-G. has arrived with his tent and taken up his abode in the Wood. We roam the mountains and meet never a soul. Clear views are followed by torrential rains; again, on the I9th, the weather is perfect. H., who goes to-morrow, leads us in splendid style up the N.W. Climb on Pillar Rock; it is a pleasure to climb behind him. What recollections crowd upon us as we ascend; each little corner and each belay is like an old friend. There, as firm as ever, is the huge cracked belay reported to have been sent down.* How the place is scratched at this point! Most parties seem to have traversed too far, whereas the upward route is but one stride (left) from the ledge with the loose stones on it. It has been a wonderful day.

April 25-26:-But simple recollections remain to us of these days. We have been to tea in the Wood and the woodsman has told us strange tales of living on sevenpence per day. We develop photographs until far
into the night and retire thankfully into our comfortable bunk. The wind rocks us gently and the Bertol becomes a cradle, the pitter-patter of the rain a lullaby, and we sleep long, deep, dreamless sleeps.

April 26 :-Our first loaf is baked to-day. Palmam qui meruit ferat.
April 27-May 4 :-Many climbers come and pass short holidays, and many a grand old cliff echoes our voices and rings with the clink of our nailed boots. We have but one grief. No sooner do we make friends than they are called away again to civilization.

The Hounds are with us, lambs arrive in great numbers, the trees are in bloom and life is active everywhere.

We are back in winter. The snow, which has been slowly disappearing, now falls heavily; the rocks are cold and icy, and our ice-axes are requisitioned. Eight busy days are spent with two doughty Alpine men. One of them, in the district for the first time, is insatiable, doing three and four climbs in the day. We tell G. we are exhausted and suggest we should accompany him on alternate days and so tire him out. On the day before he leaves we do six climbs, but with no such result, and we learn with joy that he afterwards fell into the sea, a victim to nailed boots and Seascale's mossy pier.

May 5-7 :-The winds are now supreme and our tent is blown down ; one night we turn out and rope the van to the nearest trees. The gusts from the north are terrible; one of them lifts up the back of the Bertol; another blows a hen clean away; another takes the photographic prints, as they are drying, out of the van and round and up by the Schoolhouse; another snatches up the morning paper, opens a port, whips it through and closes down the port tight again. Such are the pranks it plays. The gusts are followed by dead calms. It is a fine sight to watch the wind sweep over the grass, shake the trees, and lash the Lake to a white foam.

We spy two men coming up the road on a tandem bicycle, and, in reply to a familiar call, rush out to find J. H. B. approaching-the other man is his rücksack.

He presents his credentials in the form of steak, sausage and cheese, and is formally engaged before the mast for a cruise in the Bertol.

May 8-14:-Happy days with meals in the open! Days on the Pillar, building cairns and marking paths, and tea on the summit. Days on Gable, where the rough rock reflects the heat with fierce intensity, and J. H. B. murmurs strangely of "ambrosial nectar," "bursting bubbles," and "anger of confinèd gods." It appears he carries some bottled beer in his pocket and one of the corks has blown out. Days on Scafell and tea in Hollow Stones, where W. B. finds a lady's lacetrimmed white skirt, and cuts strange antics therein.

May 15-25:-~The dale is fox-ridden and farmers encircle their farms at night with lighted lamps. From one farm alone thirty-one lambs are lost. The glorious weather continues, and May wins the annual prize for the finest month. The Northern Lights appear and one night seven streamers are seen over the Pillar. We wander in the woods and make friends with lizards, snakes and other living things. We see an owl on the wing in broad daylight. A sheep dies, (primopera), and while still warm its eyes are picked by birds.

One cloudy day on Lingmell we see the Brocken Spectre, an awe-inspiring sight. The sun is setting over Stirrup Crag and the mist fioats in masses over the face of Scafell; from the crags of Lingmell, as we gaze into the depths of Piers Ghyll, D. excitedly calls our atttention to a perfect oval rainbow, and in the midst of it are two shadows. We wave our arms and the spectre does the same, and as D. makes for his camera with outstretched arms, the spectre looks exactly like a cross. We are not surprised that, in tragic moments peasants have judged it a supernatural sign. The spectre fades and disappears, the glories of the sunset increase, Scotland and the Isle of Man catch its colouring and with reluctance we descend in the gathering darkness.

The days pass swiftly on, each leaving its stamp upon us and subtly changing our outlook upon life. When our thoughts turn to the city of bricks and mortar we have


Fhot, by 1/. Thuratom.
left, it seems like a maze, and we on one of its walls, wondering why the people fail to find a way out.

May 26-31:-A box of trout by post proves we have thoughtful friends and provides a feast. We contribute to the welfare of the Dale by mending the main road gate and are contented to see it swing a while longer. The woodsman proudly announces that he is living on twopence a day and invites us all to tea. We find him with a huge beefsteak pie and a leg of mutton, the gifts of compassionate friends.
June:-A month of visitors, of suppers, of tea parties in the tent, of long walks and of exploration on the rocks. One day on the North Climb of Pillar Rock we ascend directly to the summit of the High Man by the North-East Ridge. From the Nose this ridge is seen towering above one, and, missing Savage Gully and the Low Man altogether, the ascent is by easy grass ledges to a diagonal crack on the left hand of the ridge. We make a new exit from Moss Ghyll, thirty feet to the right of Collier's Exit. It is difficult, but in winter when the Chimney is full of ice, it may be a feasible way. After an ascent of Walker's Gully, we keep to the rocks and climb to the summit of the Shamrock by its N.W. face. One perfect day we make a second attempt on the Engineer's Chimney on Gable Crag, and are again rcpulsed, unable, beyond a certain point, to make the slightest advance, and we doubt if it be the place to give a shoulder. A girdle traverse of the Needle from shoulder to shoulder, without touching the top, is a curious variation of the ordinary ascent.
July 1-31:- The weeks become months and the summer slips away. People ask us if we do not tire of the mountains and if holidays do not pall. We smile as we think of our active existence and tell them that as yet we have only touched the fringe of our life in the mountains, for we are in a busy world and live busy lives. Nature's invitations crowd upon us, but our lives are too short to necept them all and many are refused. To her call, however, to meet her in the woods we always yield, and, in a littlo glade we make a fire of twigs and take tea with
her. We have books with us, but they lie unopened, for the pink summit of Gable is above us, set in a frame-work of trees, and the scent of the firs, the songs of birds, the buzz of insects all around. A something enters our souls; we are reading in the Book of Life.
August:-Each day we probe a little further into the primitive, and each day impresses us more with our ignorance of our surroundings. If we were alone in the World how helpless we should be! Why, the very things we use every day-guns, ammunition, matches, lampwicks, paper, needles-would not exist for us. We grieve that, although we have learnt to spin and weave in a fashion, we have never seen flax growing; but we mean to learn these things, although the knowledge may be of little value in a world where the results of the most complex process or manufacture may be purchased for a copper.

The Postman drives to our door and leaves a strange and bulky assortment of luggage, including a grocer's barrow, and a nice box of provisions, evidently the gifts of some kind friend. Although we have no use for the barrow, the provisions will be useful, and we open the box and are sampling the dried apricots when two campers arrive to take them away! Fate is hard upon us this day but our rancour is appeased, when, at two o'clock one wild morning, the dispirited campers, in bedrenched pyjamas, abandon their wrecked tent and seek shelter from the storm.

September:-We have given up climbing, for the time being, and have taken to gathering nuts and berries.

As we roam about we notice many of those brilliant blue beetles rolling sheep-dung into little holes in the earth. They back into the holes, walking on their hind legs and rolling the balls in after them. When the hole is dug out it discloses a score of these balls tightly packed, probably for warmth during the winter. These beetles have hard shell-like cases and many have parasites feeding at the conjunction of the legs with the body. Sometimes the joints are eaten through and the legs drop off.

We have noticed also a species of large spider, with
tiger-like stripes on its back, quite the largest we have scen, except a black species near Kirkdale Cave in Yorkshire. One of these tiger spiders spins his web in the panel of the Bertol. We feed him regularly with flies, smaller spiders and centipedes, which he enmeshes by tearing out a portion of his web and rolling the prey into a ball. We accidently destroy the major portion of his web and during the night he spins another, a few panels away. One day he disappears altogether and we learn later that he has been ruthlessly destroyed by the Steward. These spiders spin quite the strongest threads we know of. In one case a thread three yards long, suspended horizontally between trees, supported a twig weighing half an ounce, in the middle. This parlicular spinner had caught and vanquished a bee, and the wrecked web testified to the battle that had taken place.

In the Wood we find a species of monogamist spider who lives in a web suspended nearly vertically amongst bushes. This little chap is most ferocious, rarely refuses combat and lights to the death. He finds for himself a wife who has already prepared the home, and whilst she sits in the contre waiting for prey, he occupies one corner and looks (91. She does all the work, it seems, and her husband murely comes to her assistance, and she, as is only fair, has the disposal of the food also. But should a male of the: same species come courting his lady, then the husband is most warlike and will sell his life like an Englishman, ill defence of his home. They seem unable to see, and nover quite know the whereabouts of their opponent until micturlly at grips with him. The spider, unlike most insects, scems to succumb to one stab in the body with a Hno: needle, and the combatants try to effect this. By Imallerring the male from its own web to that of another, wo have line gladiatorial sports, the victor delivering the burly of his victim, (often the late husband), to the lady, Hurl procecoling to make love to her while she feeds upon il.

Amolhor species usually spins a very fine horizontal web bmbuments that of our matrimonial friends. Being rather norvom, ho lives on the under side, and seizes his prey
through the web and so does not come into actual contact with his victim. Anything which may have escaped from the webs above falls a victim to the horizontal spinner below.

December:-And now as we write, the winter is upon us and all these things are past and gone. We have had a peep into a wonderful world and it seems as if the edge of a curtain had been lifted and dropped again. It is said to have been a wet year; to us it has been unprecedented sunshine. We begin to forget our little sadnesses and only the joys remain. No gay songs of birds greet us in the morning now, the days are dull and lifeless and the wind howls mournfully around, but the Bertol has no spare-room for sadness and we look forward hopefully to the future.

## TIIE CAVES OF YAMAGUCHI.

## By Mr. Edw. Gauntlett, F.R.G.S.

|We huve bocn favoured by Dr. E. A. Bakev with the following mowaets from a letter received by him from $M r$. Gauntlett of Yomanguli, Japan. Ed. Y.R.C.J.]

I enclose a set of picture postcards drawn by a famous attint and Intely published by an innkeeper at a small nountry place ncar here, showing views of a large cavern. Thla cavern, called the Takiana or Waterfall Cave, has been well known from time immemorial, but the village peoplo took no special notice of it, until I went there a yeur and a half ago, and urged them to advertise it, and alan to bast away a small rock near the entrance, Whioh made it exccedingly difficult, and even dangerous, to ontori. I offered to subscribe for a few improvements, ineluding the blasting, and the placing of a boat inside, as The water is over three feet deep in the driest season. Thif offor woke the people up, and the innkeeper mobertbed nbout $£ 20$ for the purpose, so that now the Bave la easily accossible to anyone.

Unfortunntoly many of the fine stalagmites in one part of the save have been taken away by former visitors, but If other places the cave is in good condition, and The atalactitos are very fine, one fine pillar is from 40 to 50 foct in circumference and 60 to 70 feet high, abolutely straight. The water tunnel of this cave, If If ron in in atraight line, would be about six miles long. At in place six miles to the N.E. there are five small eaven, two of which are just large enough for one to enter on hande and knees, and the others very small; and into theae a $\begin{gathered}\text { 日troum runs, which is never quite dry. After a }\end{gathered}$ heavy min these live entrances are absolutely hidden, ai I Baw for myself the other day after a storm. Some mon in the village threw a quantity of young rice stalks into the wator just where it entered the holes, and they wore linally found in the Takiana Cave six miles off, whish proven the connection.

I have made a rough plan, but I have not had time to make a correct survey, and have asked the Provincial Government to do so, after which I propose writing a book on the subject. The cave has many huge chambers.

Referring to the Sketch Plan, the water just inside the entrance, at the top of the waterfall, is about 50 feet deep for a distance of 40
 feet. Then, on the left, is a large chamber B rising at an angle of about $30^{\circ}$ and culminating in a very small entrance on the face of the cliff. From this place forward we have to go by the boat till we come to the place marked $F$, which means "font." The floor here is a mass of these stalagmitic basins, rising very slightly at first and then very steeply, until they form the most perfect imitations of casks full of water; and they are all in fact full. Then proceeding, and crossing over to $C$, we climb up a pretty steep place and crawl into a room behind a pillar, called by the villagers "The Flower Garden," but here the place has been spoilt by visitors taking away the stalagmites. A short distance beyond this the chamber is exceedingly large, and I never saw the top, even with a number of torches, until I took magnesium. The point D is called "The Temple Altar" and is a raised platform from which the view is magnificent, the torrent roaring below you and the roof high above your head. At E is "The Pillar of Gold," the huge pillar already referred to,


after which we climb up a rock, G, the perfect imitation of a petrified waterfall, called "The rock on which even a monkey would slip," and then through a narrow passage to the edge of "Hell's Mouth," H,—a fearful pit. This I have never had the courage to enter, and only one man has ever been known to do so, and he was sent by a newspaper editor, who had seen my letters in the papers. The rope he tied around him was 160 feet long, and was even then about 40 feet too short to reach the first ledge. However, he succeeded in getting down, and went on alone for three hours, seeing many interesting places.

The main stream up to K is as far as I or anyone have gone, because one must either swim or have a boat, as there is absolutely no foothold.

Referring to the Sketch Map of the district enclosed*, I must first say that Yamaguchi is situated at the end of the Main Island to the south-west, and is the capital of the province of the same name. The Takiana Cave, described above, is undoubtedly the finest in Japan, and is marked No. I. No. 2 is a small cave with two entrances side by side externally, but with one above the other inside. This is a most interesting cave, and promises some reward for exploration, for I believe it is connected with a deep pot-hole above. My next trip will be to descend this pot-hole. No. 3, it would seem, was discovered by myself, for no one seemed to know about it. The entrance is fairly large but rather risky, for you have to jump about 8 feet on to a narrow ledge, with a drop of about 6 feet on the right and 60 on the left, and this deep drop is exactly under the only point where one can enter. Inside it is full of coral-like incrustations of great beauty and continually ascends and descends. The mouth of the cave is high on the steep side of the hills, and hidden by bamboo.

No. 4 is a cave with a very small entrance, but inside has several chambers one above the other. I have not as yet examined it well.

[^1]No. 5 is the entrance to a very famous cave, but the real entrance is at No. 6. The streams run into three holes, the two westerly of which are very large; and after a spell of fine weather it is possible to go right through the mountain from one side to the other. As the crow flies the distance is about a mile and a half, but owing to its windings the passage is about two miles long. The exit No. 6 is very large, and on one side there is a branch cave, a small one, in which some soldiers hid from an enemy in ancient times. The ceiling of this cave is a mass of stalactites, and very often there is not a drop of water in the first half mile from No. 6. The other day, however, when I went there after a storm, it was quite a large river, which, after proceeding about two miles, drops into a pit with a great noise. It is my intention to enter this pit in the dry season, for I have seen it several times quite dry. A quarter of a mile beyond this, deep down in the valley, I found a pit from which a fierce current of air was blowing, which was evidently displaced by the water. No. 7, to the west, I have only just discovered, but have been totally unable to enter, for want of a boat or raft, the water being about six feet deep. The village people say that there is no end to it. The entrance is low and wide, but inside it is said to lead to large chambers.

There is a very large and deep valley, or swallow hole, at the bottom of which a stream appears, and after running about twenty or thirty yards, again disappears into the mountain. This I have marked as a continuation of the stream from No. 9 , but this is only a conjecture.

## A WET DAY IN HELLN POT.

## By W. E. Palmer.

On the evening of September 18 th, Igo8, we * assembled at the old Manor House at Stainforth in Upper Ribblesdale, with the intention of once more exploring the picturesque depths of Helln (or Alum) Pot. $\dagger$

Day-break brought a grey sky but a steady barometer, and we set off at an early hour on the seven miles tramp to the Pot.
We had arranged with our host Mr. Lund to carry our tackle in a cart, and, as usual, the most likely looking walkers of the party took advantage of it and rode.

Arrived at Long Churn, the usual entrance to Helln Pot, we were not long in setting off, with candle in hand, and rücksacks, ropes, and other tackle, down the well known stream passage leading to the Main Hole.

Botterill, however, had got a bad cold and wisely funked the wetting so dear to pot-holers; and he and A. Palmer, along with Mr. Lund, mounted guard at the top to prevent chance visitors indulging in their usual game of throwing down stones on to the skulls of those below.

We got down all right, and at I-30 p.m. reluctantly left the Bottom Chamber with its Hundred-foot Waterfall, and jet black pool, and started back. It is on record that the outlet of this pool once got choked and refused to take all the entering waters, and in half a day the great chasm filled to the brim. It is difficult to imagine Helln Pot like this, but those who have had the rare chance of secing Hull Pot in flood-time, nearly overflowing with scething brown water, will have some idea of the magnificent sight.
On returning to the Sixty-foot Pitch, we found rain lulling heavily and at once made all the haste we could

- Musmr's. Addyman, Barstow, M. Botterill, Boyd, J. Buckley, J. H. Hurkloy, Hossli, Mattley, A. Palliner, W. E. Palmer, Shaw, and

| V. R'. C'. Jomernal, Vol, 1, pp. 233 at sag.; Vol. 2, pp. 35 et seq.;

upward to the foot of the Forty-foot Pitch leading into Long Churn. To our surprise we found it a waterfall of no mean volume, visibly increasing every minute. Delay was dangerous, so I quickly scaled the ladder through the fall and was followed by Addyman; and after a few moments' struggling for the bottom rung of the ladder, which was about seven feet up the pitch, Barstow joined us in the pool at the top.

The roar of the water was deafening, and made it almost impossible for the men below to hear our signals, or we theirs, and, pulling on the life line too soon, we gave J. Buckley, the youngest member of our party, some trouble, as he was roping up. By this time the rush of the water was terrible, and we literally had to haul him up through the waterfall, but he stood the ordeal well. Again we lowered the rope, and soon there came a tug, and faintly, the words "Pull, Pull!" and for two minutes or more we pulled our best, but despite every effort by the man below on the ladder, we could only gain an inch or two at a time. At length J. H. Buckley's spectacles appeared above the head of the fall, and if ever a man looked like a drowned rat he did. He missed, however, the chance of a lifetime by forgetting to remark:-
"Facilis descensus Averni," \&c.
but probably his mouth was too full of water.
The force of water had by this time increased so much that it was impossible for any more of the five still below to attempt to climb the ladder, and indeed, in a few minutes, they were driven back by the rapidly rising flood to the grass-covered ledge in the Main Hole, level with the platform at the foot of Long Churn. It was then 2-40 p.m.
Fortunately, those on the top, who had noticed a slight drop in the barometer, too late to warn us on our downward journey, caught sight of the men on the ledge and lowered a ricksack with a note in it telling them to fasten their rope and ladders to the rope, and after these had been drawn up and fixed, the five made their way to the surface. Every care had to be taken, as the whole aspect of the Pot had changed ; three enormous waterfalls

bong chiokn exity hrom helln put.
Photu by M. Johnson.

bounded from above and met at the top of the Sixtyfoot Pitch, whilst innumerable smaller falls spouted from every chink and cranny of the walls.
It was then half past eight in the evening, and too dark for them to do anything for us in Long Churn, so both rescuers and rescued made their way to the nearest farmstead to wait for the dawn.
We did not know of their escape and wondered greatly how they were faring, but of course could do nothing to help them, and indeed our own position called for all our attention. Three of us waded up Long Churn to the next waterfall pitch, but found the force of water simply too much for any living thing to ascend, so there was nothing for it but to wait till the waters subsided. We disposed ourselves, more or less comfortably, on a sloping shelf, well above the torrent, and prepared for a long vigil. The chief of the commissariat, with a serious face, opened his sodden rïcksack and produced the remains of our lunch-half a loaf, of course soaked with water, and a tin of fruit, another man found a very much battered apple in his pocket, and on these we made a frugal meal at 6 p.m. We had set a water gauge as soon as our detention seemed certain and read it at regular intervals. For three and a half hours it rose steadily, for two more hours it remained about level, and then for three hours it slowly but surely subsided. One often hears the remark " How Time flies!" but he certainly did not do so then. Perhaps he had got his wings wet!

Luckily Addyman had an acetylene lamp and plenty of carbide with him, or we should have been in darkness, for our stock of candles was very limited. We talked at intervals, and sang or dozed, but most of all we shivered! and shivered!! and SHIVERED!!!

After a sumptuous (!) repast off the remains of our dinner, we decided, at II p.m., to try to get out, so we roped up, and started. The main stream in Long Churn was still running very strong, and the light weight member of our party at times floated out on the rope like a cork, but we struggled through, and just on the stroke of midnight reached the upper air. Our first thoughts,
naturally, were for the others, and we made our way at once to the mouth of the Main Hole, and shouted repeatedly, but as we got no response, we set off to the farm-house, where heads were thrust out from apparently every window, and our friends rushed downstairs in various stages of déshabille, which in one case was French for a towel, and we gripped hands amidst a babel of questions and counter-questions.

After another sumptuous repast, some walked back to Stainforth, and the others slept at the farm-house till the morrow.

In conclusion there is no doubt that had we been half-an-hour later in leaving the bottom, ten men would have been subjected at the Sixty-foot Pitch to the battering of three tremendous volumes of water in a limited space with no recesses or ledges to shelter in or on. However "All's well that ends well"; the sport is good and we all hope to re-visit the depths of Helln Pot.

## THE FLORENCE COURT CAVES:

Co. FERMANAGH.
By Harold Brodrick.
Even though the accommodation at the average Irish hotel is not to be compared with that obtainable in Yorkshire, the beauty of the scenery and the cheerful nature of the inhabitants, to say nothing of the numerous unexplored caves, drive anyone who has commenced the work of cave-exploration in Ireland to cross the Channel again and again. In the last number of the Journal I gave an account of some explorations at Whitsuntide, 1907, in County Fermanagh, and stated that at least one more visit would be needed to work out the Marble Arch district fully. An opportunity luckily offered itself at liaster, Igo8, when several members of the 1907 party, together with others, visited the district. On this occasion we stopped at the Victoria Hotel, Black Lion, ind so, although we still had a matter of four miles to drive to Marble Arch, we were saved the ten (Irish) miles drive from Boho which had considerably curtailed our time the year before. As on the occasion of our former visit, the Earl of Enniskillen kindly gave us permission to go into any part of the beautiful Florence Court demesne, and also gave instructions to his head keeper, Mr. Bowles, to give us all the assistance in his power.

As I stated in my former paper, three streams rise on the northern slopes of Cuilcagh Mountain, and sink at three points on the limestone plateau. There are three large springs on the low land below the plateau, and also numerous pot-holes on the plateau, some of which are indicated on the Ordnance Survey. Our intention on the occasion of our second visit was three-fold; we wished to complete the exploration and survey of the caves in the Florence Court demesne, to descend the various pot-holes, and thirdly, to trace, if possible, the llow of the underground waters in the district.

As the weather during the whole of our stay was
perfect, we alternated between cave work and pot-holing, but for the sake of clearness I shall not describe our work in the order in which we did it, but will deal with the three streams and the pot-holes above them from E. to W.

The most easterly of the three streams sinks at Pollasumera, a cave which we partially explored in 1907; but still further to the E. are two pot-holes, both of which we have descended.

Although two Rattling Holes are marked on the Survey only that in Doneen townland is of any depth, and Mr. Bowles told us that it was reputed to be the deepest pot in the neighbourhood, so there seemed to be every prospect of good sport. This pot-hole is a long open fissure, surrounded by a wall and choked with vegetation. Some time elapsed before we could find a suitable lead for our ladders, as much of the rock was in a loose and rotten condition. The descent was somewhat awkward, owing to the extreme narrowness of the fissure in places, but nearing the bottom it widened considerably, and ended in a chamber 14 ft . long and 7 ft . wide. The floor, which was reached at a depth of 90 ft ., consisted of of loose scree, sloping down in one corner to a depth of 6 ft . From the N. end a very steep mud and rock slope ran up to the surface, and from this we attempted to take photographs of the party making the descent. This was a difficult operation, as the slope was so steep that it was necessary to secure both photographer and camera by ropes tied to trees on the surface. Looking upwards from the chamber, the shaft presented a very pretty appearance owing to the wealth of vegetation extending right over the opening and some way down the fissure. As in the other pots, there were the usual remains of sheep and lambs on the floor, a circumstance which impelled us to hurry to the surface as soon as our survey was completed. About a mile to the N., in the townland of Leefa, is a second Rattling Hole, but as we were informed that it was quite insignificant, we did not trouble to visit it. The last pot-hole we explored during the expedition is situated in the townland of Gortmaconnell, rather more than a quarter of a mile
S.W. of the Dooneen Rattling Hole. It is represented on the Survey Map by a small circle, but is not named, und we have called it "Gortmaconnell Pot," as it lies in the townland of that name. The hole was bridged over with tree trunks, and trees had been planted nll round the opening, evidently with the idea of preventing sheep falling into it, and this vegetation had Hourished to such an extent that the mouth was completely covered. Our
 first business was to make a way for our ladders, and on plumbing we found the hole to be 68 ft . deep, consisting of a fissure running N.E. and S.W., 48 ft . long and only $3 \frac{1}{2} \mathrm{ft}$. wide. There was a small chamber at the bottom which showed signs of water action. The view from the bottom was very fine, as the sun was shining through the vegetation which blocks the mouth.

The most easterly of the three streams usually sinks into its bed a quarter of a mile above Pollasumera Cave, and even at the time of our visit contained such a slight flow of water that we considered colouring it would be of no use; but we were informed by Mr. Bowles that he had seen his father put chaff into the stream and it had come out at the point marked "Springs" in the Cladagh

Glen, where there was, at the time of our visit, a considerable outflow of water. This is to be expected, as the line through Pollasumera, Pollthanacarra and Pollnagollum would point to the same conclusion. In my former description of Pollasumera I stated that it was impossible to get beyond the lake which we found in it; on our second visit we carefully surveyed the cave and, as usual, found that we had greatly overestimated its length, as the main passage is only 92 yards long. When we had surveyed the part which we had explored before, we carefully inspected the lake and floated candles across it, and these revealed a pebble beach at its further end, and also the fact that along one side the water was not more than three feet deep.

We had not time that day to do anything further, but, on our last day, two members of the party hurried over to complete the exploration. To wade in three feet of water, with a bottom of rough boulders, and only twelve inches between water surface and roof, is not easy. One's head is fairly between Scylla and Charybdis, and wettings and bumps alternate as one advances, while the frequent extinguishing of candles complicates the business. This ordeal safely over, the two explorers advanced over a descending floor of boulders, hoping that a long and new passage might reward them. The going was of the roughest, as the rubbly, marbled rock was excessively rugged. A curving passage, evidently in normal weather occupied by a torrent of water, led slightly downward for about 50 ft . Then ensued a series of great curtains of solid rock, descending to within 3 ft . of the floor, with a steep rise both of floor and ceiling beyond each. The second rise was formed, not of rock, but of solid peat, brought down from the mountains and deposited here. When we saw this we knew we were approaching some upward shaft through which the flood-water could rise, leaving below its burden of detritus, and our hopes fell. Another curtain, then a dense bank of peat and ancient branches of trees, and then the cave gave out, and the water evidently continued its course through narrower fissures and cracks. We had, however, done all there was to be
done. We had penetrated more than 120 feet beyond the lake, and shown that in this direction further progress was definitely barred.
Close to the most westerly of the two Pollasumera caves we found a low opening at the base of the cliff, which led into a series of very narrow parallel fissures, but all of them became, in a short distance, too narrow for passage.
To the N. of Pollasumera, and in a direct line towards the Springs, is a large open pot-hole called Polldownlog, full of trees, with a floor of loose boulders through which no opening could be found.

Further N. still are two other pots-Pollthanacarra and Pollnagullum-lying close to one another. At Pollthanacarra we found that a ladder was required for the descent, but before we could obtain a satisfactory lead it was necessary to remove a considerable portion of the wall surrounding the pot. The fissure runs N . and S., and is 40 ft . long and 2oft. wide. We fixed the ladder at the N . end and sent one man down. He reported that the fissure ran a short distance to the North, and was then choked with loose rock. The floor is $40 f t$. below the surface, and to judge by the articles found in various parts of the pot it is used as a general rubbish heap for the neighbourhood.
Meanwhile the rest of the party had been exploring Pollnagullum, a hole obviously in the same fissure. The S . side is almost vertical, and runs down 54 ft . It was possible to climb down the N . side, which consisted of loose boulders covered with vegetation. At the bottom the fissure runs S . towards Pollthanacarra, and we followed it for about 20 ft . through loose boulders, but beyond this point the floor and roof are so unstable that we decided to retreat.

There is no doubt that before the fall of the rock which choked up the fissure there was a passage communicating with Pollthanacarra. The most striking feature of Follnagullum is the wealth and beauty of its vegetation. The sides wore covered with ferns, and festoons of creepers stretched from rock to rock. Practically every
pot we explored in this part of Ireland was roofed over with trees and shrubs, in striking contrast to the majority of English pot-holes, which are often simply bare holes in the moors high above the tree limit.

Rather more to the W. is another pot-hole not shown on the Survey, consisting of an open fissure running $N$. and $S$. From the surface we could see a wide ledge about 25 ft . below, on which lay a dead lamb, so for the time being we call the place "Lamb Pot." From measurements we found that the fissure was $20 f t$. long by 7 ft . wide. We descended to the ledge and discovered very quickly that the name was thoroughly justified, as there were three or four carcases of lambs in various parts of the hole, and the surface of the floor was almost entirely composed of bones and skulls, rendering exploration a distinctly gruesome business. At the N. end of the ledge was a second shaft, 25 ft . deep. There were other holes in the floor, io to 15 ft . deep, but nothing of further interest, so we ascended, rather relieved to escape from the remains of lamb and sheep. We have since named this pot-hole Legnabrocky Pot, from the townland in which it is situated.
By far the most interesting of the three streams is the central one, which goes by the name of the Monastir River. In my former paper I described Templebawn and Monastir Cave, so I need not say anything further about them. There are several pot-holes marked on the Survey to the S. of Pollnagapple and not far from the Monastir Cliff. Pollawaddy proved to be a large opening, 80 feet deep, filled with trees. It is possible to walk down, but apart from its size it is without interest. The same may be said of Pollreagh and Pollagaria, and after a rapid inspection we turned our attention to Pollbwee.
M. Martel mentions a pot-hole close to the Monastir Cliff and marks it on his map as 22 mètres deep, but he did not descend it. Mr. Bowles told us that its local name was Pollbwee, (The Yellow Cave).

The surface opening is a fissure running $N$. and S., the northern end being formed of a mud slope, down which it is possible to climb for a few yards. The
fissure was bridged over in the middle by a boulder, and about 30 ft . down a small ledge was visible from the surface. On plumbing the shaft, we found that the vertical depth was 67 ft ., but when stones were thrown down they appeared to roll on and finally to strike water. We had no difficulty in fixing our ladders and very soon all was ready for the descent.

The Irish member of our party was the first to reach the bottom and he reported that the shaft opened into a large chamber, the Hoor of which consisted of a steep mud slope. He remained tied on to the rope and worked his way down this slope, by the aid of very precarious footholds, until he reached a side fissure where there was firm rock on which to stand. The mud slope ended in a deep pool of water, from which the opposite wall rose vertically to the roof of the chamber. After ascertaining that his position was secure, he untied the rope and sent it up to the next man, and in this way four members of the party made the descent. We then started to explore the side fissure, but found our way blocked at the outset by a huge boulder, which completely filled the lower part of the entrance. But once over it, further progress was fairly easy, and we found ourselves in a long, narrow passage, which seemed to have been formed by the warring away of a vein of calcite. We continued along the passage, over jammed boulders, for about 60 ft ., after which the floor began to slope steeply downwards and, turning slightly to the right, ended in a small pool.

On the left was a side passage, ending in a steep slope of waterworn limestone, running up into darkness. One of the party climbed up this slope to a considerable height, but the holds were so bad that he decided to descend. As far as we could judge by the aid of magnesium wire, the slope reached a height of about 30 [t., after which the passage narrowed so much that further exploration would have been impossible.

After measuring up the passage and its branches, we retrated our steps, and three of us reached the large boulder in salfety, but the fourth member of the party had " marow escape from a scrious accident, as the false
floor of loose rock behind the boulder gave way beneath him. Fortunately it only fell a few feet, and he escaped with a bad cut on the hand.

From our landing-place at the entrance to the fissure we could see a glimmer of daylight coming through the roof at a point directly over the pool, and we heard the voices of those left on the surface quite distinctly. We measured the length of the slope, and found it to be 43 ft ., while the fall was about I in I , so that the surface of the pool is about rooft. from the surface. We were not able to ascertain the depth of the water in the pool but there was no perceptible flow in it. Our ascent of the ladder gave rise to considerable amusement amongst those on the surface, as a projecting rock about half-way up succeeded, in nearly every case, in removing our headgear, and a return to the pool, with a spare rope for fishing operations, was twice necessary. Before leaving the pot we found, close to it, the small hole through which we had seen daylight from below.

In a direct line between the Monastir Cave and the outflow of the water at Marble Arch are three openings in the moor; the first is Pollbwee, which I have just described, the second is Pollnagapple, of which I gave an account in the earlier paper, the third is Cradle Hole, which consists of a wide opening about 80 yards in diameter, its floor being covered with a mass of boulders coated with vegetation of all kinds, while the whole pot is shrouded by tall trees. The N. and S. walls of this pot are composed of vertical limestone cliffs, some ino ft . high, at the base of each of which are caves through which the stream from Monastir flows; the other two sides consist of steep slopes.

Although we had been into the Lower or Northern Cradle Hole Cave on the occasion of our former visit, we had not surveyed it; and our time had been so much taken up on our second visit with the survey of the Great Cave and the exploration of the various pot-holes, that we did not survey the Cradle Hole Cave until our last day. We were due to catch the 4-49 p.m. boat train at Enniskillen, a distance of some ten miles, so an early start was made,
and after a quick drive on a car from Black Lion, we made our way up the glen for the last time. Two members of the party made at once for Pollasumera to complete the survey there, while the third stopped at cradle Hole.
The solitary member first entered the Lower Cradle Hole Cave which lies at the foot of the southern cliff. The opening consists of a wide arch about 4 ft . high, leading into the Lower Cave. Inside this arch a drop of $\therefore \mathrm{ft}$. has to be negotiated. From here is a passage imme 15 ft . wide and 3 ft . high, which at a distance of (3) yards opens into a straight passage some 50 ft . wide, nul ringing from 10 to 30 ft . in height. The main ntranllows in from the left, having worked its way from Hou Upiper Cave under the boulders of which the Hoor of Cimmle: Hole is composed. At a distance of 104 yards from the entrance the stream spreads out and fills the whole: wilth of the cave, which is here 30 ft . wide and uboul 7 ft . high.

Surveying single-handed is naturally slow and tiring work, wo the solitary member sat on the edge of this pool for " while, to rest. An empty match-box with a candle stuck on it formed an excellent fire-ship, which slowly Iloalud slown the stream. Although, at first, it seemed thut the roof came down to the surface of the pool, the canille Iloited on, and showed that there was still at least 6 inches of head room above the water. Time and the danfu' ol solitary exploring did not permit of anything fliflher being done here, but on working out the surveys of Marble Arch and Cradle Hole afterwards, and plotting llwin wil on the Six-inch Survey, it was interesting to diacover Hat the lower end of Cradle Hole was within ohoul , 50 ft . of the upper end of the Grand Gallery in Marble Nich, so that it is probable that, if one did not ubject (o a thorough wetting, a way through could be loume. 'lhis discovery is naturally one of great interest, illid rould not have been made except from a careful alliviy.
'Tlum wolitary member then made for the open again, nill mot the others returning from Pollasumera. As a
short time was still at our disposal, we decided on a hurried look at the Upper Cradle Hole Cave. This lies at the base of the other of the two cliffs, and like the Lower Cradle Hole Cave is entered py descending a 20 ft . drop under a low arch. We at ond found ourselves in a fine water passage, with the stream flowing from left to right. Exploration was impossible down-stream, as the river soon flowed under the big boulders which entirely filled the passage. Up-stream, the cave-here 30 ft . high and ${ }_{5} \mathrm{ft}$. wide--turned sharply to the right, the floor being entirely occupied by a deep pool of water. One member quickly stripped, and, taking a measuring cord with him, hurried through the water, which was about 4 ft . deep. He soon got clear of the pool, and continued along a fine, straight cave for a distance of 55 yards up-stream. At this point, although he could still see the cave going straight forward, he decided to return.

This passage led directly towards Pollnagapple so that there is little doubt that if we had had more time at our disposal we could have reached the point below that pot and it seems not unlikely that there may be passages and chambers here as fine as any in Marble Arch Cave.

The next point of interest on the moor below Cradle Hole is the Marble Arch Cave, but before describing our work there in 1908 some account of the known portion of the cave and of the earlier explorations will be necessary. One portion of the Marble Arch Cave seems to have been known for a very long period, but, until our first visit, only one exploration of the rest of the cave seems to have been attempted, that by M. Nartel in 1895 .

Walking up the beautiful Cladagh Glen from the main road, the Springs to which I have referred earlier are first passed on the left, and then, about a quarter of a mile further on, the Marble Arch itself is reached. This consists of a fine natural limestone arch rising some 30 ft . above the stream bed. There is a local tradition that a little girl once fell through the small hole in the arch on to the stream bed below and was not hurt at all. Some 25 yards further is a limestone cliff, from the foot of which flows the stream, and further progress in that
direction is impossible; but on the plateau above are three open pot-holes, each about 60 ft . deep and some 50 yards apart, which, as they have no local names, we have designated by the letters D, C and E. All these pots, the floors of which are covered with great boulders, can be readily climbed down, and from the bottom of C an opening leads to a lake from whose shores light can be seen at D , and vice vers $\hat{a}$. From these two points practically all the lake can be seen, so that we did not attempt exploration there. At the bottom of C is another low opening which leads to a wide passage, some 20 ft . high, from which two branches run, one leading to an opening in pot-hole $E$, while the other, after a drop of ro ft ., leads to the edge of the water where M. Martel launched his boat.

In the year 1895, M. Martel, in the course of what he calls his "British Campaign," visited Marble Arch and, in company with Mr. H. Lyster Jameson, reached the end of the Grand Gallery by the aid of a collapsible boat; in the other direction, branching off from the Junction, he got as far as the point which we now call the Pool Chamber. In 1907 we explored the cave, but not having a boat, were compelled to wade through the deep water near the entrance. At the end of the first "deep water," a distance of some 80 yards, is the Junction, and beyond this we found that the conditions had materially changed since M. Martel's visit, so that the Grand Gallery was no longer filled by a deep stream, but was floored with loose rocks between which the stream flowed, where it would have been quite impossible to float a boat.

The two members of the party who waded through the water in 1007 also explored the passage which runs in a north-casterly direction from the Junction. They found Hat this passage widened steadily for a distance of about 160 ft ., while the floor to the left rose considerably, that (o) the right continuing at the same level.

At the upper end of the slope was a fine collection of wialictites, and beyond a low opening led, by a drop of 12 ft ., into a narrow fissure cave, some 30 ft . high and fo it. long. The Hoor of this fissure was composed of
clay on which one of the explorers slipped and would probably have had a serious fall if he had not been roped; at the lowest point was a small hole through which could be faintly heard the murmur of running water.
The continuation of the main passage to the right was found to end, at a distance of nearly roo yards from the Junction, at the Pool Chamber, which consists of a cave 15 yards in diameter and about 20 ft . high, its floor being composed of a mass of boulders and sand, sloping steeply down to a still pool of water at its lowest point. The far end of this chamber, which was the extreme point reached by M. Martel in 1895, seemed to be entirely blocked by fallen rocks.

To return now to our experiences in 1908. On arriving the first day at Marble Arch Gate, which we had left with such reluctance twelve months before, we found the keeper, Mr. Bowles, waiting for us with a donkey car. Our wagonette could not go far up the glen, so we transferred our ladders, ropes, \&c., to the donkey car, and worked our way up to the Marble Arch itself. The first item on our programme was the exploration of a pot-hole which had been pointed out to us by Mr. Bowles in the plantation the year before. This has a small opening some 10 ft . long by 3 ft . wide. A convenient tree gave us a safe belay for the rope ladder and this was soon lowered and the first man quickly descended the first pitch, which was only about 30 ft . deep. A second, and then a third, member of the party followed, and found themselves on a natural bridge of rock, with dimly discerned depths below. The first man, carefully roped, then climbed down one side of the bridge, to find himself, when $I_{5} \mathrm{ft}$. lower down, in a vast confused mass of boulders, where it was easy to lose one's way. This place was very similar to the upper portion of the Great Eastwater Cave in the Mendips. Three members, including two of the 1907 party, worked their way down through these boulders, and, after descending about 15 ft . in a sloping direction, arrived in a spacious chamber floored with boulders similar to those they had clambered through. Far above could be seen the dim light from
the pot-hole by which they had entered, while a cheery shout from the man on the bridge shewed they were still within touch of the open air. The man on the bridge then tried to join them over the boulders, but this was found to be impossible without wings or a ladder. This "Great Boulder Chamber" was about 80 ft . high, as far as could be estimated, and had a diameter of about 6 oft . There seemed to be no way forward, except through the boulders, and, by good luck, the first attempt led in the right direction-a vertical drop of about 8 ft . between the boulders, then a short scramble, and a further drop of 6 ft ., leading us into the end of a low passage some ro ft . in width. This passage was formed entirely out of the solid rock, and was about 3 feet in height. A crawl of 40 ft . led the party into a fine chamber, 30 ft . in diameter. To the right the floor sloped steeply upwards, and led into several passages between boulders, which seemed as if they might lead back into the Great Boulder Chamber. To the left a steep sandy slope terminated in a still pool of water. The appearance of the pot-hole had not led us to anticipate anything very great, and only a very limited supply of candles had been brought, so when only two short bits of candle were left, two members remained where they were with the shorter bit, while the third went back for a further supply. Mr. Bowles and the man on the bridge came back with him into the Lower Cave with a plentiful supply of candles and the exploration was continued. On the far side of the Pool Chamber a passage was found, 15 ft . high and 6 ft . wide, which at a distance of about 40 yards became more or less blocked by big boulders. These proved only a slight obstacle, as, owing to their size, it was comparatively easy to climb either over or under them. After getting past this obstruction we found ourselves in a high chamber, with the floor composed of rocks cemented together by stalagmite and rising at a steep angle to the right, and after clambering over a few more boulders, a smooth stretch of sand was reached which led, in about 30 yards, to the shore of a large stream flowing in from the left and vanishing into a wide tunnel to the right.

The party had now been underground for about three hours, as the shortest way through the great mass of boulders had been bad to find and we had just decided to return to daylight for a meal, when one of the party, who had been there the year before, recognised a peculiarly-shaped rock, and it only needed a few minutes' consideration to make it clear that a new way had been found into the Great Cave, which only involved a rope ladder descent and no wading, and a hurried return was made at once to the pot-hole.

Two members however followed more slowly, as they wished to explore the sides of the passage as much as possible. The Pool Chamber had evidently been the furthest point reached the year before-it was also the furthest point in that direction reached by M. Martel in 1895 -but the passage forward to the Great Boulder Chamber had been overlooked, as the entrance was hidden by several large rocks. After crawling along the low bedding cave, some difficulty was experienced in finding the way up into the Boulder Chamber; but, after two or three mistakes, the way through the boulders by which we had climbed down was found again. Clambering round part of the Great Boulder Chamber to see if any more passages led out of it, they were suddenly surprised to see a feeble glimmer of light in one corner. A short scramble over and under the boulders, 10 to 15 ft . in diameter, brought them to this light, which they found filtering in past large rocks, between which could be seen the waving branches of trees and ferns. About five minutes' work sufficed them to widen the opening and climb out, to find themselves at the base of the wide open pot-hole marked by M. Martel as E, and within about 15 ft . of another opening into the generally known portion of the cave. A shorrt scramble up the slope of the pot-hole brought them out quite close to the narrow pot down which the ladder had been lowered, and great was the astonishment of the rest of the party to find them waiting on the surface, the way through the boulders and up the ladder having taken much more time than the new exit.

As such a comparatively easy entrance had been found there was now no necessity for a ladder, and on another day we all quickly clambered down into the Great Boulder Chamber by io a.m. and divided into three sections of two each, for exploration, survey and photography. Nothing new of any note was found, although one narrow fissure leading from near the Pool Chamber was explored for some distance. Making our way past the Pool Chamber, by the passage we had traversed a few days before, we reached the Great Chamber and found that it was even more impressive than our recollections of the year before had led us to expect. Now we were a party of six, with an unlimited supply of candles; then we were only two and had got into the cave by wading through deep water, and only reached this part after exploring all the other known parts of the cave. At the upper end of the steep slope which forms the floor of this chamber is a good collection of very fine stalactites, and near them, laid out on a clay bank, was the perfectly clean skeleton of a rabbit, which must have lost its way in the intricacies of the cave. From the condition of the bones they had quite possibly been there for centuries. We went forward to the Fissure Chamber, and on its muddy floor could see traces where one of the party had a nasty fall the year before.

We next surveyed the Grand Gallery, and found it to be an absolutely straight passage 123 yards in length. It the upper end was the same pool we had reached twelve months before, and where we turned back owing to the lowness of the roof. The floor had not altered materially, but our footmarks had been washed away, indicating that this portion of the cave floods considerably at times. We retraced our steps to the Junction, and sent a volunteer through the deep water down stream to the old entrance. This was necessary, as we required accurate measurements and compass bearings. We found it to be exactly 100 yards, while the actual deep water was $4^{\circ}$ yards in length. The whole passage through which the river runs, from the upper end of the Grand Gallery past the Junction to daylight at pot-hole $C$, is a
magnificent tunnel about 20 ft . wide and ranging from 8 ft . to 25 ft . in height, while at the Junction the roof must be at least 50 ft . above the stream. One curious feature was noticed at this point. In all other parts of the cave, when the photographers burnt their flashlight powder, the heavy smoke remained hanging about the passages for a long time, but at the Junction it seemed to be drawn up at once through a dark hole which we could see high up in the roof. By this time we were all beginning to feel rather tired, and, as we had completed the survey of this part of the cave, we regretfully made our way out through the Great Boulder Chamber to daylight and tea, having spent altogether rather more than six hours in the cave. After tea we went through the passage, which is well known, from pot-hole C to E, and also took careful measurements of the surface features. As already explained, the new entrance is within 15 ft . of one previously known, so that we had now data for checking our survey. On getting home and working out the plan we were glad to find, that although the round journey from entrance to entrance is 270 yards, we had only made an error in position of less than 20 ft .-very slight, considering the difficulties of taking exact bearings by candlelight in such complicated passages.

In order to test the accuracy of the report that the Monastir River emerged at Marble Arch, we put half a pound of fluorescein into it at II-30 a.m. in dry weather ; it was clearly visible in the Upper Cradle Hole Cave at $10-45 \mathrm{a} . \mathrm{m}$. the following day, and at $6-45$ the same evening it began to emerge at the Marble Arch Spring, having taken thirty-one hours to travel a distance of slightly more than half a mile. By this test we have practically settled the courses of the three streams: the eastern one rises again at the Springs, the central or Monastir River appears again at Marble Arch, while the water which sinks at Cat's Hole almost certainly rises at the spring near the road, as I explained in my last paper. These conclusions are what one expects from a consideration of the master-joints in the district.

During this excursion we inspected a large number of caves and pots marked on the Six-inch map of Co. Cavan, between Black Lion and the Source of the Shannon, but found none of any importance. One pothole, however, probably holds the record for size in the British Isles, as it consists of a vast basin, some 250 ft . deep, with a diameter of at least a quarter of a mile. All its mopes were covered with vegetation and at its lowest point a small stream drains away into a muddy sink.

The party consisted of H. Bassett, W. L. Hicks, Chas A. Hill, R. Lloyd Praeger and the writer.



The Climber Questioned. By George Yfld.
[Reprinted by kind permission of The Spectator]
"What Question.
"What do ye win?" the scorners ask,
"Who climb great peaks of rock and snow?
What guerdon gain ye for your task
That does not wait on those below ?
We see the peak in all its might,
Its symmetry, its proud repose,
The moon sheds there her stainless light,
There dawn her kiss of flame bestows.
It shimmers in the noonday heat,
And faery shadows baunt its sides;
Dark comes, and there in lone retreat The spirit of the storm abides.
On this-yea, more than this by far -
Our eyes with keen enjoyment feed;
Say what the greater glories are That make the climber's boasted meed ?"

## Answer.

"What could young Porphyro impel To venture in that foeman's den?
What lore makes clear to us the spell That sped the feet of Imogen ?
What was it that Bassanio brought
That tamed so soon fair Portia's pride?
Why was it that Diana sought
Latmos, her Godhead laid aside ?
Words fail you? So the mountaineer
Loves yon majestic dome of snow-
To him tis passionately dear,
As Juliet was to Romeo.
But if you ask the cause, 'tis vain-
There are no words, since Shakespeare sleeps,
So subtle that they can explain
How passion through the spirit sweeps.
The lover's rapture is to love,
The climber's rapture is to climb;
And both possess a heart above
The petty chains of place and time.
Who knows, fond questioner, how soon
On thee shall fall the sacred fire,
And thou on some great peak at noon,
Feeling, shalt need not to inquire?"

## GAPING GHYLL IN FLOOD.

## By Alexander Rule.

An expedition of pot-holers to Gaping Ghyll is a matter of such frequent occurrence nowadays as to attract but slight attention from the outside world. But at Whitsuntide of $1 g 09$ the Clerk of the Weather, the real master of the situation on these occasions, was the means of conferring on some members of the Club no little fame, if only of that ephemeral kind which is the outcome of notice in the daily press.

An exceptionally dry spell of weather had aroused visions of a delightful time on Ingleborough, with just sufficient water in Fell Beck to supply the needs of the camp. But the last week of May saw a return to what one may almost describe as " normal conditions," and the advance party which assembled at Clapham on the Friday evening accomplished the long walk up to Gaping Ghyll in pouring rain.
Arrived at the camp ground we set about the erection of tents and got everything, including ourselves, under cover as speedily as possible, and in spite of the deluge passed a very comfortable night.

Next morning sundry energetic individuals roused the camp at the usual unearthly hour, and the preliminaries to a descent, so well known by this time as to make further description unnecessary, were begun in earnest.

The weather had improved considerably, but the beck was running high and rendered our original intention to descend both by ladders and windlass impracticable; so we decided on the latter method and directed all our energies to turning the water out of the Side Passage into the Main Shaft.

The windlass was rigged up, the camp got ready, and by the time the rest of the party arrived in the evening, everything was in order for the descent.

The chief object of the expedition was to re-explore and complete the survey of the Old S.E. Passage, of which
rcference to the earliest plan of Gaping Ghyll* will show a considerable portion was left unsurveyed at the time of its discovery, and we now decided, instead of surveying this portion only, to make a new plan of the whole S.E. system, commencing at the exit from the Great Chamber.

Arrangements were accordingly made for two parties to descend, one for exploration and the other to carry out the survey.

On Saturday evening there were seventeen men in camp, and several others made their headquarters in Clapham village. We especially welcomed Dr. Norman Collie, who had come up on purpose from London.

As we meant to work through the night, Booth was lowered to the bottom of the Main Shaft at about 6-30 p.m., the telephone wire was run down and fixed and communication with the surface quickly established. Buckley and Dalton followed, but the amount of water was obviously causing considerable trouble and a message from below told us that the fall was still heavy and there was little prospect of getting the two parties down that night. It was then decided to postpone further operations until the following morning, in the hope of the stream abating, and the three who had descended were quickly drawn up to the surface again.

Next morning dawned bright and clear, and Fortune seemed to be favouring us at last. The beck had fallen considerably during the night and when Booth was lowered shortly after $6 \mathrm{a} . \mathrm{m}$., he reported a great improvement in the conditions. A guy-line was run down through a pulley attached to the chair, and this innovation proved of considerable advantage, as it added to the comfort of the descent by drawing the chair well out of the waterfall and ensured a dry landing place at the bottom. Work proceeded rapidly and by 2 p.m. thirteen members had assembled in the Great Chamber. The exploration party, consisting of Dr. Collie, Wingfield and Dalton with Booth in charge, set off, and were followed at 4 p.m. by the surveying party led by Horn and including Chappell, Barstow and myself. Roberts and Hazard remained at
the bottom of the Main Shaft to assist the ascent of those returning to the surface.

No one who has crawled through a cave, loaded with a large amount of tackle, will be surprised to learn that the progress of the surveying party was decidedly slow. The transport of a delicate surveying instrument in such a place requires considerable care, but when a gallon of methylated spirit, two heavy rïcksacks and innumerable candles are added, the possibilities of rapid movement are reduced to a minimum. However, the work of survey went on steadily, and when we reached the First Stalactite Chamber we met the exploring party on their return journey, and learnt that they had reached the extreme end of the passages and had left the tackle fixed in the Mud Chamber for our use. After a short rest they went on to the Great Chamber and reached the surface by ro p.m.

At midnight Roberts and Hazard joined us, just as we were preparing to descend into the Mud Chamber, and this addition to our numbers was very welcome. We soon reached the ridge at the head of the Mud Slope and cooked a meal before continuing the work.

Roberts was left in charge of the life-line and the rest of us descended the slope to the bottom of the chamber, and after taking bearings and measurements, climbed the stcep Scree Slope. On reaching the passage at the top we noticed a slight fall of water coming down from the roof, which is here very high. The survey was continued down the long passage beyond the Mud Chamber, but progress again became slow as the floor is very rough, and the difficulties of working with the mining dial increased. liinally a point was reached where it was necessary to crawl amidst a conglomeration of broken rock, and we came to the conclusion that further survey with the dial was impossible and a prismatic compass would be of much greater use. As most of us had been underground for about fifteen hours the prospect of a return to the surface was not unwelcome, and at 2 a.m. we turned back. On reaching the Scree Slope we were surprised to find that the little waterfall, mentioned above, had increased
considerably, but we scouted the suggestion that it was due to rain, as when we left the Great Chamber on the previous afternoon the weather had appeared quite settled.

We ascended rapidly to the top of the ridge, hauled up the tackle and began the final stage of the journey, with the prospect of well-earned repose looming large before us. Nearing the Great Chamber we could not help being struck by the unusual roar of the Waterfall, but this, we argued, might be due to the sudden transition from the stillness of the passages. When, however, we reached the head of the Boulder Slope at 5 a.m., the first glance down into the Great Chamber told us that much had happened during our absence. A dim misty patch of light marked the position of the Main Shaft, but elsewhere total darkness prevailed. A large volume of water was falling and a narrow stream was running rapidly along the floor of the Great Chamber and disappearing beneath the boulders on which we were standing.

Making our way down into the Great Chamber, we found everything saturated with spray from the Waterfall and the telephone almost waterlogged, but with much difficulty we got one message through, and learnt that rain was falling heavily and the conditions too bad to permit of our ascent. So the situation had to be faced. Before all else we longed for sleep, and after taking rapid council as to the most suitable position for a bivouac, Horn decided on the New S.E. Passage, and gathering up the spare provisions, candles and oilskins, which were all lying near the telephone, we returned up the Boulder Slope to the passage in the right-hand wall. We selected a spot not far from the entrance and there cooked a meal and inspected our somewhat scanty food supply. We had some waterproof sheeting with us, and this and the oilskins we spread out on the rocks, and tried to snatch a little sleep before matters became any worse. But we soon found that the noise of the Waterfall, becoming louder every minute, made this impossible, so we retreated further along the passage away from the roar, and remained in one place for about an hour, where
some of us dozed a little, but in great discomfort. Everything was dripping with moisture, and roused at length by a bitterly cold draught, we all returned about 6-45 a.m. to our first resting place and soon afterwards heard a whistle from the Great Chamber which naturally caused us some surprise. It was quickly answered, a light flashed from the slope, and Booth joined us. He had descended soon after 6 a.m., but had found the candles removed and being only provided with matches, had spent over an hour in the Great Chamber, endeavouring to get an answer to his signals. He had had an exciting experience on the way down as the full force of the Side Waterfall had struck and driven him against the opposite wall; the lines became entangled and it was only with difficulty that he managed to get them straight again. He brought with him a rücksack of provisions, so our fears of running short of food were allayed for a time. The fall of water had increased so rapidly that ten minutes after Booth's descent further communication with the surface became impossible. The telephone had also broken down completely, so we were now cut off from all intercourse with the party above. Booth told us that a dam was being constructed outside the Side Passage, but rain was still falling and the beck was in flood and rising rapidly. Search was next made for a drier and warmer place in which to try and get a little sleep, and as the Fissure Chamber by the Canal appeared to be the most suitable spot, we dragged the oilskins along with us and settled down there, leaving Booth and Hazard to keep watch at the entrance of the passage. But the cold draught penetrated even to this remote place and our short periods of repose were broken by intervals of stamping up and down in our endeavours to restore circulation. Finally the situation became intolerable and we returned to the entrance. In the meantime Booth had paid a visit to the Great Chamber and found the water still rising rapidly, and a gauge near the telephone showed an increase of four inches in half-an-hour.

We were fortunate in having with us an excellent acetylene lamp and plenty of carbide, and this alone
made operations in the Great Chamber possible, as the clouds of spray and strong draughts extinguished the candles immediately. Booth and Hazard paid constant visits to the Main Shaft, approaching as near to the Waterfall as they could, and with the aid of the lamp searched round the walls and pool for ropes and messages. The guy-line had already been drawn away from the water and attached to a ladder lying on the floor, but during the morning it was pulled up, together with the ladder, and caused serious entanglement with the other lines. We tried communication by revolver shots but got no response. So the morning wore on, and it is of this period about mid-day that I have the liveliest recollections. We sat on the rocks, not far from the entrance to the passage and talked of many things, but the possibilities and probabilities of the situation were always uppermost in our minds. Time after time Booth and Hazard descended the slope and made their way along the chamber and we could see the light of their lamp amid what seemed to be an Inferno of waters. Then they would return with dripping oilskins and nothing to report but an increase of the fall and the impossibility of signalling to those on the surface. It is no easy task to do full justice to the scene, when the flood was at its height. Standing on the Boulder Slope and looking along the Great Chamber towards the torrent it was difficult to realize that we were so near civilization. A situation like ours seemed impossible in this country, and despite the discomforts, we could not help feeling somewhat elated at the strange and unique sight we were privileged to witness. The Great Chamiber is at all times impressive and forms, surely, one of the most wonderful natural curiosities in this country, but no one who has not seen it as we did can form an idea of its appearance in time of flood. The noise of the Waterfall gradually increased from its usual rush until it became a roar like the discharge of heavy artillery, and from where we stood the whole Main Shaft appeared filled with water and the light was reduced to a dull glimmer.

A wall of spray rose from floor to roof and spread like
" curtain right across the cavern to the opposite wall. At we point on the left of the Main Shaft another waturfall, white and foaming, sprang out from the roof where there is usually only a slight trickle. This fall, which had never previously been observed, appears to llow from the water that enters a low passage in the right lounk of the beck about half way between the Main Ilole wnd the Camp and only fills up in time of flood. 'llu Waterfall (in the Main Shaft) acted like a force pmini, (lriving the air and spray through the passages, bithrating cererything with moisture, and the intense cold Dinusul ly the draught was the most unpleasant feature of the miluration.
Ot the lioulder Slope we noticed a curious phenommon: llic light from a single candle was sufficient to illuminmte: the end of the chamber right up to the roof, mul the: bands of spar on the walls stood out clear and will-k:linecl. This was probably due to reflection from the inmunurable drops of spray which filled the whole chamber.
II in diflic.ult to say how we spent the next few hours, lout Ilu rest we had obtained in the morning, disturbed thomin it was, had done us good, and with the knowledge that in:tromg and experienced party, in charge of Leach, won doing its utmost on our behalf up above, our spirits rom viry considerably. Moreover every one realised that there wats little danger from the water, as we were 45 low incove the floor of the chamber, and at the height of the hlood, the depth of water did not exceed 3 feet. There was it roaring torrent about 25 feet wide running from the pool leclow the Main Shaft to the Boulder Slope and diwnpearing amongst the stones, and, whatever its comme, the channel seemed wide enough to cope with this Howit ill remin.
Thw flowel increased right up to mid-day, and it was not mmil ilwout $3-0$ p.m. that a change was first noticed. Thw mi:u of the Waterfall diminished and the booming homid prulually ceased. Scen from the Boulder Slope the fall mermed to be slowly resolving itself into two sections, than tronn liwe Main shaft on the right being much the
heavier. The conditions in the Great Chamber became better and the amount of spray less, the draught, which had troubled us so much in the morning, was now scarcely noticeable, and things began to look so much brighter that we indulged in song under the leadership of Booth, whose energies never seemed to flag for a moment.

Half-hourly visits were paid to the Main Shaft but without result until 7 p.m., when Booth returned with a cigar box which he had found floating in the pool. It had no lid and we concluded that the message it had no doubt contained was probably lying under three feet of water, but a keen eyed member of the party saw something written on the side and with some difficulty we deciphered the dim characters and learnt that the weather at 6 p.m. was fine, the water going down and an effort was to be made to get us out that night. This naturally raised our hopes, but another long period of waiting ensued, no ropes appeared, and we decided to inspect the Shaft again at 8-30 p.m., and if there were no further signs of rescue, to turn in and make ourselves comfortable for the night.

Our food stores had been very considerably replenished by the further supply brought down by Booth, but the stock of candles was diminishing rather rapidly in spite of Barstow's gallant efforts to utilise all waste material. Horn and I then set off along the passage to select a good sleeping place, and found a recess in the right-hand wall which promised well, and with the aid of a few stones built a screen sufficient to keep off the draught.

At 9-o p.m. Booth and Hazard descended the Boulder Slope for a ifinal inspection, but their signal whistles met with no response at the moment, and they had just returned to the passage when a gunshot was heard, and we rushed on to the Boulder Slope and saw the Main Shaft brilliantly illuminated for an instant with burning magnesium. It was obvious that attempts were being made to attract our attention, and Booth and Hazard hurried down into the Great Chamber once more and quickly reached the Waterfall. A long time seemed to elapse, and the distant whistles and the light of the lamp in the midst of the falling water added strangely to the weirdness of the scene.

Our hopes rose high when we were able to make out in H1: floom that a rope had been secured. Then came moulher wait, and Booth at length returned with a sack of provisions, and announced, to our astonishment, that Inぃard had gone up on the chair. What was possible for one min was obviously possible for the rest, and almost before we had begun to realize that our term of imprisonment was at an end we were making ready for the nucell. Chappell joined Booth at the Main Shaft, and nfter " further spell of waiting, the chair was observed once more lying against the wall. The weight of water was still grent, si) we dispensed with the life line in order to avoid the risk of entanglement and consequent stoppage, but with a now wimllass rope and the additional security of a strong lonther belt all possibility of danger was removed. No thought wis given to our various possessions and they were loll lying on the floor of the passage, to be rescued later, und 'onc by onc we made the ascent. A journey under mich comolitions and through 300 feet of waterfall could harilly lail to be exciting, but it proved strangely devoid of nonn:ulion. lior the first 50 feet the glare of the lamp Wha viailk:, intensified by the spray; then came darkness nud lur rush of water and the chair revolved rapidly, but there wore none of those unpleasant effects which nccomprany this motion in daylight; then a gleam of lighlirom the Hare-lamp suspended far overhead, and the walls of the shaft began to take shape; then an orrusiomul bump into the rock and a rebound into space menin: und now the last roo feet and the passage thromph the full force of the water from the Side Waterfall, the wher of which was like a shower of stones beating oll holmel and oilskins! Out of it for a moment as the chair mwing to the wall, then into the deluge again until Hu whinh of water was well nigh overpowering! A minlilull wilence, al glare of light and the jib was reached, it chery welcome echoed along the passage as oilskins and mons wete discarded, and we stepped out on to the moor, mbilil "perspiring land, working might and main at the whilluss, and regained the comforts of the camp.

At midnikht, Booth, the last man, reached the surface
and then for the first time we learnt of the happenings above ground since our descent nearly forty hours before. The exploring party had reached the surface safely and a pleasant evening was passed round the camp fire. Rain came on at midnight and, as it continued, numerous attempts were made to communicate with us by telephone, but they all failed, as we were at that time far away from the instrument. After Booth's descent the beck rose very rapidly and the efforts made to build a dam were, perforce, soon abandoned as the Side Passage quickly became flooded and unsafe. At mid-day the flood was at its height, the beck rushed over the windlass platform, and it became necessary to secure the windlass with ropes to avoid the possibility of its being carried away. Nothing could be done until the beck abated and then the whole party set to work to build a dam and clear the Side Passage. A large board, intended primarily for a table top, was fixed across the entrance to the passage, and held in position with sods piled up on either side. After much exertion the stream was diverted and the Side Passage rendered comparatively dry, but even then the water battered against the dam so much that it became a question whether it would hold. However the stream was now falling rapidly, and towards evening there appeared a prospect of releasing the imprisoned party, but when darkness came on the chance of accomplishing this seemed remote. Ropes and messages had been sent down at frequent intervals during the day without attracting the attention of those below, and at $9 \mathrm{p} . \mathrm{m}$. it was decided to lower a stock of provisions on the chair and postpone attempts to get the party out until the following morning. Mr. Metcalfe of Clapdale kindly lent his gun and it was fired into the Main Hole, burning magnesium was thrown down and the chair lowered. But, as already stated, the party below, having once secured the chair, took matters into their own hands, and the appearance of Hazard, when the rope was wound up again, was a welcome surprise to those on the surface.

On Tuesday morning several members descended
the shaft and recovered the abandoned tackle, but operations were brought to a sudden stop by the approach of a thunderstorm, and with the departure of most of the party that day one of the most eventful expeditions yet made to Gaping Ghyll was brought to a close.

While it lasted the incident was sufficiently exciting, possibly even unpleasant, but no one was any the worse for the adventure, and the reward for a few hours of discomfort was a sight such as none of us may ever witness again.


In Memoriam: Langton Samuel Calvert
" Death cannot Eill wihat never dies. . . . This is the Comfort of Friends, that though they may be said to Die, yet their Friendship and Society' are, in the best sense, ever present, because Immortal."-William Penn.
The sudden death of the Rev. L. S. Calvert on July 20th, 1909, at Eastrington Vicarage, Yorkshire, came as a shock to all members of the Club. It was known that his health had been indifferent for some time previously, but it was hoped that he had recovered from his illness, and this hope was encouraged when, at the Annual Dinner in Feb. 1909, his last public appearance amongst us, he appeared to have shaken off the lassitude of ill-health. All who were present on that occasion will remember his genial and witty speech and the pleasure he evidently felt in his association with the Club. That he ever realised the measure of affectionate regard which he inspired is doubtful, for his kindly nature was more attuned to giving than receiving.

The sense of personal loss to all who were brought into relation with him is deep and lasting, and his passing from our midst will leave a blank that will endure; but in the hearts of all who knew him there will ever remain the gracious memory of a singularly attractive personality, a true man and a Christian gentleman.
Langton Samuel Calvert was born in 1850. He took his degree at Trinity College, Dublin, and entering the scholastic profession, was appointed second master at Donnington Grammar School in Lincolnshire, under the Head-mastership of Dr. Constable. He took orders in 1876, and after a short period at Donnington, was appointed Senior Mathematical Lecturer at St. Mark's College, Chelsea. In 1878 he was appointed Head Master of Batley Grammar School, an appointment which he held, with honour and success, for a period of thirty years. Immediately upon his settlement in Batley he married Miss Constable, daughter of Dr. Constable of Donnington, His was a busy life at Batley and extended over a wide range of interests. For 23 years he was Chaplain of the King's Own Yorkshire Light Infantry and Brigade Chaplain of the West Humber Brigade for the last four years of his life. For his services he received the V.D. in 1907.

Keenly interested in music, he was for 25 years an active member of the Handel Festival Chorus, and during that
period sang at every Festival, except one, when he was absent through illness. He was also present at the Festival in June, 1909, a month prior to his death. Of his musical abilities we have pleasant recollections and at the Annual Dinner a song from Calvert was an institution. Another of his many interests was Freemasonry, and he duly filled the office of Worshipful Master of his Lodge No. 208, Dewsbury, and was appointed Provincial Grand Chaplain of West Yorkshire in 1896.

Embued with a love of nature and the mountains, his interest in all concerning mountaineering was constant and abiding, and his death will be heard of with real sorrow in the Alpine village of Saas Grund, where for many successive years he spent his holidays. Here, too, his magnetic personality made itself felt and throughout the district he was dubbed in affectionate jest " The King of Saas." From time to time, by papers read before the Club, he has made us sharers in the pleasure he found there, and his ever present sense of comradeship and genial humour rendered any contribution from him an enjoyment to all. He visited Saas Grund each season from 1883 to 1897 and climbed so many of the neighbouring peaks that he became a recognised authority, and was asked by Mr. Whymper to look over the proof sheets of his guide book to that district. In 1899 and 1900 he visited Cortina, where he went up Col Rosa by the face and traversed the Kleine Zinne. In 1901 with some friends he traversed the Northern portion of the Albula District, making observations for the 2nd Edition of Ball's Alpine Guide. 'The seasons of 1902-3-4-5 were spent at Saas Grund. He was elected to the Alpine Club in 1895.
It is, however, as a Rambler, that we, who were bound to him by so many ties of kindly deed and thought, shall remember him best. The opportunities which his constant attendance at our gatherings gave us of intimate association with him, served but to reveal the pure gold of his character and his genius for friendship. His catholicity of mind, genial presence and unselfish capacity to enter into the interests of others, invited confidences and many found in him a staunch friend and counsellor in difficulty.

His ready help in the affairs of the Club as Committee-man, Vice-President and President, are in the recollection of all. His diffidence in the acceptance of the Presidency was characteristic, but it is gratifying to remember that in yielding to the pressure put upon him, he realised a little of the esteem and affection in which we held him, and it is good to remember
that in the dark days of his illness and depression the sense of our comradeship was a matter very near his heart.

Now the Great Silence has fallen, but there remains a fragrance, the memory of sunny days, the remembrance of a great heart whose life was an influence and challenge, calling out the best in his fellows. Such legacies as these are a rich inheritance, and of such as leave them it is true that they leave the world better than they found it.
A. C.

## CHIPPINGS.

Derwentwater-The Annual Report, (1908-9), of the National Trust for Places of Historic Interest or National Beauty records the extension of the Trust's property on Derwentwater. The additional land which has now been conveyed to the Trust extends from the Brandelhow Lead Mine to. the River Derwent, and is ninety-two acres in extent. This addition brings the total area of the land on the shore of Derwentwater belonging to the Trust up to two hundred acres, while of the actual shore of the lake something like a quarter is now open to the public, accessible from land and water. In this connection, the fact may be recalled that before the purchase of Brandelhow there were only two or three landing places open to general use, and on no part of the lake shore could visitors land and picnic as of right. It is boped that eventually a right of way may be secured leading from the Trust's land at Great Bay across the River Derwent to the public road at Lodore. Hitherto it has been necessary for anyone making the circuit of the lake to go to Grange, and to cross the river by the bridge there. But if the suggested path could be made, it will be possible to leave the high road near Fawe Park and to go by foot-path round the lake from l'ortinscale to Lodore. The property includes nine acres of the lake with the manorial and fishing rights. The Trust has allso entered into a contract for the purchase, for $£ 200$, from Lord Leconfield, of a right of navigation over his third share of the lake, and a right of erecting piers and landing stages at any point on his manorial property. Donations for this object are invited. The Town Council of Keswick is buying navigation rights on the other side of the lake, and when these two purchases are completed, all question as to the right of public navigation on the lake will be at an end, and the Trust as a riparian owner will be able to make provision for the convenient use of its shores by boating parties.
(iowbarrow-The same Trust had hoped that the Ullswater Sle:umboat Company would have been willing to make arrangements for their steamers to call at Gowbarrow. Unfortunately, He l Directors hold the view that to do so would not be compatible with the interests of the shareholders. The Council regret the docision, as, if accessible by steamer, Gowbarrow Fell and

Aira Force would be brought within an easy distance of places frequented by visitors, to whom a visit to the National Trust land now entails a long journey round the lake.

Windermere-Those who care for the beauty of Windermere have been much disturbed by the proposal to construct in close proximity to the lake enlarged works for the disposal of the sewage of the towns of Windermere and Bowness. Since 1895 the sewage of Bowness has been treated at Braithwaite Fold, near Ferry Nab, where a system of settling and filtration tanks has been constructed. These have proved a source of considerable nuisance to residents and visitors. But it is now proposed to amalgamate the sewage system of Windermere with that of Bowness, and for this purpose to extend very largely the existing system. Considering the rapid development of the district, the Trust would gladly see the adoption of a comprehensive policy by the various towns of the district-Bowness, Windermere, Troutbeck, Ambleside, and Grasmere-for the joint drainage of all their sewage into the sea; but if the time is not yet ripe for such a solution of the problem, the whole of the sewage should at least be taken to a much more distant and less frequented site.
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Borrowdale-The same Trust is now appealing for a sum of $£ 2,400$ with which to purchase 320 acres of freehold land in Borrowdale, together with the Bowder Stone and its adjacent cottage, 46 parts or shares in the Wheyfoot Quarry and the foreshore and bank of the River Derwent for more than a mile. The property was bought some time ago by some friends of the Society for $£ 77 \mathrm{~s}$. an acre, (which compares very favourably with the $£ 60$ an acre paid for Brandelhow), and they have given the Society the option of purchase at cost price, (the balance of $£ 260$ is for preliminary expenses), until the end of the year. Members need not to be told of the beauty of the site, and until Government can afford to make Lakeland into a National Park, or at any rate, buy out the mineral and water rights, there is no other way of securing such places for the public. Subscriptions can be sent to Canon Rawnsley, Crosthwaite Vicarage, Keswick.

Geology-The still vext question whether the present forms of mountains and valleys are due to glacial erosion is exhaustively treated by Prof. Wm. Morris Davis in a paper on
"Glacial Erosion in North Wales," read before the Geological Society and printed in its Quarterly Journal (Vol. 65, pp. 281 350). The learned author gives a detailed account of the orographical features of the Snowdon range and discusses them in the light of the rival theories of the glacial erosionists and the anti-glacial erosionists as to the part played by glaciers, without himself pronouncing in favour of either. Those who climb with their heads as well as their feet will find the paper most instructive.

The same Journal for November 1909, contains interesting papers illustrated by many photographs, maps and sections: (a) on the country round Plynlimmon and Pont Erwyd in Wales, which shew several points of agreement with the Stockdale series of the Lake District, especially with what is known as the argenteus zone stretching from Broughton-in-Furness to Cautley near Sedbergh; (b) on the carboniferous limestone of County Clare, which appears to be like that of the Clitheroe district near Pendle; (c) on the topography of the Howgate liells near Sedbergh and (d) on the volcanic geology of Cilencoe.
(iaping Ghyll-The Bradford Scientific Journal, No. 22, (1)enry Gaskarth, 11, Sunbridge Road, Bradford, 6d.), contains 14 descriptive account of Gaping Ghyll by Cuthbert Hastings, whicll, as might be expected, is eminently practical and rampincing.
lianiles's Nest Ridge Accident-The details of the fatal Marident to Mr. Thomas James Rennison on the 27th Sept., 190\%, are so fully described in the Journal of the Fell and hork Climbing Club, (No. 3), that it is unnecessary to repeat thom hure. The climb is one of extreme difficulty and it neems duubtful whether Mr. Rennison was in sufficiently good hmalil in make it justifiable. The result should be one more warning to climbers of the duty they owe to others, and to bon of the finest of sports.

Hiv Ilial Road-We observe, with regret, that the propmonal to make a carriage road over Sty-head from Sellliwnitu to Wasdale Head has again been brought forward, mil houe with everyone who really knows and loves the Lakes ihat il will mot be carried out.

Music-The following song, sung at the Annual Dinner on 20th Feb., 1909, seems to merit a wider audience:-


Forty in round numbers are
England's counties great and small
And of these shall ever stand
Yorkshire, greatest of them all;
Shouldering the stalwart North,
Buttress staunch and true is she;
Is there county can compare
With her of the Ridings three?
Chorus.--Herc's a health, then, lads of the Ridings three,
To the broad acred shire in the North Countree;
Here's a health to bonnie Yorkshire and all that she enfolds.
From the Humber to the Tees, from the Pennines to the Wolds.
Here's a health, here's a health to Yorkshire!
From her battlemented cliffs
Facing eastward to the sea,
To her high fells in the west
Guarding moorlands in their lee,
Nature's graces lie revealed
In profusion wide and free;
Gifts of God to win and charm
All she holds in simple fee.
Chorus-Here's a health, then, lads. \&c.
Briton, Roman, Saxon, Dane,
All have known her magic spell,
Loved her, spread her fame abroad,
Made the history we tell:
On her honoured roll of fame
We may read who loved her well-
Saint and soldier, prince and peer,
And the lads of dale and fell.
Chorus-Here's a health, then, lads, \&c.

And as time doth roll along,
Shall her sons unworthy prove
Of the high inheritance
Long descended of her love?
Never whilst the waves recoil,
Beaten from her rugged coast
Never whilst her litls do stand
Shall she cease to be our boast.
Chorus-Here's a health, then, ads, \&c.

Tail Pieces: -The tail-pieces in this number, which we owe to the pencil of Mr. Eric Greenwood, recall pleasant memories of Cogne (pp. $16 \& 40$ ), Zermatt (pp. $30 \& 65$ ), Courmayeur (p. 48), Susa (p. 77), Cortina (p. $80 \& 91$ ), and Pralognan (p. 118).
$\qquad$
Back Numbers:-These can be obtained from the Hon. Librarian (Mr. J. H. Buckley, 168, Wellington Street, Leeds). Price: Nos. 1, 3, 4, 6, 7 and 8, 2s. each, No. 2, 10s., No. 5, 5 s .; also specially designed green buckram binding cases for the two volumes, 2 s . each. Postage extra. $25 \%$ reduction to members.


## KINDRED CLUB JOURNALS.

It is thought that the following summary of the principal contents of other Club Journals, published since our last number was issued, may be interesting to members:-

The Alpine Journal.
(Longmans, Green \& Co., 39, Paternoster Row, London. 2s. od.)

$$
\text { No. 184. May } 1909 .
$$

The Rosengarten Dolomites ... Edward A. Broome. Two Days with a Guide ... G. Winthrop Young.
Traverse of the Dôme de la Sache
and Mont Pourri ... W. N. Ling.
The Gletscherhorn ... ... H. C. Bowen.
A Week in the Selkirks with the
Alpine Club of Canada
G. E. Howard.

In Memoriam:-
Sir Hy. Bergne ... Sir W. Edward Davidson.
Count Hy. Russell-Killough W. P. Haskett Smith.
Arthur Gilbert Girdlestone ... W. H. Gover.
No. 185. August, 1909.
The Middle Age of a Mountaineer Claud Schuster. Mountaineering on Ski ... E. Russell Clarke.
Climbing on Lliwedd
... A. W. Andrews.
No. 186. November, 1909.
Col des Cristaux
... .. J. J. Withers.
The Dent Blanche by the East

$$
\text { Ridge } \ldots . . .
$$

Nineteen Days in Corsica ... T. G. Ouston.
A Night on the Sustenhorn
... H. V. Reade.
In Memoriam:-
Rev. L. S. Calvert
.. A. H, Tubby.
Henry Pasteur ...
... Rt. Hon. Sir Alfred Wills.

No. 187. February, 1910.
Between he Inn and the Adda ... E. L. Strutt.
With the Canadian Alpine Club :-

1. The Club House and the Camp.
2. The Yoho Expedition ... Harold B. Dixon.

Dr. Longstaft's Expedition to the Karakoram.
Mt. Kolahoi and its Northern

## Glacier

.. Ernest F. Neve.
Gabelhörner Grat
...
... Edward A. Broome.

In Memoriam:-

| J. J. Hornby ... | $\ldots$ | Douglas W. Freshfield. |
| :--- | :--- | :--- |
| Eustace Hulton | $\ldots$ | Charles Pilkington. |
| Daniel Maquignaz | $\ldots$ | J. P. Farrar. |

The Rucksack Club Journal.
(Chas. H. Barber, 24, St. Ann Street, Manchester. Is. od.)
Vol. 1. No. 3. March, 1909.
A Day on the Ober Gabelhorn ... L. J. Oppenheimer.
Peak Bagging on Snowdonia
Seven in the Alps
.. W. Broxap.
A Whitsuntide Fragment
Two of Them.

Ode to a Novice
Chas H. Ashley.
Hich ... R. W.
... W. Forbes Boyd
N. W. Climb, Pillar Rock ... J. Anton Stoop.

A Wild Day in Highest Yorkshire R. B. Brierley.
Rock Climbs at Arrochar
R. B. Brierley.
A. G. Woodhead.

Arctic Conditions in the Lake
District
. A. E. Barker.
In Memoriam :-L. $\dddot{\mathrm{P}}$. Scott.
The Climbers' Club Journal.
(George Philip \& Son, 32, Fleet Street, London. 2s. od.)

$$
\text { No. 43. March, } 1909 .
$$

The Oberland from End to End on Ski
... ...
East Peak of Lliwedd-The
Avalanche Route $\quad .$. J. M. A. Thompson.
1)erbyshire Pennine Club Notes, 1909.

No. 44. June, 1909.
Notes from Capel Curig ... P. A. Thompson.
Traverse of the E. face of Tryfaen.
Regarding some "Ogwen" climbs Henry Bishop.
New Climbs on Glyder Fawr.
Knots with the Lay...
... O. Eckenstein.
Derbyshire Pennine Club Notes, May 1909.

$$
\text { No. 45. September, } 1909 .
$$

New Climbs in Coire Labain, Skye G. Barlow \& H. B. Buckle.
June Days in the Coolins
E. W. Steeple.

The Moors in Mooulight and Mist H. Bishop.

Two Great Hill Walkers .. W. P. Haskett Smith
Derbyshire Pennine Club Notes, August 1909.
New Climbs:-

> Lliwedd East Peak ... H. O. Jones. North Buttress, Tryfaen F. C. Aldous and others.

The Scottish Mountaineering Club Journal. (Douglas \& Foulis, Edinburgh, rs. od.)
Vol. 10. No. 58. January, 1909.
A Climb on Stack Polly
G. A. Solly

The North Buttress of Carn Dearg Harold Raeburn
The Ben Alder Group ... William Garden
Midsummer Days in Skye ... Francis Greig.
The Mamore Forest Group ... W. C. S.
An Sgarsoch ... ... W. Garden.
Braemar to Blair Atholl.

$$
\text { Vol. 10. No. 59. May, } 1909 .
$$

Suilven ...
... ... H. MacRobert.

The Cliffs of Stob Coire an Lochan W. Inglis Clark.
Drumochter ... ... F: S. Goggs.
The Meikle Benn with Lanterns W. W. N.
Ski-ing in the Monadbliaths .. W. W. N.
The Ladies' Scottish Climbing Club.
Vol. 10. No. 60. September, 1909.

Courage in Climbing
... W. W. Naismith.
Ski-Running in Scotland
Photography in Colours for Mountaineers
...
The Berries of Scotland
Ski-Running on Dpeside
An Avalanche Experience on Ben

## Achalladar

Coruisk...
$\ldots$ ...
Cairnwell and Glas Thulachan
Groups ... ...
Groups $\cdots$
...
Western Buttress of Sron na Ciche,
Sgurr Sgumain, Skye ... E. W. Steeple.
Vol. 11. No. 61. February, 1910.
Wm. Douglas, Honorary Editor, 1892-1909.
J. Rennie.

The Coming of Age of the S. M. $\ldots$. Gilbert Thomson.

A' Chioch in Applecross
Beinn Lair and Beinn Airidh a'

## Charr

...
,
... W. N. Ling
Loch Spey and Glen Roy … A. Fraser
Carn nan Gabhar of Ben-y-Gloe J. H. Bell

The Cairngorm Club Journal.

> (D. Wyllie \& Son, Aberdeen. rs. od.)

Vol. 6. No. 34. January, 1910.
Sir John Murray's Survey of the
Cairngorm Locbs
. C. G. Cash.
The Cairngorm Parishes and the (Old)
Statistical Account of Scotland C. G. Cash.
Twenty One Years of our Club ... James Gray Kyd.
A Week End in Snowdonia ... Wm. Barclay.
Lammermoor Glens...
... Rev. Wm. Mc'Connachie.
Seven Days Tramping in the
Highlands
... Thomas Stell.
Excursions and Notes:-Accommodation for Mounitaineers in the Highlands-The Aberdeen Touring Club-Afforestation.

The Alpine Ski-club Annual.
^ Record of Winter Mountaineering, by members of the Alpine Ski-Club.
(Horace Marshail \& Son, 125, Fleet Street, London, E.C. 2s. od.)

$$
\text { No. 1. 1908, } 86 \text { pp. }
$$

The Aims of the Alpine Ski-Club.
Ski-Running among the High Alps F. F. Roget.
A Raid on Ski among the High
Alps
.. F. F. Roget.

1. The Aiguilles du Chardonnet and du Tour.
2. The Grand Combin.
'I'le: Wildstrubel and Wildhorn on
Ski ...
.
Rurollections
wo Winter Climbs above Zermatt
Furggrat
.. F. A. M. Noelting.
Niderpass ... . ... C. Scott Lindsay.
'I'wo Expeditions by a Novice ... W, A. M. Moore.
'Iha Holmenkollen Ski-Jumping
Competition ...
Norman Hind.

Some Unexplored Ways in the
Winter Alps ...
possibilities of Christiania
On the Pronunciation of the word "Ski"
..W. Rickmer Rickmers, A.C.
Four Days on Ski ... ... Arnold H. M. Lunn.

$$
\text { No. 2. 1909. } 86 \text { pp. }
$$

Two Guideless Ascents in Winter O. D. Tauern.

1. Monte Rosa.
2. The Blindenhorn.

From Zinal to Zerm
An Easter Holiday in Norway
At Random. Two Avalanches...
W. A. M. Moore

At Random. Two Avalanches. C. Scolt Lindsay.

The Oberland from End to End W. R. Rickmers, A.C.

Concerning Avalanches and Security
Therefrom

.. F. A. M. Noelting, A.C.
Alpine Notes, Annual Dinner, Reviews. Officers, Committee and Rules of the Alpine Ski-Club.

The Journal of the Fell and Rock Climbing Club of the Endílish Lake District.

Edited by Edward Scantlebury.
(To be obtained from the Editor. Ulverston, Lancs. 2s. od.)

$$
\text { Vol. 1. No. 3, } 1909 .
$$

The Pillar Rock of Ennerdale. (Colour Reproduction.) An Adventure on the Rocky
Mountains
Dr. A. W. Wakefield.

Doe Crag and John Robinson
Some Early Recollections
W. P. Haskett Smith.

Godfrey A. Solly
In the Abbey Precincts-Dawn... Canon Rawnsley.
The Lake District ... ... Claude E. Benson
Reminiscences of a few days climbing

## in the Fell Country <br> . W. C. Slingsby.

"A" Buttress, Doe Crag
The Trippercrock ... ... Claude E. Benson.
Stray Leaves from the Diary of a
Wasdale Camper
Warnings
...

In Memoriam : Andrew Sisson
Thomson ... ... G. D. Abraham.

A Wintry Dawn
... Wm. T. Palmer.
The Fatal Accident on Great Gable.
Year Book of the Ski Club of Great Britain. (W. J. Hutchings, Hillingdon Press, Uxbridge, W. Is. od.

By Post, Is. $3^{\mathrm{d}}$,
1909. Vol. 1. No. 5:

Editorial Notes. Near Manchester. Ski-Running in Great Britain. [This is an account of Mr. Wingfield's Ski-Run mentioned in Member's Holidays].
Ski-Running in South Wales. A Day's Expedition from London. Club Tour in Montenegro. On Ski in Turkey. Avalanche Accidents. The Song of the Ski. How to learn to run without using the stick. Continental Reports. Ski-ing Centres. A Five Days' Expedition from Montana. Tips and Dodges. A New Binding. A Summer Ski Tour. A Note on the Early History of Ski. Reviews and Notices. Meetings and Dinners. Accounts, Rules and Bye-Laws. List of Members.

The Hon. Librarian also begs to acknowledge receipt of the following Journals which may be seen at the Club Rooms, 10, Park Street, Leeds:-

Deutsche und Oesterreichen Alpen Verein: (D.u. Oe. A. V.), Monthly and Annual Journal,

Club Alpino Italiano (C. A. J.): Rivista Mensile.


## MEMBERS' HOLIDAYS IN 1909.

It has been suggested that the following short particulars of how some members spent their holidays would be of interest, and perhaps of use to others, and it is hoped that even more will contribute their experiences in future.
Dr. Tempest Anderson :-Made an extended tour round the World with volcanoes as his principal objective. The following is a summary of his trip:-

Nov. 13 1908: New Zealand viâ Teneriffe and the Cape. The Cold Lakes in South Island. Cruise to the Sounds. The Wauganui River. Rotorua. Wairaki and the Hot Lakes in North Island.
March 30 1909: Auckland to Tongatabu (Friendly Islands). Vavau and thence to Apia (German Samoa). Spent nearly a month at the Island of Savaii (German Samoa) for a visit to the Volcano Matavanu. Returned to Apia and thence to Levuka and Suva in Fiji Islands.
May 17: Suva to Honolulu (Hawaian Islands). Spent two months in the Hawaian Islands with three weeks at Volcano House, Kilauea, and an ascen of Haleakalá (a night in the crater) in Maui.
July 20: Honolulu to Vancouver, B. C. Spent four weeks in the Canadian Rockies on the way to Winnipeg Meeting of British Association. Home vià Montreal, Quebec and Liverpool.
G. Winthrop Young :- Was climbing in the Oberland and at Chamonix :-
Aug. 1. Unter Bächhorn: Traverse and first ascent by S . ridge.
Aug. 4. Nesthorn: Traverse and first ascent by E. ridge (21 hours).
Aug. 7. Finsteraarhorn: Traverse by S.E. and N.W. ridges. From Concordia Hut and back ( 17 hours).

Aug. 9. Jungfrau from the S. Descent to Bel Alp (18 hours).

All these without guides. The following with Joseph Knubel as guide:-
Aug. 13. Aiguille Verte: Traverse and descent by the Moine Ridge.

Aug. 15-19. Bivouac for the Aiguille du Grépon. Ascent by the E. face (partial), and the Col des Nantillons (partial first ascent from the Mer de Glace, beaten by storm 600 ft . below the Col.)

Aug. 21. Aiguille de Chardonnet: Traverse from S. to N.
Aug. 24. Aiguille du Grépon: Traverse (icy conditions).
Aug. 30. Traverse of the Weisshorn, first ascent of the N.E. corner from the Bies Glacier.
J. J. Brigg and W. A. Brigg:-With Mr. Eric Greenwood, spent the first fortnight of August in the Tarentaise and had "three fine days and a thunderstorm" kind of weather.
Aug. 1. Modane to Plan Sec Chalets. Dent Parrachée and by Col de l'Arpont to Pralognan.
Aug. 4. Grande Casse by ordinary route in high wind, and walked next day by the Vallon de la Leisse and the Col de Fresse to Val d'Isére, where they found the Hotel Moris as comfortable as ever and at times full.
Aug. 8. Up and down the Tstanteleina from the Hotel before lunch.
Aug. 11. Drove down to Les Brévières, slept at the Granges de Martin and (with Fréderic Rond of Fornet as guide) traversed the Mont Pourri from the Breche Puiseux and down to Ste Foy. (H. Mt. Iseran).
Aug. 13. Ste Foy to St. Bernard Hospice by Le Châtelard and, through mistaking the route, the Traversette Forts; Courmayeur, two nights at the Refugio Torino on the Col du Geant in bad weather and to Montanvert in heavy rain.
W. A. Brigg was also at the Clachaig Inn in Glencoe at Easter with Messrs. Haskett Smith, Greenwood and Scott Tucker, and climbed Bidein nam Bian and with Messrs. If. Raeburn of the S.M.C., and Scott Tucker the gully to the N. of the Crowberry Ridge of Buchaille Etive. (second ascent), under very bad conditions. "The old snow in the gully was good and firm, but it was snowing nearly ail the time, and the fresh snow kept pouring down and was heavy enough to sweep out the party without careful hitching. The pitches near the top were difficult owing to ice on slabby rocks. The last pitch was turned by a traverse which was somewhat difficult under the prevailing conditions. The climb took four hours and twenty minutes." (S.M.C. Journal, x. 342).

At Torver in September with Messrs. W. P. Haskett Smith and Eric Greenwood and climbed Great Gally and Woodhouse's Climb in Dow Crags.
J. J. Brigg was also in Madeira in January and camping in the Holy Land and Philistia in Spring.
G. W. Lloyd :-Spent a fortnight in the Tarentaise and Riffel Alp with the Rev. E. A. Aldridge.
Aug. 4. Dent Parrachée from the Plan Sec Chalets with a guide-turned back within 20 mins. of the top owing to the extremely cold wind and came down to Termignon.

Aug. 4. Termignon to Bonneval.
Aug. 6. Bonneval to Val' d'Isére by Col d'Iseríp.
Aug. 7. From Val d'Isére ascended Pointe dé la Galise and by Col de la Galise to Ceresole.

Aug. 16-25. At the Riffel Alp: Climbed the Riffel Horn (a) by the Sky Line Route (with a party of five), (b) by the Ordinary route with two others, (c) from the Gorner Glacier by the more Easterly of the two chimneys (with guide).

From the Riffel Alp by Findelen Glacier to Stockhorn-and along the Hohthaligrat and Gornergrat with five others and a guide.

From the Riffel Alp to the Théodule Pass, along the Furggengrat to the Furgg-joch and Breuil and returned by Théodule Pass. Furggengrat, returning by Schwarz-See (with a party of five and a guide).

Sept. 26-27. Ingleborough and Clapham Cave.
E. E. Roberts:-April 24. Survey of Hardraw Kin (Far Douk) to top of first pitch (with Payne and Erik Addyman).

May 30-31. Gaping Ghyll.
June 3 and Sept. 19. Sunset Hole: Passage leading underneath Braithwaite Wife Sink Hole explored, drop 100ft., length 600 yards (with Addyman).

August 4-16. In the Mont Blanc Range with Messrs. Davidson, Oppenheimer and Fox: Climbed the Pic du Tacul, several points on the ridge of the Charmoz and the Dent du Géant (in a thunderstorm), and traversed Mont Blanc from the Dôme Hut.

June. Walker's Gully, Shamrock Chimney, \&c., with , F Botterill.
A. E. Horn :-June, 1908. Whitsuntide Camp at Braida Garth, Kingsdale:-Bull Pot and Jingling Pot (with C. R. Barran, H. Brodrick, J. H. Buckley, L. Chappell, C. Hastings, G. L. Hudson, Lewis Moore, W. Robertshaw, P. Robinson and A. Rule).

September 1908. Club Meet at Kirkby Lonsdale:Rumbling Hole (with Booth, Buckley, Seatree and Wingfield); Gavel Pot (with Booth, Parsons, Seatree and Wingfield).
H. Brodrick:-Easter, 1909. Cong, Co. Galway, Ireland, with Belas, Bassett, Hicks, Rule, C. A. Hill and B. P. Hill, exploring caves and pots between Lough Mask and Lough Corrib. Descended several pots, none of a greater depth than 80 ft ., also several caves. Pidgeon Hole (Clonbur), Ballymaglancy Cave, Cat's Cave, Captain Webb's Hole (45ft.), Kelly Cave, Pidgeon Hole (75ft.), Trou Sans Nom (90ft.), 60 ft . pot, four pots near Lough Mask, about 50 ft . deep, and The Lady's Buttery and Horse Discovery. Owing to the flooded condition of the country complete exploration of many of the caves was impossible.

August, 1909. With Ireland and Rule at Zermatt. Weather very bad for big excursions, spent most of our time walking and glacier pottering. Brodrick and Rule did the Mettelhorn, the Wellenküppe being impossible owing to fresh snow. After Brodrick left, Rule crossed the Alphubel to Saas Fee, joining Ireland at Stalden. Rule and Ireland then went on to Chamonix.
W. H. Greenwood:-New Year. Snow Gullies on Ben Nevis and Carn Dearg.
Easter. At Ogwen. Tryfen Buttresses-North, Central, South, Milestone. Idwal Slabs, Clogwyn Du Gully.

Whitsuntide. Wasdale Head-Moss Ghyll, Pinnacle, Eagle's Nest Ridge, Needle Ridge, Arrowhead Ridge.
Midsummer. First "Round Tour" at Gaping Ghyll, i.e. entrance by new "Flood Entrance" and exit by Main Shaft.

Midsummer. North Wales-Hanging Garden Gully, East Gully, Glyder Fawr, Great Gully, Craig yr Ysfa, Slanting Gully.
Midsummer. At Arolla-Pigne d'Arolla, Dent de Sitarme (wretched weather), Petites Dents de Veisivi (including direct ascent, the second recorded, of the Red (iendarme).

Christmas. At Wasdale.-Eagle's Nest Ridge, Kers) Knotts Chimney, Lower Kern Knotts.

Cuthbert Hastings:-Did next to nothing chiefly owing to the weather, but last Easter with Leach and Hudson found a cave, which is believed to be new, in Chapel-le-dale, at a place marked on the Six Inch Ordnance Map Haws Gill Wheel. Inside there is a fair sized chamber with the stream (Cbapel-le-Dale Beck) flowing through it. The cave is roughly speaking 20 yards long, 10ft. high, and 10 yards wide.
J. W. Puttrell:-Visited the Dauphiny Alps (La Béarde) last June but the unsettled weather prevented anything of note being accomplished.
C. R. Wingfield:-In the storm of March 1909, did what is probably the longest ski-run in England yet recorded ( 96 miles), viz:-

March 2. From Nelson over the moors to Skipton.
March 3. From Skipton over the moors to Grassington.
March 4. From Grassington over Great Whernside to Buckden.
March 5. From Buckden over Buckden Pike to A ysgarth.
March 6. From Hawes Junction over Wild Boar Fell to Kirkby Stephen.
March 7. From Kirkby Stephen over Nine Standards Rig to Kirkby Stephen.
March 8. From Kirkby Stephen over The Calf to Sedbergh.
April 9. Y.R.C. Meet at Coniston.
April 27-30. In North Wales:-Cefn Cave near St. Asaph. Caves and Old Copper Mines on Great Ormes Head. Gloddeath Cave and Gwrych Caves near Llandudno.
March 18-23. In Derbyshire:--Matlock: 3 show Caverns (with guide). Castleton: Peak Cave, Speedwell and Blue John Mines (with guide); Giants Hole near Blue John; Deep Dale Caves (two). Green Lane Fissure, Buxton (first descent, 80 ft . in depth). Reynards Cave, Deepdale.

May 28-31. With Y.R.C. at Gaping Ghyll.
July 10. Green Lane Fissure, Buxton (too much water).

July 10. All holes and sinks, \&c., from Perryfoot to Giants Hole.

Note:-Perryfoot, Derbyshire, nearly at the West End of the Odin Fault between Rushup Edge and Eldon Hill. Manifold Cave: A dry stream intake, small though interesting, about 200 ft . The water runs E . from here to Castleton underground. The surface slopes W. from top of the Wynnats. Jack Daw Pit might go in dry weather. There are several sinks along this line.

Giants Hole, W. of Blue John Mine, is interesting but can only be done in dry weather, as at about 200 ft . from entrance there is a crawl under a bedding plane 50 ft ., about 100 ft . beyond it ends in a syphon.

Green Lane Fissure, Buxton, now, I believe, closed, was found when laying a pipe line. It is near to and a part of the Pools Cavern to Wye Head System. 80ft. down is an old stream bed partially choked with clay, and very small.
July 17 and 18. With Y.R.C. at Gaping Ghyll.
July 31-Aug. 1. London to Cowes. Motor Boat Race.
Aug. 17-Sept. 10. On "Gwynfa" 60 ton yacht (amateur crew), visited Falmouth, Plymouth, Brixham Cavern, Ryde, Newhaven, Dieppe, Boulogne, Dunkirk, Ostend, Amsterdam, and Brightlingsea.
Sept. 11-14. On "Edith" 8 ton cutter (friend and self), visited Ostend, Dunkirk and Dover.
Oct. 10. 90 miles per hour on $100 \mathrm{~h} . \mathrm{p}$. motor car.
Nov. 1. At Inauguration of Shropshire Aero Club.
W. G. Ledgard and L. A. Lowe spent Easter at Seathwaite and climbed Gimmer Crag (the Face Climb wî Aınen Corner), Raven Crag Gully, Kern Knotts (West Chimney), and the Needle Ridge.

## CLUB PROCEEDINGS, 1907-I908.

The Committee deeply regret to record the loss the Club has sustained by the death of our President, the late Rev. L. S. Calvert, which took place suddenly at Eastrington on the 20th July, Igog.

Elected a member in I895, he took a deep interest in the welfare of the Club, and his many good qualities of heart and head enabled him to render it valuable service in various capacities for fourteen years.

A devoted Rambler and a sincere friend, his frank and generous nature won for him the regard and respect of his fellow members. Calvert was an old member of the Alpine Club and spent his holidays for many years amongst the Alps. Saas Grund was perhaps his favourite centre, and he was popularly called the "King of Saas," with whose advent the local season was supposed to commence. He recounted some of his experiences and adventures in several papers read before the Club and printed in the Journal. An excellent $\beta$ peaker, his breezy humour illuminated the driest subject, and a lecture or a speech after dinner by Calvert was always eagerly anticipated and highly appreciated. The Yorkshire Ramblers will indeed miss him and grieve sincerely for one who by his simple manly goodness and kindly wisdom had endeared himself to them, and whose death comes to many as a real and personal sorrow.

The Annual General Meeting was held at the Club Rooms on 27 th October, 1908, when the Committee presented their 16th Annual Report. The Club then consisted of io Honorary and 99 Ordinary Members.

During the winter the following five lectures were given :
1907-November 8th. "Some Alpine Indiscretions," by Mr. Geoffrey Winthrop Young.
November 26th. "Vesuvius in Eruption," by Dr. Tempest, Anderson.
December 13th. "The Evolution of the Rivers of Yorkshire," by Professor Kendall.
1908. March 10th. "Some Caves and Pot-holes in Co. Fermanagh," by Mr. Harold Brodrick.
March 20th. "Exploration in the Japanese Alps," by Rev. Waiter Weston.
On Friday, November 8th, Mr. Geoffrey Winthrop Young gave us a delightful and amusing lecture entitled "Some Alpine Indiscretions," which was illustrated by numerous fine lantern slides.

The Rev. Walter Weston for the second time paid the Club a visit. His lecture, fuli of interest and charm, entitled "Mountaineering in the Japanese Alps," was illustrated by a unique series of beautifully coloured slides.

The committee wish to acknowledge gifts of books, journals, etc., to the Club Library, and invite members to use the Library, and when possible, to make additions to it.

Representatives of the Club were invited to attend the annual dinners of the Scottish Mountaineering Club, the Climbers' Club, the Rücksack Club, and the Fell and Rock Climbing Club.

The Sixth Annual Club dinner was held at the Hotel Metropôle on the i8th January, igo8. The President, the late Rev. L. S. Calvert, was in the chair, and seventyeight members and friends were present. The Club was specially honoured by the presence amongst its guests of the President of the Alpine Club, Mr. Hermann Woolley; the President of the Scottish Mountaineering Club, Mr. Gilbert Thomson ; the President of the Climbers' Club, Mr. R. A. Robertson; a Vice-President of the Fell and Rock Climbing Club, Mr. George Seatree, J.P.; and Mr. J. W. Whitworth of the Rücksack Club.

The usual toasts were proposed and replied to in a series of admirable speeches, and an excellent musical programme greatly added to the evening's enjoyment.
Two Club Meets were held during the year, in the spring and autumn. The spring meet on the 16 th and 17 th May, igo8, took place at Middlesmoor, and was well attended. The unsettled weather interfered to a certain extent with the pot-holer's programme, but otherwise the
meet was thoroughly successful.
The autumn meet at Kirkby Lonsdale on 26th and 27th September, 1908, was not so well attended, but was favoured with beautiful weather, and those members who were fortunate enough to be present had a very good day amongst the pot-holes on Leck Fell.

The committee have with sincere regret to record the loss by "death of two of the Club's oldest honorary members, the late Duke of Devonshire and the late Mr. Horace Walker.

The late Duke of Devonshire was one of our first honorary members, and the Yorkshire Ramblers always appreciated the sympathy with rambling he showed by granting such liberal access to the beauties of his Yorkshire estates.

By Mr. Horace Walker's death the Club has lost an old and sincere friend. In the year 1899 , Mr. Horace Walker came to Leeds to lecture for us, and the Yorkshire Ramblers well remember his kindly words of encouragement and the deep interest he expressed in the fortunes of the Club.

## CLUB PROCEEDINGS, I908'Igog.

The Annual General Meeting was held at the Club Rooms on 26th October, rgog, when the Committee presented their 17 th Annual Report. The Club then consisted of II Honorary and 104 Ordinary Members, an increase of I Honorary and 5 Ordinary Members during the year.

Six lectures have been given during the year as follows:-
1908-October 13th. "Rambling in the Himalaya," by Dr. T. G. Longstaff.

November 10th. "Alpine Flowers," by Mr. Geo. Yeld, M.A.

November 24th. "A Mountaineer's August," by Mr. E. E. Roberts, M.A.

December 8th. "Camping and Climbing in Skye," by Mr. R. A. Chadwick, M.A.

1909-January 26th. Club Evening. Short Papers :-
"Almescliff," by Mr. J. H. Buckley and "Caves of Padirac," by Mr. W. Parsons, F.R.G.S.
February 9th. "In Old Tracks," by Mr. W. A. Brigg.
A large audience assembled in the Philosophical Hall, Leeds, on October 13th, 1908, to hear Dr. T. G. Longstaff's lecture on "Rambling in the Himalaya." Dr. Longstaff, who is a Yorkshireman and one of the few men who have reached a height of over 23,000 feet, gave an extremely interesting account of his climbing amongst the mountains of Garhwal.

The lecture was illustrated with numerous excellent lantern slides, amongst which were a number of fine panoramic views.

On November ioth, igo8, Mr. G. Yeld, editor of the Alpine Journal, read a paper before the Club on "Alpine Flowers." Mr. Yeld, who is an authority on Alpine flora and an enthusiastic collector, dealt very ably with his subject and showed many charming slides. He pointed out how a climber might add a great delight to the joys of climbing by interesting himself in the many beautiful flowers which abound on the mountains.

The committee wish to acknowledge gifts of books, journals, etc., to the Club Library, and invite members to use the Library, and when possible to make additions to it.

Representatives of the Club were invited to attend the annual dinners of the Scottish Mountaineering Club, Climbers' Club, Rücksack Club, and the Fell and Rock Climbing Club.

The seventh Annual Club dinner was held at the Hotel Métropolle, Leeds, on February 20th, 1909. The President, the late Rev. L. S. Calvert, was in the chair, and seventy-four members and friends were present. The Club was honoured by the presence amongst its guests of Mr. G. Yeld, the editor of the Alpine Journal, Mr. Haskett Smith of the Climbers' Club, Mr. Harold Raeburn, Vice-President of the Scottish Mountaineering Club, Mr. Minor, of the Rücksack Club, and Mr. G. Seatree, J.P., President of the Fell and Rock Climbing Club.

The usual toasts were proposed and replied to in a number of excellent speeches, and these, combined with an enjoyable programme of music, made the dinner as successful as any of its predecessors.

Three Club meets were held during the year.
The Christmas Meet at Dungeon Ghyll, from December 26 th to 28 th, 1908 , was attended by a number of men, who enjoyed some good winter climbing and ski-ing.

The Easter Meet at Coniston was a great success. A good many members met at the Sun Hotel, and others camped in the neighbourhood. The weather was favourable for rock climbing and hill walking, and both were greatly enjoyed.

The Autumn Meet was held amongst the Yorkshire Dales at Buckden on September 18th and igth, igog. The weather was beautifully fine, and the Ramblers were further rewarded by finding a considerable number of additional bones belonging to the "Lady of Scoska," which have been added to those in the Museum of the Leeds Philosophical Society. Members who have not yet seen the remains of the skeleton should do so at the first opportunity.

The Eighth number of the Club Journal has been issued during the year, and your Committee have, with very great regret, to report the resignation of Mr. T. Gray, who has so successfully edited the first two volumes. Those who have been most closely connected with the work of the Club will most appreciate the valuable services of our late editor. Mr. Gray has skilfully directed the fortunes of the Journal through its early and most trying years, and has obtained for it an honourable position amongst publications of a similar nature. Your committee are pleased to report that Mr. W. A. Brigg has accepted the office of Editor, and hope that members will send him plenty of interesting matter to fill the pages of the Journal.

The following Members have been elected since the issue of the last number of the Journal :-

## Honorary Member.

Collie, Dr. J. Norman, F.R.S., i6, Campden Grove, Kersington, W.
Ordinary Members.
Addyman, Oscar J., 9, Alderson Road, Harrogate.
Albrecht, W. H., 6o, Avenue Hill, Leeds.
Goodman, Professor John, The University, Leeds.
Hazard, Juhn de Vars, 55, Clarendon Road, Leeds.
Lloyd, G. W., M.A., J.P., The Hall, Stockton-on-the-Forest, York.
Palmer, W. E., 23, Wedderburn Road, Woodlands, Harrogate.
Thomson, A. R., M.A., Beech Bank, Bowdon, Cheshire.
Wilkin, W. R., B.A., 43, Gloucester Square, London, W:
For some time the Committee has had under consideration the advisability of publishing a book dealing with the Caves and Pot-holes of Yorkshire.

The Committee are of the opinion that if the necessary matter can be got together the book may be successfully issued. They therefore invite the co-operation of all the Club's members in this-the first and most important portion of the work.
They venture to make the three following suggestions :---
1st. That members submit any information on the subject they may possess, or are able to obtain.

Special care will be taken in the book to recognise fully all individual work.
2nd. That members notify the Committee of projected expeditions, so that special directions may be supplied to all parties with regard to the data to be obtained.
3rd. To ensure immediate and satisfactory progress, it is desirable that all members who are willing to undertake explorations should place themselves without delay in communication with the Secretaries.
The Committee will cordially welcome members' further suggestions with regard to this matter and give them most careful consideration.

## REVIEWS.

## The Pyrenees. <br> By H. Belloc.

(London: Methuen. 1909. 7s. 6D. nett.,
No true Rambler-none, that is, who has in his heart the true spirit of the business-will fail to find pleasure in this book. It is an odd book in many ways, and many will complain that it is inconsistent and unclassifiable, but they will read it, and read it with joy.

It would almost seem as if the Author had set out with an earnest desire to be learned, prosaic and dull, but soon found the effort to be far beyond his strength, and gracefully abandoned the struggle, burning all that would have adorned ordinary guidebooks, and adorning all that a guidebook editor would have burned. One effect of this is seen in the unusual proportions of space assigned to different subjects. Where a guide would have most to say, Mr. Belloc says little, and where the former would practise rigorous compression the latter expands indefinitely. He discovers for instance that the Pyrenees do not form a straight line from sea to sea but, if we may so put it, resemble a tunnel, which having been begun from both ends at once, does not quite meet in the middle, and thus produces a small overlap. To prove this requires many diacrams and many, many pages, while the respective merits and defects of the various French Government maps are analysed and discussed at portentous length. The average reader will propably skip some of this, skinı with growing interest the chapters on the river-systems and the history, and read with profit and delight every word of the excellent hints on equipment, camping and way-finding. The writer speaks with just praise of those excellent local contrivances, the hempen sandules and the gourde or wineskin. Of the former he says, "Remember that with alpargatas you will always end the day with wet feet. Let not that trouble you," and of the latter "The gourd is designed by Heaven to prevent any man from abusing God's great gift of wine; for the goat's hair inside gives to wine so appalling a taste that a man will only take of it exactly what is necessary for his needs." He appears to choose his meat on the same principle for he takes only salpichon. "You will soon hate it even if you do not, as is most likely, hate it from the bottum of your heart on the first day, but there is nothing else so compact and useful. It is salt pig and garlic."

With socks he deals after the manner of a famous chapter on the snakes of Iceland. "I must speak of socks. Those who know most of marching wear none."

The writer's knowledge of his subject is of so intimate a character and he is so keenly observant of such things as local names and expressions, that the few apparent slips which have come under our notice may well be corrections of common errors, but it can hardly be doubted that, like Pryenees and Cerdague, Trainzaygues (for Tramesaigues) is a mere oversight, while salpichon, Jedre, Anicle, and Gabediou may be improvements of the usual forms salpicon, Gédre, Niscle, and Gabiétou.

At least one curious statement is made which cannot be laid to the charge of the printer, " The true W. end of the chain (of the Pyrenees) lies well to the S. and E. of the Atlantic Ocean." Sir Ernest Shackleton may know of some place which answers this description, but certainly it cannot apply to any place in Europe or even Africa. The author must mean "S. and E. of a part of the Atlantic Ocean, commonly called the Bay of Biscay." Even when so rectified the statement would not be accepted by all, for the real W. end of the chain, though there happens to be a break in it near the S.E. corner of the Bay of Biscay, is near Cape Finisterre, and therefore S. but not E. of that Gulf.
The essence of the Pyrenean charm lies, after all, not so much in history, geography, zoology and mountaineering, though it is increased by all of them, as in the free life which it offers to the bivouacking rambler. Let us not say to the "camper," for that word seems to imply tents and all kinds of bulky apparatus which true Pyreneans scorn. To the man who would taste these joys Mr. Belloc is an invaluable guide. He is devoted to the open air bivouac. He refers sadly to "those few parts of England where the wealthy will allow plain men to indulge in this amusement," and to his mind one of the best features of the Pyrenean range is to be found in "the continual presence of overhanging rock" offering suitable sholter for the night's repose. He cannot endure "the odiousness which most cosmopolitan holiday places radiate uround them like an evil smell." Almost the only lure which cill draw him into such towns is the prospect of a good dinner. At ono time he leads you by the hand, indeed it may almost loo mid by the nose, to an ideal French inn "Smelt out by the infidlible nose of the French professional class." At another ho tinds for you, even in rumously expensive Luchon, a
restaurant, where, at a moderate cost, you can enjoy "cooking very good indeed, and wine really remarkable." Even among the filthy posadas of Spain he knows a country inn delicately described as "not too simple in its customs." Lastly, somewhat staggering our faith in him, he lavishes praise on Gabas-" as pleasant an Inn as you will find in the whole world." Well! Time works changes, even in the Pyrenees, but twenty years ago, at any rate, it was not at that end of the scale.

A word must be said about the illustrations, which are numerous and graceful. One of them (inserted without comment) to show the folly of being guided solely by the map in selecting a camping place, is full of humour which might easily pass unnoticed. It shews what the traveller actually found, his map having promised a suitable spot provided with wood and water; the latter proves to be a torrent in a profound and gloomy gorge, and the former to be perched on a ledge half way up an inaccessible limestone cliff.
There is plenty of fun in the book and a right appreciation of the art of walking, now well nigh moribund elsewhere. In the Pyrenees the march of modern improvement is incredibly slow, and for a long while to come their proverb "Quien mal anda mal acaba" will remain true in its literal sense:-A bad walker has a bad time." At least he will miss much enjoy ment both of nature and of this delightful book.
W. P. H. S

## In a Yorkshire Garden.

By Reginald Farrer.
(London: Edward Arnold. 1909.)
There has been a plentiful crop in recent years of books about gardens, but this work will challenge comparison with the best of them, and Ramblers especially will give it a hearty welcome, not only as the work of a fellow member but as dealing with a garden created by the author in his father's beautiful grounds at Clapham, so well known to all pot-holers.

The author's article in this number of the Journal will give members a foretaste, if they have not yet read this book, of the mingling of quaint fantasy, shrewd philosophy and keen observation with which he describes the captives of his trowel, and, oddly enough-of his tie-pin! For says he "there is no invented implement of such huge and multiform use in the
garden-no, not the trowel itself, which is a mere specialist, compared to the general-practitioner genius of the tie-pin.'

For his delightful description of the individual plants we must refer the reader to the book itself, as they hardly come within the scope of this Journal, but the following description of Clapham will appeal to all lovers of beautiful Craven :-
"Now Clapham village claims to be the prettiest in England; and I will honestly confess that I have never yet seen another to challenge that claim, which, indeed, has even received a sort of canonisation in the pages of the Strand Magazine, in which Clapham was recorded as standing among the six prettiest in England-a recognition, partial though it be, by which the villagers were properly uplifted. Close under the shelter of the northern hills, all wooded, it lies. Straight overhead, out of sight, rolling up from tier upon tier of those lower hills, rises the great tutelary mountain. And down through the very middle of the village, embowered in hawthorns and Penzance briars and other such loveliness, flows the Beck, a rippling stream now, placid and peaceful, after its stormy career above.
"For the Beck emerges high on the flank of Ingleborough, plunges peevishly, like Arethusa, into the unplumbed (sic) darkness of Gaping Ghyll Hole, in mid-moor; like Arethusa emerges again at the mouth of the second lngleborough Cave, about a mile or more lower, in the deep wooded, shady gorge, which is the beginning of the Ingleborough woods, and so, in cataract after cataract, and waterfall after waterfall, comes brawling down through the Ingleborough woods themselves-a creamy terror in spate, and a lovely mossy rippling in drought, until it loses itself in the quiet black waters of the Ingleborough Lake. From these, at last, it plunges finally to wards the valley in three wild falls; and so, calm for ever, rolls broad and serene through Clapham village, under huge old spreading sycamores, and so on into the valley below, until its meanderings join another beck, where the shores are yellow with Mimulus; and the combination takes the name of Wenning, so to continue, under shaw and coppice, full of Trollius, until it joins the Lune, and so, like any weariest river, flows somewhere safe to sea on the hideous mud-flats that stretch out from Lancaster into Morecambe Bay."

The author has gone to the Alps for many of his plants, and his chapter on the Piz Padella and Piz Languard is a moving story of the difficulties, climatic and otherwise, under which one who is confessedly not a mountaineer pursues his
hobby, but it will hardly tempt the mere climber to forsake his more active mode of enjoyment.

We are tempted to quote many of the quaint saws and modern instances to be found on every page, but space forbids, and we must conclude by heartily recommending the perusal; -and purchase - of the book itself.

## In the Heart of the Antarctic. <br> By Sir Ernest Shackleton, C.V.O. <br> (London: Heinemann \& Co. 1909. 2 Vols.)

We welcome this splendid record of a splendid deed, and none the less because the author-hero is a Yorkshireman, if not by birth, at any rate by name and descent. But we cannot pretend to give even a summary of the contents of these sumptuous volumes, and must refer our readers to them for the convincing details of the camp life and the sledging, the geology and meteorology, and above all the inimitable penguins.

The ascent by Dr. Mackay and his party of Mount Erebus was the principal mountaineering exploit, and the difficulties met with were due chiefly to cold and wind, in fact rock climbing in "finskoi" boots and fur mittens was out of the question. And unlike the Great Glacier traversed by the leader and his party in their sledging expedition towards the South Pole, there were no crevasses.

Of that Southern Expedition and the modest account of its hardships, it is difficult to write in praise without seeming to exaggerate, but it is not too much to hope that some parts of it will be found in future Reading Books of every English school. Never did hero deserve better of Fortune, and never did one bear defeat more philosophically. The author's descriptions of the difficulties met with-the soft snow, the hard ice, the tremendous crevasses (in one of which they lost their last pony), the blizzards, and above all the continuous pangs of hunger--make the chronicles of the most difficult Alpine climbs very small beer indeed.

We note that the party found Jaeger underclothing with gaberdine outside better than the orthodox fur and thick cloth, and that a new and somewhat weird word, sastrug $i$ to wit, is used to denote the windfurrows so often found on the neve of a glacier.

Siberia: A Record of Travel, Climbing and Exploration.

## By Samuel Turner, F.R.G.S. <br> (London: T. Fisher Unwin. 1905.)

Siberia to the average English man is a terra incognita and what little he knows about that immense country is "often distorted by an unfortunate racial animosity and by the too-ready credence that is given to sensational stories by the great mass of the public." Fortunately the author of this work undertook his journey with an open mind and carried out his own precept, that "nations like individuals should be judged with some reference to their own ideas and modes of thinking and not by our pet personal standards of right and wrong." He found, as others have done, that the country has in the past been grossly libelled and misrepresented, "and many of the blood-curdliing characteristics of the country and its people were altogether erroneous. It is certain that if these occurrences are real they rarely, if ever, come under the notice of the people among whom they are supposed to occur. Business is carried on pretty much the same as everywhere else and peace and serenity are the order of the day."
The primary object of the author's journey to Siberia was to investigate the butter industry, and the export of that commodity to this and other countries which has assumed enormous dimensions; and this done, he devoted the rest of his stay to exploring the Altai range of mountains.

His descriptions of the country, and the complete and valuable information and statistics as to its industries and institutions, educational and otherwise, and the peeps into the domestic life of its inhabitants, are full of interest not only to the political economist but to anyone who takes any interest in countries outside his own.
To the mountaineer however, the most attractive portion of the book is that which describes the author's climbs and the difficulties he met with in travelling in late winter to and from the mountains, where even his interpreter refused to accompany him. An expert mountaineer himself, he set off with characteristic British pluck, in defiance of all opposition and with the remark that "as no one had ever been there in winter, not even the natives, nobody could possibly know whether the mountains were accessible or not." His objective was

Belukha ( $14,800 \mathrm{ft}$.), supposed to be the highest of the Altai mountains, and though defeated on that, he had already had the satisfaction of making the complete ascent of Willer's Peak, which proved to be the highest discovered mountain in Siberia, overtopping Belukha by some 3,000 feet. The cold wind and hard ice slopes on Belukha proved too much for his unaided efforts and it was only by the exercise of the utmost will power that he was able to drag himself back to the tent again. He says, "I suddenly became aware that the snow was giving way beneath me, and the next moment I was on the top of a billow of loose snow that was gliding down the mountain side considerably more swiftly than was either comfortable or safe.... my body was crushed down in a most uncomfortable manner. I pushed away the snow and secured the head of the axe and using it as a lever, was presently able to wriggle myself out of the snow . . . In this manner I advanced slowly, foot by foot, well aware all the time that if I was so unfortunate as to start that avalanche on its downward career once more I should most certainly be precipitated on to the ice below and killed.... Although cutting the step had restored the circulation to my limbs, the fierce north wind chilled me to the marrow and absolutely made me beat a retreat." The author very wisely, but after the event, deprecates the practice of venturing on such an expedition alone, and recommends taking an Alpine guide so as to be independent of the natives who seem to have an absolute dread of the mountains. As a climbing centre he says the Altai mountains contain enough virgin snow peaks to keep members of the Alpine Club busy climbing for the next few years. "I have gazed," he says, "on Mont Blanc from the summit of the Matterhorn, and at the Matterhorn from Mont Blanc, and on some of the grandest views on Switzerland; but the northern faces of the Katunskië-Belkie Range with the crystal clear glaciers hanging in the sun and sparkling like diamonds, form a picture so striking and beautiful that my experience can offer no parallel to them."
The author's race against the advancing thaw, when the roads 'would become impassable for several weeks, is graphically told and forms an exciting conclusion to his plucky journey.
The book is profusely illustrated and deserves a place in the library of every traveller and mountaineer.
S. W. C.

Ski-Running for Beginners and Mountaineers.
By W. R. Rickmers.
(T. Fisher Unwin, Adelphi Terrace. +s. 6d. nett.)

## The Ski-Runner.

By E. C. Richardson.
(At 1, Mitre Court, Temple, E.C. 45. 6d. nett.) -
These two books are complementary-and complimentaryto each other, and the beginner would be well advised to get both. While it is true that any athletic art can be best learned from a friendly expert, it is equally true-experto crede-that experts are not always there when wanted and possibly not always friendly enough to be of use. We were at a Swiss ski-ing centre very recently and received many hints and instructions from an "old hand": a perusal of these works shows very clearly where the "old hand" gets his information.

We have not space to enter into the different descriptions of turns and stems, but we may perhaps be allowed to ask Mr. Rickmers in all seriousness to reconsider, in his next edition, his descriptions of the proper movements and positions. " Draw (not lift or pull) the glider down to the braker, ending up DB, then FP. Afterwards combine the two moves SS-DBFP into one, smartly" may be an accurate description of how to finish, but is rather too much like an American College football-formula. Mr. Richardson's explanations are quite as lucid and less like Euclid. Speaking for beginners, we would beg of Mr. Rickmers to allow us something more in the way of sticks than "any stiff pole reaching at least as high as the shoulder and without a disc"; and he hardly emphasises sufficiently the need for wax when snow is soft. To toil up hill and down with clogging snow for want of wax, while others are sailing by you, is an experience we do not wish to repeat. We would also ask Mr. Richardson with submission. whether the attitude in the diagram on page 110 is really correct. It is not graceful and except on very steep slopes an upright position as shewn in the photograph immediatoly underneath is quite as easy and much more elegant.
Our readers may not be aware of it, but in the ski-ing world there has been fierce rivalry for years between "toe-bindinks" composed mainly of straps, of which the " lfuitfold" Hull "Ellefsen" are typical examples, and "sole-bindings" repte sented by the "Lilienfeld." A truce has now boen called nad

Mr. Rickmers treats the subject very briefly with a leaning to the "Lilienfeld" type, but Mr. Richardson goes into the matter at length and gives a reasoned decision in favour of the other principle, and English ski-runners will be disposed to follow him.
Both books are written from the point of view of the tourist or mountaineer, and both open up a new field of travel and adventure for the climbers and the troglodytes of our Club. They are written, of course, for English visitors to the Alps in winter, a majority of whom have not gone through the school of high pedestrianism, and though to the mountaineer some of the advice may seem trite this is only an error of excess. The dangers from winter avalanches are dwelt on very fully by both writers and the description of the nature and habits of these monsters strikes us as being to a great extent new. Both books are admirable in this respect. Mr. Rickmers, owing as he too modestly says to "a complete absence of personal experience and proficieacy " devotes hardly any space to ski-jumping, but Mr. Richardson tells the beginner all that he need know of this fascinating art.
Although the art of ski-running comes from Norway where they pronounce it "shee," we would humbly ask those in authority to have the fair alien naturalised. Why cannot we English̆ it into " skee"?
Mr. Richardson has also something to say about ski-ing in England. It is never as pleasant falling on 6 inches of snow as oin 6 feet, but even near Leeds ski-ing can be indulged in and one of our members (Mr. Wingfield) has shewn in the current number of the Journal what can be done in the Yorkshire Dales. While urging our members to take up ski-ing before they are too old and stiff, we would also urge them to buy a handbook which he who runs may read. Someone has sagely remarked of books that 'style is the great antiseptic,' and style in ski-ing as in skating is everything. "Be sure you get it."
J. J. B.

## British Mountaineering.

## By C. E. Benson.

(London: George Routledge \& Sons, Ltd. 1909.)
The novice in mountaineering has now small lack of literature for guidance either as to proficiency in the sportat least as much of it as can be learnt from books-or as to where it may best be pursued.

Mr. Benson's latest book certainly does not tell us much that is new-perhaps that is more than could be expected after all that has been written on the subject-but it is interesting to learn his views on matters of moment to climbers.
He has mucb to say on Equipment, Rambling, Scrambling, and Rock and Snow Climbing that will be found of considerable help to the young climber, and his advice is, in the main, very sound. Not only does he tell the novice what ought to be done and how to do it, but also, what is at times of even greater importance, what must not be done.
Mr. Benson does not enter into detailed descriptions of even the best known climbs in Great Britian; but, after giving the novice much valuable advice and a brief description of the best known districts, leaves him to ramble and scramble at will; although for instruction's sake, he occasionally, in imagination, guides him over certain hill-countries and enters a little more fully into topographical details.
It is, however, of extreme importance that a guide should himself be perfectly clear in describing routes or points of interest; and in this respect Mr . Benson is occasionally found tripping-and in the Lake District too, which he knows so well! For instance he writes about "the swampy part behind the Langdale Pikes" apparently forgetting that the "swamp" really lies behind Pike o' Stickle only, and if anything in front of Harrison Stickle. Also to write of the Langdale Pikes as if they all lay on the North side of the dale is to ignore Pike o' Blisco on the South side.
Again, standing on Harrison Stickle, he tells us that Bowfell lies on "the opposite side of the valley." Seeing that he is at the time supposed to be guiding an imaginary party which has gone astray, such a description of the position of Bowfell is not as clear as it ought to be. Indeed Mr. Benson would appear to be a little astray himself in this part of the Lakes; for, in the frontispiece to his book, a view of Stickle Tarn is given with Pavey Ark and Harrison Stickle on the right, effectually blocking out any possible view of Bowfell, yet in the background, where by no stretch of imagination could it be placed, he calls a mountain Bowfell, which is obviously Wetherlam. The illustration is in fact a reduced copy of a by no means scarce engraving by Allom.
A considerable number of the text illustrations are taken from Almescliff Crag, a mass of millstone grit forming a double crown to a low hill, a few miles south of Harrogate and
an almost ideal rock on which to practice rock-climbing. These illustrations are admirably chosen to illustrate chimneys, cracks, and face climbs; but in recording the early history of this favourite little practice ground of the Yorkshire Ramblers, for he seems to have that place in his mind, Mr. Benson is certainly not justified in saying that not one of those climbers who began the sport there "had any true idea of the possibilities of these crags"; and that when they were tackled "the easy courses fell first, then the moderate, and last of all the difficult; the climber being for the most part safeguarded by a rope from above taken round to the top of the crags by some easy way." As one of the three or four that some eighteen years ago were the first to do nearly all the important climbs on the crag itself-boulder-climbing was left to a later date-the present reviewer, though admittedly the least skilful of the party, can bear witness to the contrary. The correct story of the early days of climbing on Almescliff Crag has yet to be written, but the order in which the climbs fell was certainly not that stated by Mr. Benson. Indeed several of the difficult climbs were done before some of the more moderate, and only once, or at most twice, was the rope dropped from above to help in a new climb. Except these two, all the climbs were well within the power of the leaders, two of them born mountaineers of the best kind.

In giving this crumb of history, it is not intended to subvert the sound doctrine which Mr. Benson teaches, viz:-that the climbing novice should take his courses easy first, moderate next and difficult last.

The book has chapters on Mountaineering for Ladies and the Dangers of Mountaineering, Useful Medical Hints, a List of Rambling Centres in Great Britain and a short Glossary.

Though there are a few minor faults in the book, besides those chargeable to the printer, it may safely be recommended to the novice as a useful and entertaining little work, and it is written in Mr. Benson's usual light and breezy style.

If another edition should be called for, the lower illustration on p. 33 should be placed right side up, and when emphasising the importance of straight-grained ash for the shafts of iceaxes it would be as well not to use illustrations which shew the grain very badly twisted.
T. G.

The Tramp: An Open Air Magazine.
The Adelphi Press, Ltd. Monthly 6d. No i, March, igio.
Every Rambler should buy this, the latest comer of the many monthly sixpennies, for it devotes itself entirely to the pleasure of those who, like himself, have tasted the joys of the wide fell and the open road, and deals not at all with that paraphernalia of statistics and jargon which bave made the records of modern "sport" such a bore. The place of honour is given to an article by Dr. E. A. Baker on "Easter at the Lakes," which, though short, shews an intimate knowledge of the subject, and is illustrated by some charming photograpbs, taken from unusual points of view. There are articles on Fontainebleau, the New Forest, Hitchen and Donegal, all well illustrated, a practical account of the gentle art of Vagabondage, and several good stories with local colour.
We are sufficiently altruistic to add that the Editor professes his willingness to consider articles, illustrated and unillustrated, particularly such as deal with subjects connected with travel and topography, for which payment will be made, after publication, at the ordinary rates.

## British Mountain Climbs.

By George D. Abraham.
(London: Mills and Boon. 1909.)
The author's attempt to bring together, in one handy volume, descriptions and general information as to the now great number of recognised rock-climbs in Great Britain has been very successful. The climbs are grouped round the wellknown climbing centres and in most cases are adequately, though briefly, described, with the help of many diagrams shewing the principal routes, and of the author's very beautiful photographs. As to the latter we should like to ask whether the rocks shewn on pp. 23 and 189 are really so steep as they appear in the photographs.

Besides the ordinary descriptive matter, a considerable number of hitherto unrecorded adventures-and misadventures -are related, which, at any rate, form interesting reading for others, however they may have struck the persons principally concerned.

With regard to the statement on p. 54 respecting Botterill's Climb on Scafell that "at one point the daring pioneer's footsteps are not there, for upward progress was made by using a quaint form of ice-axe plunged into doubtful turf," we feel bound to remark that we have Mr. Botterill's authority for saying that this was not so, nor is there anything in his account of the climb to warrant it. (Cf. Y. R. C. Journal, Vol. II, p. 16 et seq.)
On p. 118 it is said that the actual direct ascent of the Central Gully on Lliwedd has not yet been accomplished, but we understand that this was done in the summer of 1909, probably since the book went to press.

We put down the book with the feeling that the climber of to-day is very well catered for in the way of written guidance, not only to the foot of his climb, but also for his feet when actually climbing; and we endorse the author's many words of warning and advice.
J. A. G.

Mountaineering in The Land of The Midnight Sun.
By Mrs. Aubrey le Blond.
(London: T. Fisher Unwin, 1908. 304 pp. ios. 6D. nett.)
We heartily welcome the reappearance of this delightful book on Arctic mountaineering, and feel sure it will be appreciated, as much by the tourist as by the skilled mountaineer, for the life led in the valleys is almost as full of incident and adventure as that spent amongst the peaks and glaciers.

Mrs. Le Blond was accompanied by the two Imbodens of St. Niklaus, father and son, the former a well tried and faithful Swiss guide, and in her two seasons of climbing amongst these far off peaks of Norway she succeeded in placing no less than 24 new ascents to her credit.

Seventeen chapters of the book are devoted to a detailed description of these climbs; indeed we are taken from one virgin peals to another with such breathless speed, that we turn with relief to the record of quiet days spent in camp by the side of lake or fjord.

We must confess it would have added very materially to the interest of the book if the heights of these new peaks had been given. The natural man has a distinct craving, when he
has succeeded in reaching a mountain summit, to know the height he is above the level of the sea; but we are left in complete ignorance, as to whether we are $6,000 \mathrm{ft}$. or only $3,000 \mathrm{ft}$. Even a pocket aneroid observation would have given the elevation, at any rate, approximately.
But for a succession of stormy days-that special bugbear of the climber in Arctic Norway-there is no doubt the list of conquests would have been longer still; although days of summer sunshine did come--witness the following description of the view from Isskartind:-
"Straight below us lay the tranquil blue waters of the Jaegervand. The sea beyond, studded with islands, shimmered in the brilliant light of a perfect summer's day. Beyond the Kjosenfjord, spotless robes of snow covered the mountains. Glaciers with green rifts in their waves of ice swept majestically between the peaks, which stood like monster spires to the north. Tiny lakes looked up at us with wide open sapphire eyes from every little hollow. Clouds drifted lazily, here and there, casting deep purple shadows on the hill sides. Not a sound fell on the ear. We seemed detached from the earth."
The illustrations are for the most part good, and many are excellent.
E. G.

From Ruwenzori to the Congo: A Naturalist's

## Journey across Africa.

By A. F. R. Wollaston.
(London: John Murray. Igog. xxv. \& 315 pp .)
A well written account of how the author joined the British Museum Ruwenzori Expedition, as medical officer, at its camp at Bihunga, on the eastern slope of Ruwenzori, and did some climbing from there. He reached one of the lower peaks of Kiyanja, but was prevented from doing anything on the Western slope by trouble with the natives. The book is lavishly furnished with beautiful photographs and gives a very clear idea of what travelling in Central Africa means to-day. The appendices, though short, are very interesting, especially that on sleeping sickness. A disease whose mortality is 100 per cent. and prevention so far as we know extremely difficult and uncertain, and which has killed more than 200,000 people in Uganda alone in the last seven years, is a formidable obstacle to civilization.

The Bernese Oberland.
Vol. 1. From the Gemmi to the Mönchjoch. Part 2. The Groups N. and S. of the Main Range.
A New Edition by the Rev. W. A. B. Coolidge. (London: T. Fisher Unwin. 19io. pp. xvii \& 214, 32 mo . 2S.) It is unnecessary, at this time of day, to add another stone to the cairn which grateful climbers have been building for some twenty years past to the honour and glory of Mr. Coolidge and his helpers in the laborious task of compiling and collating all that is known about the different ways up the Alpine peaks. One can only wonder how guideless climbers did, and in some parts of the Alps still do, without these guides.

This volume deals with the Blümlisalp, the Bietschborn, the Nesthorn and the Aletschorn groups; and we observe, with special interest, a note of the first descent from the Nesthorn by its S.E. arête, of which Mr. Lowe writes an account in this issue of the Journal ; a ridge only ascended for the first time by Mr. G. Winthrop Young and party, so lately as last summer.

Those of us who, in years gone by, have tried in vain to keep within shouting distance of the "times" in other volumes of this series, will read with gratitude that those recorded here are such as would be taken by average climbers under average conditions.

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[^0]:    * Alpine Journal, vol. xvi., p. 422.

[^1]:    * We have not thought it necessary to reproduce this map Ed. Y. R.C.J.

