#### THE

# Cairngorm Club Journal.

EDITED BY

#### ALEX. INKSON M'CONNOCHIE.

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## The Cairngorm Club.

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#### RULES.

I.—The Club shall be called "THE CAIRNGORM CLUB."

II.—The objects of the Club shall be: (1) to encourage mountain climbing in Scotland, with special reference to the Cairngorm group of mountains; (2) to procure and impart scientific, topographical, and historical information about the Scottish mountains, their superficial physical features, minerals, rocks, plants, animals, meteorology, ancient and modern public routes giving access to and across them, and the meaning of their local place names, literature, and legendary, or folk-lore; (3) to consider the right of access to Scottish mountains, and to adopt such measures in regard thereto as the Club may deem advisable; and (4) to issue a Journal or such other publications as may be considered advantageous to the Club.

III.—Canditates for admission as members of the Club must have ascended at least 3000 feet above the sea level on a Scottish mountain.

IV.—The management of the Club shall be vested in a Committee, consisting of ten members, in addition to the following Office-Bearers—a President, two Vice-Presidents, a Chairman, a Secretary, and a Treasurer—five being a quorum.

V. The annual general meeting of the Club shall be held in December for the following business: (1) to receive the Treasurer's accounts for the year to 30th November; (2) to elect the Office-Bearers and Committee for the next

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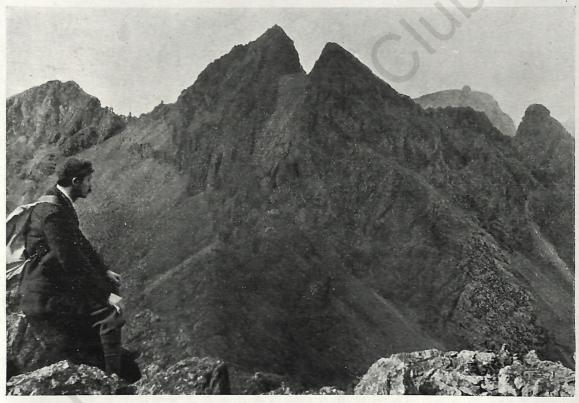


Photo by THE ALASDAIR GROUP FROM SGURR DUBH NA DABHEINN. W. Barclay.

(1) Sgurr Sgumain; (2) Sgurr Alasdair; (3) Sgurr Tearlach; (4) Sgurr Dearg; (5) Sgurr Mhic Coinnich.

#### THE

## Cairngorm Club Journal.

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## IN COR ARDER.

By REV. THOMAS SINTON.

SHOULD the day turn out wet—as that mantle of mist on Meall an t-Snaime would seem to indicate—you who are to accompany me to Cor Arder will think none the less of it on that account; for those giddy slopes and turretted heights and tremendous precipices upon which we are to gaze, are never, methinks, seen to better advantage than when spiritualised by the mystic drapery of the clouds. And yet, my good friend! I do confess that I have beheld the corrie shimmering in the noon-tide sun of mid-summer, when the raven's croak or the bleating of a lamb sounded loud through the great concave that was hushed in more than Sabbath stillness-the rills of falling water, pure and sparkling, and usually full of noisy merriment, having now sunk their voices to one low multitudinous tone of solemn harmony that stole imperceptibly on the ear, and anon seemed to die away into the bosom of the hills; and there, reclining to rest on a heathery knoll, with the blue sky overhead and the mighty Bens around, I fell into a drowsy muse of contemplative joy in nature and universal human happiness, and so passed eftsoons into the sweetest sleep allowed to mortal man.

An agreeable experience this, and impossible in soaking damp and under drenching rain. Therefore, whether Cor Arder really afford more pleasure to the beholder in vaporous gloom or brilliant light, may be left to be decided by every man for himself, according to his individual taste and various mood.

On leaving the farm house of Aberarder on Loch Laggan, and taking our upward way, it will be convenient to skirt the high bank of the burn which pours out of the corrie in many a foaming linn, and is known as Allt Choir Ardair-i.e. the Burn of Cor Arder. Oddly enough, however, the corrie had previously taken its name from the burn-Arder meaning High Water, being derived from Ard, high, and dur. water. Hence, Aberarder signifies the confluence of the High Water. And no name could be more truly descriptive. The desultory birches-single or in groves-forming advanced outposts of the forests covering the lower portion of the corrie, are conjunctly called Doire nan Dearcag-i.e. the Wood of Berries. Not a few of those trees are in a decaying state, and some so far gone as to be quite unable to maintain. in anything like an erect position, their pale stems with boughs, ghostly-looking in the mutilation of old age. Here and there we may see poor shattered boles littering moist patches of rushy ground, where what are called "Fairy Circles" were believed to be the haunt of the green-kirtled folks who inhabited those conical knolls around, during their hours of midnight merriment. But whatever be the position of those disconsolate trunks and larger detached boughs-all fozy and water-logged-every one of them is sure to be studded with knobs of that firm fungus out of whose coating coloured like their own bark, shepherds used to make spunk -working each piece out until it somewhat resembled smooth chamois leather, and was ready for flint and steel.

Before we enter the Corrie Wood—Coill a' Choire—I must tell you that the hill on our left, around which we shall trace something like a semi-circle, is Bealach a' Ghoir. What crow or cry gave it that name, who can say? While on our right, that ascending series of rocky knaps called Na Cnapanan leads to the Carn Lia (3298), an eminence invisible from our path now bringing us into the jaws of Cor Arder.

"This is the forest primeval," and all of birch. Nay, not quite all! I think that an enquiring eye would soon discover several scattered alder trees; and, by my sooth! I

know that there are some hazels clothing the steep shaded sides of yonder grassy glade that slopes upwards on the skirt of Bealach a' Ghoir. From childhood has this little glen or gill been imprinted on my mind with all its living green, for there, gliding through the pleasant boscage, with a thrill of enchantment I first caught sight of deer. For you must know that Cor Arder has been, time out of mind, a favourite haunt of a small herd of these fleet-footed dwellers of the waste, that came and went at their own sweet will,—now here, and anon far away in some other sequestered resort among the corries of Drumalban, where a change of herbage was to be had. But I am sure they liked Cor Arder best, and regarded it as their duchus or hereditary seat.

What! nettles here in the wood so far from human habitation, for which they usually reserve themselves with such persistent fidelity, along with rats, mice, dockens, ragwort, and all our other Lares et Penates which we take about with us wherever we go! Yes, actually a tuft of nettles! Come nearer, however, and you will see that they are growing on a spot where was the hearth of an old hut whose foundations are still faintly visible; so that those we have here are true to nature after all. Those rough vestiges that may yet be traced of the humble dwelling that once stood here have a particular interest, there being good reason to believe that it afforded shelter to Royalty in distress. It is known that in the end of August, 1746, Prince Charles Edward Stewart passed down through Cor Arder on his way to Ben Alder, where he remained in comparative security enjoying the hospitality of Cluny Macpherson until he received the good news of the arrival of ships sent to carry him back to France, and it is extremely probable that he found shelter and entertainment in this secluded retreat. He was then under the protection of the Macdonalds of Aberarder and Tullochrom,—two brothers who were intimately acquainted with the recesses of Cor Arder all their lives, and who, although they had taken part in the rising, had made their peace with the Government, and were therefore able to be of great service to the Prince in his utmost need. How curious to know that this very footpath, that we are now following, was once trodden, in anxious vigilance by the royal fugitive and his guides! He, like us, must have made his way over many a hoary old trunk, round many a boulder, and across many a swampy dell and sparkling runnel,—now low down close to the burn, and anon scrambling up some rough bank.

It is well perhaps that you have no rod in your hand, for in that case you might be tempted to cast your line athwart those dark pools overhung by wood, where the fox-glove and the lady-fern grow so luxuriantly in the damp shade, -each pool below its own roaring cascade. Should you do this, it is likely that your patience would be speedily exhausted and also your hook-book. In other words, you would soon have no line or hooks to cast. At that very pool beside us, surrounded by the great smooth stones, where the water swirls as in a cauldron, I have witnessed sad exhibitions of the petulance of poor human nature amid the mishaps which are sure to attend the angler in Cor Arder. For instance, I have known one come from hither on a certain afternoon long ago, who had fished his upward way by pool and linn and confluence. Without the reward of success in his endeavours, as he plied his rod, he paid everywhere unwilling tribute to rock and heather and tree, and various objects of nature in the wild channel and its banks; so that when we had arrived here, only a single cast of flies remained to him. But lo! here, in a moment he perceived that he was like to have due amends. Scarcely had his flies touched the water when trout came leaping and curveting to the surface; and they were of finer size and colour than he had ever seen on that burn before or since. There was only a moment allowed him for observation and expectation, the next was for mortification and disappointed hope; for only a piece of hookless, gutless line hung limp from the end of his melancholy rod. Therefore, as one having a right to speak, I would bid all anglers beware of Cor Arder Burn-specially in Cor Arder Wood.

But we are now emerging from its ancient solitudes, and our path leads by the foot of those green stone-strewn slopes not without brackens and heather, that fall away abruptly from the mountain brows in the direction of Meall an t-Snaime and the Carn Lia—i.e. the Knot Hummock and the Grey Cairn. Hereabouts, in bygone days, were sheilings, whither the wives and children of the tenantry in the neighbourhood of Loch Laggan resorted at certain seasons of the year with all their various cattle. You may yet see traces of their chalets and folds upon these silent braes, which in early summer and again in autumn were formerly vocal with laughter and song.

Ah! this tiny foundation was, nevertheless, not connected with primitive times and pastoral life. Why, this is all that remains to tell where stood the Bothie of Cor Arder-Bothan Choir Ardair—that my own eyes have seen and my own feet have entered. It was erected, and occupied for a season or so by worthy Dunnach Phadruig and his two sons. who not long afterwards sought a home beyond the St. These men practised the lost art of building the single, or otherwise, the Galloway dike. Part of their work may be seen from here,—that long line of wall that goes up as far as the foot of the precipice below Meall an t-Snaime, dividing the ewe-ground from the wether-ground of Aberarder Farm. In that gleesome rill, sparkling at our feet. Duncan used to bathe his bruised hand, praising its healing virtues. Certain excisemen whom I knew did not bless the Bothie of Cor Arder, which was made the medium of carrying out a practical joke at their expense. A householder on Loch Laggan, in the course of conversation with them, casually dropped some hint as to a bothie in Cor Arder, whereupon the alert officials in over-zeal immediately set out to discover the lurking-place of Illicit Distillation. Hot and tired, they in due course arrived at Dunnach Phadruig's abode, where they became very angry indeed.

Near the crest of that high bank overlooking the burn, a pair of kestrels was wont to breed; and directing your gaze above, you can see the rough brindled acclivities forming the back of Bealach a' Ghoir, around which the Cor Arder Burn takes its horse-shoe-like course.

That sweep of the corrie on our right is called An Crom Leat-

had from crom, bent; while right above this extended hook is pleasant Coire Chriochrain with all its craggy minarets.

Straight ahead are the Posts of Cor Arder, now coming full into view. Those soaring cliffs, like the mighty crowstepped gables of a Cyclopean ruin,—on the whole, frowning and dark, notwithstanding many tiny beltings of green—ascend to a height of 3700 feet above sea level. The lochan at their base is 2200 feet.

It is fortunate that we have arrived at our journey's end, for the wind has suddenly risen, dark gusts are sweeping and whirling across the surface of the tarn, and in a few moments rain will fall in torrents. We must hurriedly cross the burn, and this is very easily done just at the outlet, where the furious blast succeeds ever and anon in driving back the water that had commenced to flow. Let us take shelter without delay under those huge boulders which became detached from the Posts during the Ice Age, or subsequently, and settled down in the humbler position which they now occupy in a higgledy-piggledy fashion. From this retreat, like Elijah in his cave, we may look out upon the rain-storm.

Above our heads is Coire nan Gamhna, into which our old friend Bealach a' Ghoir merges insensibly, while facing us high up on the opposite side of the loch, above the Leacainn Corrach, i.e. the steep green slope, like a great Gothic Arch inverted, is the Window of Cor Arder. So elevated is this vast opening, that it is visible far down in the valley of the Spey, presenting a most striking appearance when the westering sun throws its weird outlines into bold relief.

Never have I been in Cor Arder without seeing the eagles that nest every year on that fearful ledge in the face of the loftiest of the pillars, whence, even now, taking advantage of the subsidence of the storm, they are flying out together on strong wing to sweep upwards, gyrating from the Posts to Coire Chriochrain, and from the Window to Coire nan Gamhna, finally, as is always the case, to disappear abruptly. From the top of that towering pinnacle, where is their abode, and which actually seems at this moment to project and impend over us, I used to hear of only two men who had looked downwards upon the loch,—one of them being the

ancestor of him who shall be nameless. How little did I imagine in those days that I should be in that position myself,—I, who was surely one of the least likely to adventure such a poise.

Well, this is how it came about. Setting out one morning, early in November, 1880, from the farm-house of Moy, and having the company of a near relative—then a lady of some three score—we ascended the steep banks and long stony acclivities, that would bring us most comfortably to the nearest part of the great table land called Am Buidheanach1 -i.e. the Yellow Region, of which the cairn of Craig Meugaidh<sup>2</sup> (3700 feet) marks the culminating elevation. The day at first seemed very promising, considering that the season was so far advanced, but ere we had accomplished more than two-thirds of the ascent, heavy showers of snow Determined, notwithstanding, in our purpose to reach Craig Meugaidh, we persevered in our upward course despite the wintry weather, until we gained the top of Meall Coire Choille-ras, from whence, away to the north on a slightly rising plateau, we could see the cairn and pole erected by the Ordnance Survey men, which marked the goal and object of our ambition. I thought that I was fairly familiar with our environs, for in early life I had been repeatedly over the ground of a summer morning, along with the shepherds. But as the event showed, I ought to have known the ins and outs of it better than I did. Be that as it might, we quickly traversed the desolate expanse before us, having our destination in full view. All the while though, the air was darkened with driving flakes; and the carpet of moss and mountain grass that lay over the firm slabs was covered with a coating of snow. Hardly had we gained the meagre shelter of the cairn, when the gathering tempest broke upon us in a climax of violence, the wind with a wild whistle tearing across the bare, bleak altitudes around; so that we judged it best to beat a hasty retreat.

<sup>&</sup>lt;sup>1</sup>The name of this elevated plateau is often given as A' Bhuidheanaich, and sometimes Na Buidheannan: the root in every case being buidhe, yellow.

In the Ordnance Survey this name appears as Meaghaidh.

Through the blinding drift we managed to retrace our footsteps in the snow, until, supposing ourselves out of danger of losing our way, and allured by some rocky hummocks that gave hope of shelter, we turned to the left, and eventually sat down upon a bank to rest and refresh ourselves. Suddenly, the wind came whirling up from below—icy cold and full of sound and fury—as though rending its way through a density of snow flakes, which it sent flying in every direction; then beneath our feet, all at once there opened up a veritable bird's-eye view that thrilled us with awe and wonder. Nearly fifteen hundred feet down, we beheld Loch Cor Arder—targe-like—lying at the base of the precipice on whose brow we had been sitting all unawares of our fearful peril.

To-day as I gaze upwards at those dark columns of rock, it is hard even for me to realise that yonder crowning peak should be smoothly connected with the dull, undulating, and featureless mountain ground which so completely deceived us on the occasion I have described. Though low, in comparison, how much safer is our present seat! whence we survey the loch, whose bosom is stirred by the strong wind into various shades of colour, from black to dusky grey.

And now that the rain has ceased, let us betake ourselves round by the foot of the Posts to the opposite shore,-not in order to ascend to the Window of Cor Arder, though, which would be a stiff climb indeed, but to bring you to the huge stone beside the burn, which affords the only view obtainable of a curious lusus naturae, never to be forgotten by him who has once beheld it. I refer to the Window of the Posts. There it is, high up in an outflanking wing of rock on the extreme right, like an aperture in a dark bank of cloud, giving an unexpected glimpse of the bright sky beyond. Shaped not unlike a toy kite, it appears to be from six to seven ft. in height. But one would require to have the wings of an eagle to know fully the nature and cause of this wild orifice which cannot be discovered from above, and makes one's head giddy to look at from below. A more imaginative age than ours would say that it was the work of some Fingalian giant who stuck his finger through the rocky wall in order to make a loophole from which, at his pleasure, he might survey Cor Arder, unseen himself the while.

We, however, my gentle companion, may well rest content with what we have seen of it from our own points of view. As it fades from us now, with its lochan of green depths and one solitary bush—often, perchance, in aftertime to "flash upon that inward eye which is the bliss of solitude," let me sing you a song reminiscent of another day, which this has brought to mind.

Ere noon, we had climbed to the Ptarmigan's Stone, That crowned the ascent of a hill; The sun seemed to shine for Cor Arder alone, And the sweet summer air was still.

And there did we rest us a while from the heat—
A grey-headed shepherd and I—
In silence surveying the loch at our feet,
And the compassing mountains high.

When, sudden, we heard a far triumphing shriek,
That echoed through regions of light;
As, leaving their haunt in the ledge of a peak,
Two eagles extended their flight.

We followed their course, while, with lessening size,
They soared over corrie and ben;
Till, where that dark pinnacle towers to the skies,
At length they passed out of our ken.

"Hark!" whispered the shepherd, and turned to the mere Whose face had contracted a frown; For the rocks intercepted the sunlight clear, And an eddying breeze went down.

He guided my vision, with out-pointed crook,

To a desolate shore and wild;

Whence issued, 'mid noise of a turbulent brook,

A sound like the cry of a child.

'Twas an otter that stood on a slab of stone,
With head lifted up to the blue;
But, whether his voice was of joy or of moan,
The God who created him knew.

Then he crept to the edge, and was lost to sight
In the water so dull and deep;
And the thought of him moving through vaulted night,
Made me shudder and well-nigh weep.

"May mine be the lot of yon sovereign bird!—
To have liberty unconfined,"
Quoth I to my friend (who spoke never a word),
In the eagerness of my mind.

"The eagle may sweep over mountain and sea,
The otter must lurk by his den;
Their diverse conditions it seemeth to me,
Resemble the fortunes of men.

"So some are degraded in dungeons of earth,
Where labours and sorrows be rife;
And some are exalted, by favouring birth,
To bask in the sunshine of life."

Then answered the shepherd, in tone of rebuke, And gazed upon me, as he said, With an earnest smile and a far-seeing look— "'Tis the whim of a childish head;

"For each creature that lives has an equal joy In fulfilling its nature's law; And each soul may do glory to God, my boy, And have pleasure devoid of flaw."

We rose to depart, and the dog gave a bound (It was Jed—worth his weight in gold):
Our hirsel were roused from their summering ground,
And we gathered them down to the fold.

## ON THE RIDGES OF THE COOLINS.

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## BY WILLIAM BARCLAY, L.D.S.

THE bad weather of Skye is proverbial; is it not named the "Isle of Mist?" But it is not always so; there are days when the sun does shine on the Coolins, when the dark chasms surrounding Coruisk are lit up with the light of day, and the black and jagged peaks above, are exposed to view.

In the month of September last, Mr. A. E. McKenzie and the writer journeyed to the distant isle, and enjoyed for a whole week one of those bright periods so rarely met with in that region when the sun shone with summer vehemence, and the hills stood out sharp and clear, day after day; so that we enjoyed one of the rarest of mountaineering holidays, and were enabled for five successive days to wander over the peaks, and along the shattered ridges of this fine mountain range. Nowhere else have we seen such shapely peaks or such narrow and sensational ridges.

After twenty-four hours continuous travel we arrived at Sligachan one Saturday night, in the midst of a downpour—the one and only touch of wet that we had during our holiday. While this inn may be all very well for the tourist who comes to gaze on the Coolins with reverential awe, or perhaps pay a visit to Loch Coruisk, it is really of little practical use, as a centre, to the climber who wishes to explore the inmost recesses of this giant range. Situated as it is at the extreme northern end of the group, it is convenient only for the hills in that vicinity. We were extremely fortunate in securing quarters in lonely Glen Brittle, right at the base of the south-western giants, and within striking distance of all the principal corries.

It would have taken too big a slice out of our holiday to spend a day in crossing from Sligachan to Glen Brittle, so

we proposed to do Sgurr nan Gillean en PINNACLES route. With that intention we stayed the OF SGURR night at the inn, and hoped for a good NAN day on the morrow. When we got up in the morning Sgurr nan Gillean was GILLEAN invisible, the mist being down to the first

pinnacle; still, the day was promising, and we hurried over

breakfast, and were off by 9.10.

From the inn we struck straight across the moorland, over the Allts Dearg Mor and Bheag for the Bhasteir corrie. By 10 o'clock the day had improved wonderfully, the Red Coolins opposite had shaken themselves free of the mist, and the pinnacles above us began to show face. When we reached the entrance to the big gorge running down from Coire a' Bhasteir, we looked about for a place to leave our baggage, and found a suitable corner in the lee of a big boulder. Only one rucksack, with camera and a few sandwiches, and the rope, were taken up the hill. It was 11.15 when we reached the base of the first pinnacle, and by this time the Bhasteir was quite free of mist, as was also the greater part of Sgurr nan Gillean. We wasted no time, but immediately set off, up the rocks in front of us, and soon had topped pinnacle number one (2500). The second was as easily surmounted, and from the top (2700) we could see that the mist was not far above us. The wind was also blowing a little stronger and considerably colder. While ascending the third pinnacle, (2900) we entered the mist. and soon after had to "button up," as we were feeling rather chilly. Our first difficulty was experienced at the "bad step"—the descent from the third to the base of the fourth pinnacle-and here the rope was put on. The route was easily found, however, by following the nail marks, and a good hitch enabled the second man to descend in safety. The fourth pinnacle (3000) was much steeper than any of the previous ones, and gave much better climbing, though no further difficulty was experienced, and it was with a feeling of something akin to pride that we stepped up to the summit

cairn (3167) at 2.30. The mist had now completely gone, and the whole range of the Coolins lay before us. On our left were the "Reds," their soft and rounded outlines forcibly reminding us of the Cairngorms; while Blaven and Clach Glas conducted us round to the great chain of the "Black" or true Coolins.

Away in the south, over the hollow of Coruisk, we recognised Gars-bheinn and the Dubhs, and from there could follow the main ridge right round, over Alasdair, Dearg with the "Inaccessible," Banachdich, Ghreadaidh, and Mhadaidh, to Bruach na Frithe and the Bhasteir just on our right.

Truly a noble and never-to-be forgotten sight to one who has never before seen this fine array. Beneath us, the great Lota Corrie could be followed round the prominence of Sgurr na h-Bamha into the equally great Harta Corrie. Though it was still pretty cold, we found a sheltered nook, and enjoyed a little lunch; then we followed the ridge running down to the west, till we came to the "Tooth"-although thus named on the map, it is almost invariably called the "Gendarme." This we successfully traversed, and then descended by a small chimney into the Coire a' Bhasteir. We now skirted the precipices of Sgurr nan Gillean, descending diagonally over the screes till we reached the upper end of the gorge. Then keeping along its eastern wall we soon reached our hidden belongings. After a short rest and some lunch by the burnside, we shouldered our heavy rucksacks and set out on the final stage of our journey. We were already at a fairly good elevation, so by simply rounding the slopes of Meall Odhar, in about half an hour we reached the summit (cairn) of the Bealach a' Mhaim. There was little sign of a track on the Glen Brittle side, but as the "going" was fairly good, we had no necessity for one. Before descending very far, however, we struck off to the right, as the walking was easier, and joined the Carbost-Glen Brittle road about a mile above the bridge. In the passing we had a splendid view into Coire na Creiche. Once on the road we settled down to a steady tramp, and reached our quarters a few minutes before eight o'clock, or in one hour and fifty minutes from the gorge in Coire a Bhasteir.

It was dullish when we rose the following morning, and from our door we could see the mist playing about the

SGURR NAN summits of Alasdair and Sguman, alternately exposing and enveloping these rocky teeth. We did not settle any definite programme till we had seen how

the day was to turn out, but after breakfast set off in a leisurely fashion for Coir a' Ghrunnda. In the passing we stopped for a few minutes to have a survey of Coire Labain, but the mist was still hovering about. Out to sea the mountains of Rum were also cloud-capped. It was eleven o'clock when we rounded the shoulder of the Sguman ridge and dropped into Coir a' Ghrunnda.

Here if anything the mist was a little denser, creeping along the hillsides at about the 2000 feet level, and as there was little prospect of its lifting now, we decided on a simple ascent of Sgurr nan Eag, reserving our energies for a better day. Descending to the stream, we struck up the opposite slope for about 1500 feet, and so got on to the southern aspect of the mountain. It was then a steep ascent over scree and broken rock, all the way to the summit (3036). This, a long, narrow ridge with a couple of eminences on its crest, slopes steeply to the north-east in great slabby rocks.

We wandered along to the southern extremity of the ridge, and lunched in a sheltered corner. The mist was still very thick, so in about half an hour's time we began the descent, endeavouring as far as possible to follow our line of ascent. When we emerged from the mist, however, we found ourselves a little farther to the east than we expected, the noise of the Allt Coir a' Ghrunnda being responsible for that, as we had no desire to land on the steep rocks of that corrie. We had a second lunch by the side of the burn, and then a daunder home in the evening.

It was a beautiful morning when we set off on Tuesday for Sgurr Dearg, not a cloud was in the sky, and all the tops

PINNACLE AND SGURR NA BANACHDICH

were clear. The ridge of Dearg towered SGURR DEARG, above our cottage, and as it was only a "INACCESSIBLE" short mile to its base, we very soon had left the grass behind and were breasting the stony slopes. Under a broiling sun we found these screes very trying, but it was not very long before we struck the

ridge, and then, of course, it was much cooler. The walk along the ridge was most enjoyable, affording on the one hand most impressive views of Sgurr a' Ghreadaidh, and on the other of Sgurr Alasdair and Tearlach, separated by the deep notch which forms the beginning of the famous Stone Shoot.

We reached the small cairn at 11.30, took a few photographs, and then prepared to tackle the "Inaccessible" Pinnacle, which of course is the true summit of Sgurr Dearg, and which still towered above us for about sixty feet. skirted the pinnacle round to the south, and relieving ourselves of our rucksacks, put on the rope and commenced the ascent.

The climb from this side, though three or four times the length of the short northern extremity, is considered to be much easier, but, as a matter of fact, we found it quite difficult and sensational enough for us, though I must admit. at the same time, that we enjoyed it thoroughly. The ascent occupied us altogether about an hour, but that was going in a very leisurely fashion. Five minutes was spent at the top (3255), and then we descended, the journey this time occupying forty-five minutes.

We now scrambled along the ridge southwards to the next -nameless-top, and from there took a photograph of the pinnacle. Then we returned to the cairn on Sgurr Dearg and lolled away another hour with lunch, photography, etc. It was such a grand day that altogether we spent over four hours on the top of this mountain, and neither of us considered any part of that time as wasted. It was only when we remembered that the month was September, and that the

afternoon was wearing on, that we thought of moving, so turning our faces northward we descended to the Dearg-Banachdich col. Then followed another most enjoyable ridge scramble over two or three minor tops, until we were brought face to face with the highest point of Banachdich (3167) in an hour and ten minutes from Sgurr Dearg. While coming up from the col we observed two figures on the skyline making their way along the ridge of Dearg, and as we sat by the cairn they showed themselves on the "Inaccessible." when we exchanged salutations.

In our descent we followed the western ridge till about half way along to Sgurr nan Gobhar, then turned down the steep scree slopes into Coire na Banachdich, and found an easy though rough descent to lower levels. A quiet walk over the soft moorland landed us home at 5.50, just as fresh as when we left in the morning.

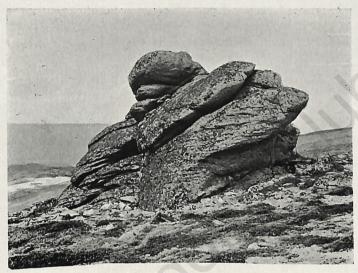
Wednesday morning showed a continuance of the good weather, and soon after nine we were wending our way for

DABHEINN, SGURR DUBH MHOR, SGURR TEARLACH, SGURR ALASDAIR AND SGURR SGUMAN

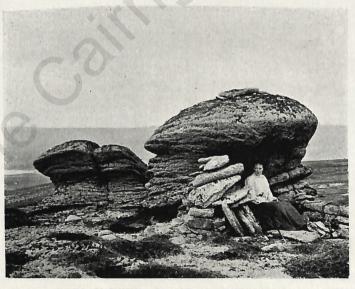
Coir a' Ghrunnda, this time with a definite SGURR DUBH NA programme in view, namely, to explore that part of the ridge between Sgurr Dubh na Dabheinn and Sgurr Alasdair, including, of course, the famous Alasdair-Dubh "Gap." It was just 10.30 when we reached the entrance to Ghrunnda, and keeping well to the left along the base of the Sguman cliffs, we rapidly made our way over screes and slabs to the inner basin of the corrie. This is

completely cut off from the lower by a mighty barrier of great sloping slabs, and is in fact a corrie within a corrie. In this upper part, amidst the most magnificent rock scenery, lies the little Loch Coir a' Ghrunnda, o'ershadowed by the peaks of Sguman, Alasdair and Dubh na Dabheinn. Looking backwards down the corrie one obtains splendid views of the islands of Rum, Eigg and Canna.

We rounded the lochan and attacked the slopes of Sgurr Dubh na Dabheinn, up whose sides we rapidly scrambled,



SGORAN DUBH-ARGYLL STONE.



Photos by SGORAN DUBH-CLACH A' CHUITSEICH. S. A. Kay.

at first over tremendous blocks of gabbro, and latterly over a broken up rock face. The ridge was struck just to the left of the prominent knob, Caisteal a Gharbh Choire, and from here the graceful Gars-bheinn looked most inviting. When we reached the top (3069) of Dubh na Dabheinn at 12.20, the short subsidiary ridge leading to Dubh Mhor looked so tempting that we thought we might as well take a run along to it. So dropping down the slight distance to the col we slipped off our rucksacks, and a short twenty minutes' climb over excellent rock landed us on the narrow moss-covered summit (3120). During the few minutes that we were sitting here a couple of eagles came sailing over our heads and disappeared towards Blaven, probably the same two that we had seen some time before circling about Alasdair. But it was now time to be moving, so we descended to the col, found our packs, crossed over the top of Dubh na Dabheinn again, and continued along the main ridge towards Alasdair. At the dip we halted half an hour for lunch, and immediately afterwards were pulled up short by a steep rock face in front. The rope was put on, but we found the pitch more sensational than difficult, and a few minutes more brought us to the well-known Alasdair-Dubh "Gap."

This is a deep cleft that completely cuts the ridge, and to all appearances seems to bar further progress. unclimbable gullies descend on either side, on the one hand into Coir a' Ghrunnda and on the other to Coir an Lochain. We were well informed as to the ways and means of passing this obstacle, so without more ado we hitched the rope and slid into the cleft. The route-unmistakable by the nailscraped rocks-now led up a narrow slit in the almost vertical wall opposite. Into this the leader jammed himself, and after a deal of scraping and wriggling reached firm anchorage above a jammed block. The second man followed after the rucksacks had been sent up, and a stiff pull up the next pitch landed us above the difficulty, the passage of which had occupied three quarters of an hour. It was now quite an easy scramble—though the rock was very rotten up the remaining distance to the summit of Tearlach (3230).

From the hollow between this top and Alasdair there runs down into Coire Labain the great "Stone Shoot"—the "easy" ascent of Alasdair. It was only a short drop from the summit of Tearlach into this gap, and then a ten minutes' scramble landed us on the top of Sgurr Alasdair (3275)—the giant of the Coolins. Here we finished our sandwiches and prunes, and watched the evening mists begin to gather about the summits.

We were now faced with the problem of reaching easy ground before darkness fell, so we decided to cross Sgurr Sguman and descend into the south branch of Coire Labain. We found a fairly easy way down Alasdair by keeping a little below the connecting ridge on the south or Coir a' Ghrunnda side, then from the dip it was but a step to the top of Sguman (3104). Daylight was now fast waning, and if we intended to get out of Coire Labain before dark, we must be pretty smart about it. From the summit we kept southwards for a little, and then turning to the right we worked our way down the screes, dodging the rock pitches as they came, and ultimately reached easy ground just as daylight left us. The remaining mile over the moorland was accomplished without mishap, and home was reached at 7.35.

Thursday: After our big day of yesterday we intended taking it rather easy to-day, so decided on a simple ascent of

SGURR A'
GHREADAIDH
AND SGURR
A' MHADAIDH

Sgurr a' Ghreadaidh, which, however, was extended to the inclusion of the neighbouring peak of Sgurr a' Mhadaidh. We left at 8.35 and followed the road up Glen Brittle for about a mile to the Allt a'.

Coire Ghreadaidh, then joining this stream we kept it company through the fine grassy slopes into the corrie of the same name. In its upper part this corrie forks, one branch running up to the right towards Banachdich and the south top of Ghreadaidh, while the other leads directly up to Sgurr a' Mhadaidh; a ridge running down from the summit of Ghreadaidh forms the division. As the rocks in the right section did not look very inviting—being wet and slabby—we struck up to the left round the prominence, and so got on to the ridge leading up to Ghreadaidh. Then a

short climb, partly by gully and partly up broken rock, landed us on the north top (3190) of Sgurr a' Ghreadaidh. Another twenty minutes' scramble along a very narrow and shaky ridge, and we were at the south top (3180). And here, perched on one of the shapeliest peaks of the Coolins, we sat for long, studying the line of the ridges and watching the mist play about the peaks to the south of us, while the calm and lonely Coruisk was lying in the shadows away down below. It was a lovely day, and as it was our last we were loath to leave. When we did move we returned to the higher top, and then continued down the ridge northwards, passing the tremendous cleft An Dorus. This is simply another "Gap" similar to the one between Alasdair and the Dubhs, but it is easily skirted on the east, and another short descent of 130 feet brings one to the Bealach. From here it was only a ten minutes' scramble to the highest point of Sgurr a' Mhadaidh—South top (3020).

On this narrow summit we remained for an hour and had lunch, then we dropped down to the Bealach again, and descended by a stone shoot into the upper part of Coir a' Ghreadaidh. A leisurely walk down the glen brought us to the road in Glen Brittle in an hour and a quarter.

The following afternoon we walked over to Sligachan by the Bealach a' Mhaim, caught the post gig for Portree, and on Saturday bade adieu to the Isle of Skye.

And here in the depths of the city
My fancy is ever astray,
My heart's with the kings of the Highlands—
I see them, I hear what they say.

We can fully endorse Mr. Tough's remarks—C.C.J. Vol. I.—as to the necessity for wearing gloves, for unless one possess the hands of a navvy it is next to impossible to climb for more than a single day.

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## SOME EARLY NOTICES OF THE SPEY, THE FESHIE, ROTHIEMURCHUS, AND GLEN-MORE.

By C. G. CASH, F.R.S.G.S.

In the Advocates' Library, Edinburgh, are preserved some bound volumes known collectively as *The Sibbald Manuscripts*. They were bought for the Library in 1723, after the death of Sibbald, and contain papers of much interest.

Sir Robert Sibbald (1641-1722), medical man, antiquary, and naturalist, writes in one of these papers, "Upon King Charles the 2do constituting me Kings Geographer anno 1682 September 30 I applyed myself to procure descriptions from those who resided in the severall Countreys and were most capable to doe them and then I wrott myself." The Sibbald Manuscripts contain part of the material alluded to, consisting of original documents sent to Sibbald, transcripts made for and by Sibbald, and accounts composed by Sibbald himself. Some of these documents are of quite exceptional interest; such are the holograph descriptions by the two Gordons, Robert and James—the latter in many cases professedly copying from the papers of Timothy Pont—and some maps drawn by these same three men.

I present here a few paragraphs relating to the districts near Cairngorm. Extracts 1 and 2 are from a quarto volume, press-mark 33.5.15, written mostly in an excellent script, evidently copied by an amanuensis from original documents; there is no indication of the authorship of these passages. Extracts 3, 4, and 5 are from a folio volume, press-mark 34.2.8, containing a large number of original papers in various hands, as well as some transcripts; the passages here presented are taken from papers entitled, "Noats and observations of dyvers parts of ye Hielands and Iles of Scotland"; the papers are in the handwriting of James Gordon, the parson of Rothiemay; the information in them

may have been taken from the papers of Timothy Pont, though this is not stated in regard to these descriptions as it is in regard to others.

These descriptions must rank among the earliest extant, and show that the general arrangement of the topography was quite well known, though distances are often curiously inaccurate. Thus Loch Gamhna is not a mile long, nor is it a mile from Loch an Eilein; on the other hand the Bennie is certainly more than two miles long, and so is the Luineag. In the last quoted passage "Balerongan" seems to be an old name for the cluster of houses that once evidently stood near Achnahatnich.

ROTHIEMURCHUS.—Upon the south side of the River [Spey] opposite to Craig-Ilachie lyeth the Parish of Rothemurcus, wt contains six Dauchs of Land, each Dauch being four Ploughs. This Parish is in a Creek, & a Pendicle of the Parsonage of Duthell. It holds of ye Regality of Spynie, it belongs to Patrick Grant a Cadet of Grant's Family; but formerly it did belong to the Schaws, who yet possess the Parish, Alexander Schaw of Dell being the Head of the Tribe. The Schaws are able fighting men, and acknowledge Makintosh to be their Cheiftain, and go under his Banner. The Schaws killed the Cumins that dwelt here, who built a Castle in the middest of a great Loch called Loch-Iland. This Castle is usefull to the Countrey in time of troubles or wars: for the people put in their goods & children here, and it is easily defended being environed with steep Hills and Craigs on each side, except towards the East. There is in the body of this Parish a great Firr-Wood of two miles of length, but very broad, in respect it runneth up into many Burnes. Here is a Saw-Mill, a great Forest with Deer & Roe, which marcheth with ye Forrest of Marr to the South.

GLEN-MORE.—Above this Parish [Kincharden] lyeth the Glen More, where is a great Firr-Wood with much Birch. Here is a great Loch, out of which runneth a Water, wt runneth through Rothemurcus, called Druie & runneth into the Spey. They use to bring down their timber on this Water. Here is ye famous Hill called Kairne Gorum, wt is four miles high. Here it is said there are Minerals: for Gold hath been found here. This Hill aboundeth with excellent Crystall. Much Deer & Roe here. The people of this Parish much neglect labouring being

addicted to the Wood, which leaves them poor. There is much talking of a Spirit called Ly-Erg, that frequents the Glen-More. He appears with a red hand in ye habit of a Souldier, & challenges men to fight with him, as lately in 69 he fought with three Brothers one after another, who immediatly dyed thereafter.

THE SPEY.—This river of Spey is accounted ye longest river in Scotland, for following ye draught yrof, not accounting smal crooks and windings it wil be no les yen thrie scoir myles long, in it cours it is swift above yem all, running throw hills, and running from a hie country. it is most myld and calme in ye course as it runneth through Badenoch, afterward lowe down a great deal more furious. yea at ye entrie into ye sea, it abateth nothing of ye wonted swiftness, and suffreth ye sea within it. be tyds verie litle not above a myle. it is exceeding clear water, so yt a man looking into it wold judge it shallow in many places and foordable, but it is far uthirways, and a great deal more deape yen it doth show, it hath manie rivers and great burns fall in it, al very clear streamis, but Avin river, which cumeth out of Strathavin on ye south syd, above yem all, yea more clear and pure yen anie river in Scotland whatsoever, this swiftnes and furious cours of Spey, suffreth no mills, dams, cruvis, years upon it. wherby great plentie of salmond ar vrin far beyond anie river in ye kingdome, even from ye springs to ye fall yrof. ye greatest plentie whrof ar fished at ye mouth be thrie corbils onlie. whrof every one hath a number of men to attend ye service of yem. far by ye use of uthir rivers, becaus of ye great strenth of ye streame and all this great and gaynefull fishing is done in less space of ye river then a quartr myl, or litle more.

The Feshie.—A myle from Farletie is Balnespick, a myl from it is Inner-Ishie, upon the west syd of Fishie river at ye mouth yrof. Item upon a half yland in Loch-Inche is Tome-Inche, a seat and kirk, a quarter myle be west Inner-Ishie. Twa myle above Inner-Ishie up ye said River of Fishie upon ye west syd yrof is Contelait, I myl upp on yt same syd of yt river is Cory-Arnisdail beg, 2 myle thence Cory-arnisdail moir, Aught myle above yt ar the mountayns of Scairsoch, wher out of floweth ye hiest brache of Fishie, no dwellings above Cory-arnisdail moir. A myle from Coryarnisdail moir upon ye east syd of Fishie is Innermarky wt alt-Marky, cuming out of Glen-Marky, half a

myle thence Croft Innermarky, a quartr myl from Innermarky, entereth in Alt-Roy falling out of a uglie corie cald Cory-Roy, wt a mightie steep craggie hill cald Craig-Megevie, wt manie deer above, and fair firr wood below. 2 myle thence fornent Innerishie is Dalnavert. a myl thence hard upon Spey is Kinrara-na-Caille, wt good firr wood.

ROTHIEMURCHUS.—Nixt Kinrara is Rothymurcus. Half a myle southeast from Kinrara is loch-na-gawin a myle long wt firr woods about it. a myl be east this loch is Rothymurcus loch a myle long wt a burne joyning ye said twa lochs, in yis last loch is a tour in ane inch. A myl from Kinrara hard upon Spey is Kean-na-pool. heir is a great hie hill called Torbain just ovir aganis Craig.-Alvie which is on ye north syd, and betuix Rothymurkus and Spey. Half a myl be east Kean-na-pool is Bale more, wt ye kirk of Rothymurkus, upon ye west syd of Avon Rothymurcus as it falleth in Spey. A myle above Bale more is Tullich-row, upon ye east of loch Rothymurcus, wt great and large firr woode. Item avon Trowy entereth in Avon Rothymurcus, a myl befor it fall in Spey. This avon Trowy hath a glen on ye west of it called Glen-Ennich, wt loch Ennich, thrie myl long cuming out of Cory-Ennich. Item upon ye southeast of Trowy is a burn cuming out of Loch-Moirlich, a myl long in glen-moir. it is twa myl befor Ennich fal in Trowy from ye head yrof, and 2 myl befor Moirlich entereth in Trowy from ye head yrof also. Half a myle from Tulloch-Row upon ye west is Innertrowy. Upon ye east syd of Trowy hard by the former is Inner-dale. Item upon ye east beneth Loch Moirlich twa myle is Balerongan half a myle yrfra Gewsalich, it is a myl above Dale.

## BEINN HEASGARNICH AND OTHERS.

### By John Ritchie.

It is surprising to note how comparatively accessible most of the higher mountains in Perthshire have become, owing to the spread of railways and other means of travel. Ben Lawers, Ben More and Am Binnein, Ben Laoigh, Beinn a' Ghlo, Schichallion, Ben Vorlich and Ben Ledi readily occur to one as examples. Railway, coach, or steamer will soon carry us to the foot of any of them. There is a certain pleasure, therefore, in being able to reach some more inaccessible Ben, from whose sides no puff of smoke from the passing train is ever seen, and no shriek of railway whistle is ever heard.

It is a common subject of remark that the opportunities for romantic travel in the world are daily growing less and less. In the course of years, few unexplored spaces will be left to men. Railwaymaking and bridgebuilding will leave to the world a very different Africa from that which Speke and Grant and Livingstone knew. future traveller in quest of adventure will with difficulty seek out the unknown parts of the once dark continent, and if he does light on a part less travelled over, there also will be gathered the most savage tribes yet remaining, whose senseless fury against the inoffensive wanderer will be apt to make his life a burden—of the carrying of which they would fain relieve him if they could. May we compare great things with small and suggest the working out of an analogy between Africa and our country? In the latter, the gillies and the sporting tenants will of course take the place of the savage tribes and their chiefs. With this hint for the subject of a paper by some future contributor to the Journal we leave the matter.

Some of our mountains, however, are not "gillie-fenced," and whether they are or not, let us spread the map on the table and seek out some remote and lofty Ben for an ex-

cursion. Here is the group of mountains that "guards Loch Lyon round," and here is Beinn Heasgarnich (3530) standing on the south side of the Loch and well off the beaten track. Long had the tireless W. B. wished to ascend this mountain, (had not the Scottish Mountaineering Club Journal referred to it as little known, and invited information for its "Guide Book"?) so we planned a visit to the hill for a day in June, 1905. Several courses are open for the approach, but we chose Glen Lochay, which is probably the best. The visitor to Loch Tay who sails up to Killin and the head of the Loch has two glens branching off before him, Glen Lochay to the right and Glen Dochart to the left. From Killin it is a walk of about ten miles up Glen Lochay to the foot of our mountain. Setting out from Perth about five o'clock one afternoon in June, 1905, and travelling by the Crieff and Lochearnhead railway, we reached Killin about 7.30, and half an hour more saw us on our way up the glen to Lubchurran, a shepherd's cottage where we had secured quarters for the night.

Glen Lochay resembles many more Highland glens, in that it is well wooded in its lower reaches, and more wild and bare as we ascend to its head. We visit the beautiful falls of Lochay about two miles up from the entrance to the glen at Bridge of Lochay, and pass a most romantic part where the river runs through the woods on our left in a series of loud-sounding rapids. The peaks of the forest of Mamlorn which close in the head of the glen soon come in view, rising boldly into the western sky. Let us for a moment discard our pedestrian pen and set down the eloquent words of Dr. Macmillan about the view, as seen, not in the gloaming, but at high noon. "In the far distance the glen is shut up by the great ghostly peaks of the Forest of Mamlorn, streaked with snow, appearing and disappearing through a dim haze, at the foot of which are miles of treeless pastoral lands, sunsteeped in the drowsy noon, whose monotony oppresses the soul, and whose profound silence becomes almost audible. The sigh of the wind and the murmur of the river produce a peculiarly sad effect in the universal loneliness, like the cry of the curlew and the wail of the plover. You seem here to lose consciousness of the human world altogether, while your own existence becomes more intense amid the immeasurable solitudes." Be that as it may, there is no peculiarly sad effect produced in my companion and myself as we step westwards into the growing darkness. We feel supremely happy as we leave the farms behind us and look forward with cheerful confidence to "a fine day on the riggins the morn." Long shall we remember the delight of the walk up Glen Lochay in the gloaming of that perfect day.

At last darkness has fallen and we must be drawing near our destination. A light gleams across the moorland on the left, and we bend our steps in that direction. A narrow wooden bridge swinging high over the Lochay, and seeming strangely insecure in the darkness, gives us a crossing to the other bank of the river, and in a short time we have reached our comfortable quarters.

The next day broke bright and clear, and we were early on foot. "Where is Beinn Heasgarnich, shepherd?" "That's him, sir, just in front of us across the glen." "What! that is surely far too close at hand for our Ben." "That's 'Easgarnich sure enough, and that high peak further to the left is Creag Mhor, and that's Ben Chaluim there with the sun shining on it." How lovely the green-grey giants looked, sleeping in the morning sunshine! We bade goodbye to our kind host and hostess, crossed the Lochay and made tracks for the top of our hill. We climbed upwards in a long slant towards the west, and after a time we reached the corrie from which a burn known as Allt Badour runs down to meet the Lochay. The summit of the mountain lies just to the west of this hollow. The clearness and freshness of the early morning had passed away to some extent-though it was still early-and everything seemed to promise a very hot day.

Our walk to this point had been wholly over grass, and indeed most of the mountains in this district are grass-

covered to their summits.¹ Beinn Heasgarnich, though it affords a pleasant and easy climb, is not a specially attractive mountain to look at. Its top consists of a long ridge running north and south. The highest part of the mountain is at the north end of this ridge. An easy walk over a number of grassy slopes running parallel to that of the summit soon brought us to the highest point, where we lay down and basked in the pleasant sunshine for a couple of hours. The view was remarkably good, and we were able to identify most of the mountains that rose on all sides as far as the eye could reach. A number of the Cairngorm summits were visible, including Beinn a' Bhuird, Ben Muich Dhui and Braeriach.

The nearer view was fine. There below us to the north lay the little Loch Lyon. Its shores are not specially · interesting, as the lack of wood and its comparatively regular shape do not tend to make it a very remarkable feature in the landscape. "A pleasing sheet of water two miles long and quarter of a mile wide," says Murray's Handbook. pleasing sheet of water is a suitable and not unduly enthusiastic phrase. From the loch the River Lyon takes its course eastward down the glen that bears its name, and we can trace the long white ribbon of the glen road till it is lost to sight near Meggernie. The feature of the near view, however, is the noble group of mountains to the north of us. Close at hand, and rising from the northern shore of the loch are Ben Vannoch (3125) and Ben Chuirn (2795), and behind these-forming a splendid arc-are Beinn Creachan, Beinn Achallader, Beinn an Dothaidh and Beinn Doireann. From this point the conical summit of Ben Creachan was especially

<sup>&</sup>lt;sup>1</sup>The writer is unfortunately not a botanist, but he is indebted to Mr. R. H. Meldrum, the Schoolhouse, Tibbermore, who knows Beinn Heasgarnich, for the following note: "To a botanist Beinn Heasgarnich is interesting as being the scene of the re-discovery of Carex ustulata in Britain. This rare Alpine sedge was recorded [1810] from Ben Lawers by George Don, but as no other botanist could find it in that neighbourhood doubts of Don's veracity began to be freely expressed. About 20 years ago, [1885], however, the plant was found on Beinn Heasgarnich by Mr. Brebner, Dundee, and somewhat later on [1892], Ben Lawers itself by Mr. Paul, Edinburgh, thereby completely establishing Don's good faith."

noble in its appearance, and we vowed that we must reach that mountain "next time."

We now retraced our steps and walked southward along the ridge. It was only about eleven o'clock, and we looked around for another summit to climb. Creag Mhor (3505) stood out boldly to the south-west, separated from the point on which we stood by a deep and narrow valley. In shape this mountain is a great contrast to Beinn Heasgarnich. The latter, as has been indicated, is rather massive than handsome, while Creag Mhor, on the other hand, towers aloft-a real "craig"-with conical rounded head. We at once set out for this fine summit, and after a steep descent of about 1,600 feet we reached the dip between the mountains in about half an hour and sat down for lunch by the side of the Allt Fionn a' Ghlinne, which runs north towards Loch Lyon. The day had now become oppressively hot, and the steep climb to the top of Creag Mhor seemed the hardest part of the day's work. The view from the top is very similar to that from Beinn Heasgarnich, but Am Binnein or Stobinian, one of the noblest of Perthshire mountains, now made its appearance, opening out behind Ben More. These two mountains are distant only about eight miles from the summit on which we stand. The twin peaks rising sharply into the air are one of the finest features of the view from the Loch Lyon group. A glimpse of Loch Awe was also had, while Ben Cruachan with its two summits almost rivalled Ben More and Am Binnein in grandeur.

Leaving the top about half past one o'clock we had a descent of 1,600 feet to the Allt Learg Macheathe, and then followed another climb over the ridge running northward and separating us from Beinn a Chaisteil. As we crossed this slope the writer began to feel that he had had enough of this great Mamlorn switchback for the day, but W. B. held on heartlessly. On reaching the foot of Beinn a Chaisteil (2897) we turned southward, crossed the county march between Perthshire and Argyleshire, then rounding the base of the mountain on our right, we entered Glen Choillean, which runs west to the West Highland Railway at the famous "horse shoe," between Tyndrum and Bridge

of Orchy. It is a fine glen with Beinn Odhar (2948) on the left, Beinn a Chaisteil on the right, and, noblest of all, Beinn Doireann's steep sides in front. The railway was reached at last, and then a walk of about four miles brought us to Tyndrum at 5 o'clock. By 7.30 we reached Perth, and our long and happy day on the "riggins" had come to an end.

Another year passes, and with the return of summer comes the wish to go back to some of the Loch Lyon hills. A walk over Beinn Achallader and Beinn Creachan is decided on, and our company is made up for the excursion. W. B. cannot join us, for he is "living in the Midlands that are sodden and unkind" (though at all times one knows that "the great hills of the North Country come back into his mind)". F., however, is willing to join in a tramp that promises sunshine and the pleasant light of day in contrast to a former midnight wander over Beinn a Ghlo, and B. and M., two other intimate friends, make up the party. Quarters for a night were secured near Loch Lyon, and our plan was to travel to Bridge of Orchy by train, climb Beinn Achallader (3399) then walk along the ridge to the north-east over Meall Buidhe to Beinn Creachan (3540) and descend to our lodging for the night. Next day was to be spent on Beinn Doireann (Ben Douran), from which we were to return to Tyndrum for the night, and so get back to Perth on the following day. The best laid schemes-

We set out early one morning in June, 1906, and travelled to Tyndrum. There the silly competition of rival railway companies left us, as usual, to kick our heels for several hours before we got a train to Bridge of Orchy. Beinn Doireann had a cap of mist, and generally the chance of a settled day seemed far from certain. However, in the early afternoon we reached Bridge of Orchy, and set off in good spirits to walk the four miles or so that lay between us and the foot of Beinn Achallader. We took the railway track as being the most direct road. A drizzling rain set in very soon after we left the station, and it continued to fall in a steady, unintermittent way, which made the prospect of a walk over the hills to Loch Lyon a somewhat cheerless one. A dreary mist lay along the slopes of Beinn na

Dothaidh and the other mountains on our right. Mist shrouded the peaks of the Black Mount away to the left, while over Loch Tulla and the moor of Rannoch in front of us brooded the blank solitude of rain.

Beinn Achallader rises close to the railway, and the top can be approached by a northern or a southern ridge. In the weather conditions then prevailing it was difficult to say which was the better line to take, but at last we resolved to climb up the northern slope and bear back in a southerly direction to reach the summit. A subsequent examination of the hill in good weather seems to show that this is a mistake, and that the better course is to climb by the southern slope, leaving the railway soon after crossing the Achallader burn. We passed this fine stream, which came tearing down a deep and rocky gorge on our right, and passed the ruins of Achallader Castle on our left, where the massacre of Glencoe is said to have been planned.

We turned aside to a surfaceman's cottage to ask where we could find "the main road over to Glen Lyon." "Oh, dear me!" said the woman who came to the door. "There's no ony main road to Glen Lyon. You're never thinking o' gaen' ower the hill in a day like this." Thus spoke the "mistress", and other members of the family crowded into the doorway to gaze on the "chiels" that were so hard up for something to do as to be set on crossing the hill on "siccan a day."

At last it seemed to me we had had enough of the exhilarating exercise of walking over railway sleepers, and I called to my friends that it was time to take to the hill, setting out myself across the heather to strike the northern ridge. I thought the others would follow at once, but they kept along the railway for about half a mile further in the hope that they would find a better starting place. As I climbed up, the heather soon gave way to the grass that covers so much of this range. On reaching a point on the ridge under the line of mist I waited for my companions. F. made his way to the place where I stood, but the others who were lower down the hillside to the north of us evidently hesitated as to the best course to take for the further ascent.

The day had now become so bad that F. and I discussed the question of whether we should not abandon the idea of crossing to Glen Lyon and return to Bridge of Orchy, and we waited till our companions should come up to give us their opinion. We saw them set out, and in a few minutes they disappeared behind some rising ground. We thought they were taking what they considered the easiest course to reach us and we waited for a considerable time, but they never came in sight. The mist began to roll lower and lower down the mountain, enveloping the spot where we stood, the rain kept driving along the hillside, and to our deep vexation we found ourselves completely separated from our companions. We made our way in the direction in which we had last seen them,-shouting and hallooing in the hope that we might attract their attention. We climbed a little higher up the mountain and then descended, walking along the side of the great corrie on the north side of Beinn Achallader and shouting as we went, but all was of no They were not to be seen walking up the corrie as we had half hoped, and at last we had to come to the conclusion that, whatever course they had taken, it was useless trying to find them on that hillside. We stood debating what our friends were likely to have done-to have gone on or turned back. At last we concluded they had followed the latter course, and we were confirmed in this opinion by the fact that they had neither map nor compass, and that they were quite unacquainted with the district. At the point where we stood we were, so far as we could judge, about 700 or 800 feet from the top of the mountain, and the mist, when it lifted a little at intervals, showed a grand rocky slope in front of us. At last, with reluctance, we began to descend, scanning the railway below us-when once we were clear of the mist-for any sign of the "strays," but they were not to be seen. We got down to the railway about five o'clock. and anxiously inquired of a surfaceman whom we met if he had seen two men with bags on their backs walking towards Bridge of Orchy. Yes, he had seen them. Our spirits rose. but a few further questions brought out the fact that they were two tramps who had passed more than an hour ago.

As we walked back and could see or hear nothing of B. and M., we had to come to the conclusion that they had gone over the hill after all, but it was too late for us to follow them now, and we resolved to make our way to Inveroran Inn at the west end of Loch Tulla and spend the night there. A man whom we met on the line advised us to save a couple of miles' walk, by crossing the Orchy on some stepping-stones to which he directed us. He assured us we would cross dryshod. Let future wanderers shun that man; the truth is not in him. We were wet enough already but we were wetter still when we reached the other side of that river. However, we had only a few miles to walk to Inveroran, and we tramped along at a good pace. We kept wondering what had become of our friends and how they were faring, but we were encouraged in the hope that they would reach their destination without mishap, as a great improvement had taken place in the weather, the rain had stopped, and for a time the summit of Ben Achallader stood out quite clear, glowing in the light of the evening sun. was not the least tantalising experience of that tantalising day. We soon passed through the fine fir wood that makes the south side of Loch Tulla so beautiful, and arrived at our inn a little before eight o'clock.

Next day broke bright and clear, and we made an early start for Bridge of Orchy, intending to keep to this part of our original programme and climb Beinn Doireann and possibly Beinn an Dothaidh. We crossed the railway at Bridge of Orchy station, and struck up to the left towards the top of Beinn an Dothaidh. An uneventful and comparatively easy walk of about an hour and a quarter brought us to the top of the ridge that overlooks Bridge of Orchy, and we sat down to gaze upon the glorious prospect of the Black Mount summits spread before us to the west. Clachlet and Stob Ghabhar were most prominent, but away behind Inveroran and Loch Dochard rose a fascinating peak, which reference to the map showed to be Stob Coiran Albannaich (3425). Thither, if fortune favours and gillies are not too numerous, we must travel on some future day. To the north are seen the remains of the old Caledonian forest north of Beinn Creachan; beyond lies the

gloomy solitude of the Moor of Rannoch with Loch Laidon and numberless smaller lochs shining brightly in the sun. In the south-west Glen Orchy, with its streak of river running between grassy banks, led the eye towards Dalmally and Loch Awe.

Poor F. gazed in rapture on the glorious prospect spread before him, and unslung from his back a heavy camera which he had carried for many a mile in the hope that some such mountain panorama as this would present itself. stand was fixed up and a few plates were found, but unfortunately while at Tyndrum, before setting out, we had, in the kindness of our hearts, distributed amongst us F.'s photographic apparatus with a view to lighten his burden, and among other things the lost men had the "changing bag." F. was not to be daunted, however, and at his request I bound his hands and arms fast in his emptied rucksack, while he wrestled in the interior in the effort to change his I gazed with admiration while he struggled, resembling for all the world Mr. Stuart Cumberland endeavouring to unloose himself in the course of his famous entertainment. The task proved too difficult, however, and the heroic F. had to give it up.

An easy stroll from the ridge on which we sat brought us to the top of Beinn an Dothaidh about 12.30, and after an equally easy descent we crossed the col between this mountain and Beinn Doireann (3523), and struck up towards the summit of the latter, which we reached about 3.30. (We took things very leisurely, so these times are no guide.) Beinn Doireann is a delightful mountain. Duncan Ban MacIntyre, the famous Gaelic poet, who was born in this district, has sung of it in strains that may seem a little exaggerated as we read them in Professor's Blackie's rendering—

Honour o'er all Bens
On Ben Douran be,
Of all the hills the sun kens
Beautifullest he.
For Ben Douran lifts his head
In the air,
That no Ben was ever seen
With his grassy mantle spread
And rich swell of leafy green
May compare.

But, whether exaggerated or not, Beinn Doireann is well worthy of a "day" from members of the club. Seldom have I walked over more springy ground than the turf and moss we crossed as we drew near the conical point to which the summit of the Ben rises, and the view was superb. We were at one in declaring we could not remember a more delightful day on the hills. The weather was very different from that of the day on Beinn Heasgarnich a year before. There was no sultriness in the air to-day. It was bright, invigorating, "washed" clear after the preceding day's rain.

The view from Beinn Doireann has been sufficiently described by Mr. Barclay in Vol. IV. of the C. C. J., p. 233, so it is unnecessary to dwell on it here. It may be noted, however, that from one point we saw very well the south end of Loch Ericht, lying darkly in its cut among the hills; Loch Lyon, dark blue in its colour to-day, lay to the west of us; old friends like Beinn Heasgarnich and Creag Mhor reared their lofty heads into the air. The finest part of the nearer view, however, consisted of the arc of mountains stretching northwards from us—Beinn an Dothaidh, which we had just left, Beinn Achallader and Beinn Creachan.

Many glances did we cast from the high ground on which we had been spending our day, up Glen Chonoghlais, for by this route were our lost friends likely to make their way from Loch Lyon towards our rendezvous at Tyndrum. They were not to be seen, and visions of their possibly having been benighted and spending the night on the hills rose before our minds and gave us some anxiety.

We descended the very steep south side of Beinn Doireann, over stony screes and down long and deep grassy hollows till, at 5.30, we reached the foot at the point where the road from Bridge of Orchy to Tyndrum crosses the Chonoghlais. We then set out down the road to Tyndrum, and as we drew near our destination we were delighted to meet B. walking up the road to meet us. From him we learned that he and his companion had come to the conclusion that we were taking an unnecessarily difficult course over Beinn Achallader, and, thinking that we should under-

stand their intention, they struck up the corrie, crossed the col to the north of the mountain, and after much tiresome wandering descended on Loch Lyon. They had reached their destination about 7.30, and were surprised to find we were not there before them. At last they had to give up hope of our arriving that night, and concluded we had gone back. On the following day they contented themselves with the walk down Glen Chonoghlais to Tyndrum. It is very desirable that some travellers should record how often the burn has to be crossed in this glen—our friends thought somewhere between thirty and a hundred times.

Thus ended another "varied and interesting" excursion among these mountains. Let us hope that more are in store for us—with no such unfortunate accident as attended this one. Here's to you, Ben Creachan! Here's to you, Stob Coir an Albannaich! On this rainy gusty November night we look towards you.

### SUR LES DIABLERETS.

### BY ALFRED D. SMITH.

ONE of the most delightful valleys of Switzerland is the charming spot, situated to the north of the Diableret Mountains and about four hours' drive east of Aigle, where somewhat away from the swirling tide of tourists nestles the quiet village of Ormont Dessus. Here, with an hotel-keeper innocent of English, and at an altitude of some 4000 feet above the sea, one may forget that such a thing as business exists, and feel that repose of mind and body which comes from complete change of environment and the proximity of conditions that invigorate the health and charm the senses with their beauty. The majestic Diablerets to the south, beautifully wooded at the foot and shimmering with glaciers at their summits, aroused the climbing spirit within me, and having a Swiss friend, an experienced mountaineer, in the vicinity, his proposal one day to attack one of the heights on the morrow was irresistible.

"Up in the morning early" is a well-worn maxim among mountaineers, and, with the sun so overpoweringly evident as it was in the late summer of 1906, it is doubly necessary to act up to the sentiments of the old Scottish song. hotels are well used to meals at hours seasonable and unseasonable, so that, having risen at 4.30 a.m., and dressed by candlelight, on the 1st September last, M. Anglaise had no difficulty in enjoying his morning coffee at 5 o'clock, and 5.45 saw all preparations completed and a start made with the gradually increasing light heralding the approach of another day. Wending in a southerly direction our course was up the Creux de Champ valley, the path winding alongside the Grande Eau, whose icy waters, rushing through the well-wooded pastures of this peaceful spot, showed in their slaty grey colour the glacier source from which they spring. The path rose slowly, and having in remembrance the warmth of the recent days, it was delightful to enjoy

the cool atmosphere of the early morning air, and hopes were freely indulged that our solar orb would not show his too luminous rays over the mountain tops in front until a substantial amount, at least, of the climb had been accomplished.

Having no aneroid on this occasion, it is only possible to give approximate altitudes, but probably in an hour from the start we had risen about 700 feet, the sun now tinting with its morning light the mountains to the north, behind. Diablerets here form an amphitheatre round the Creux de Champ (a rocky basin which these mountains partly encircle). the main stream of the aforementioned torrent taking its rise in the centre of them and descending sheer from the glacier; and the trees around, clustering on the lower parts, form a beautiful contrast to the mass of rock ascending in all its grandeur to the heights above. Having risen to about 5000 feet above sea level our path bore to the left, or to the north-easterly end of the range, and the more arduous work of the ascent began with a constantly winding path of considerable steepness, bearing in a zig-zag manner up through the trees that clothe the lower sides of the mountains. This verdure adds greatly to the latter's charm, and, with the grandeur of the rocky glacier-strewn heights above, is a combination of which we cannot boast in our own more modest Scottish hills. These trees grow up to a height of about 6000 feet above the sea, and the knowledge of this fact enabled us to estimate our altitude, as we would soon be nearly out of the wood-at least in one sense. Not, however, in another, for the chief work of the climb lay before us. Halts "to admire the view" began to be made, but on this occasion there was really some justification, and at 7.15, at an altitude of about 5,700 feet, a short rest was taken, the sun being now well up and tipping one of the peaks to the right and all the tops behind with a beautiful morning glow. Away to the west the Tours D'Ai stood out conspicuously, reminding one in their shape, though of course on a grander scale, of those well-known landmarks in the English Lake District, the Langdale Pikes. Being somewhat of a "Salvationist," I gazed with an ever-increasing interest upon

the gradually approaching rocks ahead, wondering what my Ultramontane friend had in store, only hoping that he had not over-rated my powers of negotiating inclines whose declivities verged on the perpendicular. Meanwhile, to wile the passing hour, he entertained me with cheery accounts of his recent experiences on these elevations, wherein falling stones, risky slips on the glaciers, and other items of mountaineering small-chat formed a leading feature.

Passing now a deserted hut we crossed a considerable patch of grass still growing at this elevation, but all vegetation ended at about 6,500 feet, the path then becoming indistinct over rough scree and boulders, the acclivity having a gradually increasing tendency up which the stocks of the ice axes

became increasingly useful.

As before mentioned the start had been made at an early hour, in order that as much of the ascent as possible might be accomplished while the mountain was still in shadow, so as to escape the exhaustion which would be produced by the direct heat of the sun's rays. From time to time backward glances were cast at the line of light creeping up from below, with what seemed relentless speed, and knowing the effect it would have when it reached us, it was not till after nine o'clock that it was decided that it would now be desirable to take a little respite from labour and indulge in a second breakfast. Had it not been that the writer hailed from a Northern clime and was, therefore, more accustomed to the east winds of our Scottish capital than the balmy rays of a more Southern sun, a request for a breathing space would ere this have been made. Here at a height of some 7,500 feet we enjoyed a magnificent prospect of mountainous country spread out beneath, and appreciated all the more the benefit of the rest because of its delay. For an hour or more we gazed our fill upon a grandeur of scenery unobtainable nearer home, and refreshed the inner man with the provision which forethought had provided. But time and tide wait for no man, and-"The sun "-exclaimed my friend, and glancing up I saw the rays of the (on this occasion) unwelcome intruder striking my friend's headgear. Losing no further time, kits were speedily packed, and the ascent up- . wards recommenced. The general acclivity had increased to about 40 degrees, and we pressed on up the steep scree and sterile rocks, capital hand-holds being obtained, and at 8000 feet reached the edge of the Prapioz Glacier. As the rock was pretty good, it was not yet deserted, but the ascent continued up the right hand or southern side of the icy field for a few hundred feet more, and then, having duly roped, my leader traversed to the left, and, crunching the crystal ice, we commenced cutting steps up the glacier. It was delightful to a Northerner to touch the cool ice and snow once more, and, the crevasses not being large or dangerous, good progress was made. At 9000 feet a divergence was made to the right, and a magnificent view was obtained of the Tete Ronde peak surmounting the Mauvais Glacier, the latter so called because of the danger from falling stones to be experienced when traversing it, the wildness of the intervening declivities presenting that dizzy and awesome appearance which mountaineers so love to behold. After a short halt for a photograph of the writer, with the foregoing as a background, progress was resumed up the glacier, but as it was now less steep, step cutting was hardly required, and kicking footholds was sufficient, though just at the further end the axes for a few steps were again useful.

Now came the the stiffest portion of the ascent, for, some hundreds of feet above, cliffs, reaching to the top of the mountain, presented an obstacle which required some energy to overcome, and were the objects in which the Cairngorm member had been taking a peculiar interest some thousands of feet below. The practised eye of my Ultramontane friend, however, soon picked out the best route, and steadily but slowly, and taking all the usual precautions, the distance from the summit was gradually lessened. A good deal of the work was along ledges of outward sloping scree, where the shaft of the ice axe was invaluable as support. From ledge to ledge we crept, and I, for one, never moved without being assured that the rope was well and effectively hitched. Unfortunately the rock here was not very good, or progress would have been quicker, but, with one slight exception, no trouble was experienced from that bête noire of climbersfalling stones. Nevertheless the climb was pretty toilsome, and, coming as it did at the end of seven hours' hard work, fairly exhausting. No regrets were therefore expressed when, on rounding a corner, it was discovered that the next ledge would crown our efforts with success, and, after traversing this, and receiving a shower bath in crossing a cascade, which came off the glacier above, a short steep slope of scree took us at one o'clock on to the Zanfleuron Glacier at the top.

The day's labour was now accomplished, and, as beforementioned, there were no regrets, for it had been a long and trying climb, and the last cliff was, for a Salvationist, not one to be despised. It was a fine experience, nevertheless, and not one for a moment since regretted. Having been going, with the exception of the nine o'clock rest, almost continually for six or seven hours on a declivity by no means slight, a substantial halt was now necessary. Most fortunately the whole ascent was managed before the sun got round on to the Western face of the mountain, but the heights were scaled none too soon, for almost directly afterwards its rays were beating upon the cliffs. Even at this altitude, 10,000 feet above the sea, and upon the snow covering of the glacier, the friendly shade of a large rock afforded a shelter gratefully accepted. A two hours' rest was here taken, and the contents of the knapsacks energetically attacked, and, following the satisfaction of the inner man, a short snooze formed not the least enjoyable feature of the halt.

Although practically on the summit, another fifteen minutes' walk remained to the Dome. The view I shall not attempt to describe. It must be seen to be appreciated. But those who have been in this magnificent country can imagine something of one's feelings when, standing on the snow covered glacier, with the cliffs of the rocky Diablerets behind, we gazed upon range after range of Alpine peaks on every side, with the Matterhorn and Weisshorn towering above their fellows in front, the Mont Blanc, that monarch of European mountains, dwarfing its satellites to the right, we listened to the avalanches thundering like the booming of cannon into the depths beneath.

But, being pressed for time we could not linger, and, after the inevitable photograph, set our faces to the northeast, across the Zanfleuron, and then the Sex Rouge Glaciers, passing between the Sex Rouge summit on the left, and the Oldenhorn on the right. Quick going brought us to the beginning of a rough path at 3.50 p.m., and by the descent of rough scree the Cabaine des Diablerets of the Swiss Alpine Club was reached at 4.10. After signing the visitors' book, and mentioning the route accomplished, the path, narrow and steep in places, was resumed, with scree in considerable quantity, down which the most expeditious means of descending was by standing glissades. Then followed a long weary path to the foot. mountaineers do not waste much time on such work, and there was not much breath left in the Edinburgh Member's body when he pulled up at a Swiss cow-shed by the road side at the Col du Pillon at five o'clock. The ascent of the Diableret is frequently made by ladies from this point, and presents no great difficulty except that at one point there is a nasty little staircase which may be awkward for those nervously inclined, and a little efficient assistance is desirable. Otherwise, the chief requisities by this route are plenty of time and a fair amount of power of endurance. But, certainly, no novice should attempt the ascent from the Creux de Champ, unless, in addition to his enduring qualifications, he be accompanied by a thoroughly experienced mountaineer, and be the possessor of, at least, a moderately steady head.

Only the high road home now remained, and a three mile walk brought us to Ormont Dessus about 6 p.m., after an absence of exactly twelve hours.

## GENESIS OF HIGHLAND SCENERY.

### BY REV. D. C. MACKAY.

THE first time that we ascend one of our higher mountains on a fairly clear day and look around, we are inevitably struck with astonishment at the wonderful sight that presents We may have listened to realistic accounts and read graphic descriptions of all this, but in spite of the fidelity of these verbal testimonies, nothing short of personal observation can succeed in bringing this wild scene home to our imaginations. When looking from the plain, one is apt to imagine that there are at least certain lines or ranges of hills more or less defined, but when we reach a commanding mountain top this illusion is soon dispelled. There is really no attempt at lines or order of any kind—there is only a jumble of hills and mountains of all sizes and shapes. On recovering from the first sensation of astonishment, the least inquisitive will be inclined to ask whence comes all this variety of feature. In the old days of faith, people did not trouble about these things, or, if they did, they were apt to put it all down to the particular fancy of the Creator on the morn of creation; but in these days when science arrogates every domain to itself, we are of a more enquiring turn of mind, and must have the why and the wherefore of everything.

Why, then, and wherefore these hills of the Highlands?

For an answer to this we must turn to Geology. This comparatively youthful science is simply the offspring of nature fertilised by observation, so that every man may be a geologist to a certain extent, given a little aptitude and opportunity. With regard to the genesis of our scenery, then, geology tells us that the chief agents at work were the following:—

(1) Upheavals of the soil by some subterranean force, producing corrugations, undulations, faults, etc., on the surface. (2) Rain, frost and the elements in general, resulting in a constant denudation of the surface. (3) Water deposit-

ing sediment, marine, lacustrine or alluvial. (4) Ice in the glacial age depositing in one place what it had carved out in another. (5) Volcanoes bringing new elements to the surface. No doubt most of these agents have been at work from the beginning; but as real, practical science does not pretend to say just what that beginning was, we cannot exactly study these agents setting out to work; it will, however, be quite sufficient for our purpose if we watch them actually at work, or if we examine the general results they are producing.

The first, and, probably the greatest of these agencies is upheavals of the surface. We cannot explain the cause of these, as we have not had opportunities for studying the forces at work under the earth's crust, but we may form some idea of their magnitude from the terrific violence of some of the volcanic eruptions. But, whatever the cause, the effect of these forces is evident enough, and is also extremely varied, these upheavals (under which head we must understand also the corresponding antithesis, which is subsidences of the soil) being sufficient of themselves to produce a great diversity of scenery. A few lines of rough drawing will explain my meaning better than many lines of print. Let us suppose then that we start with a plain composed of various kinds of rock and soil lying in horizontal layers one above the other as represented in section in (Fig 1.) So far it is an ordinary, undiversified



Fig. 1. Horizontal section of (imaginary) rock with perfectly regular strata.

plain. Presently the labouring heat in the centre of the earth, or some other cause or causes unknown, sets to work upon it, and, in the course of many years, produces a little hill in the middle of our plain. It is to be noticed also that in this operation the courses of rock lose their horizontal

position (Fig. 2.) There we have already got a hill. But suppose, as very often happens, that this elevation of the

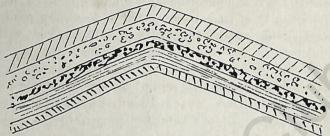


Fig. 2. The same after upheaval (omitting superficial vegetation.)

soil had taken place, not merely in a broad plain, but in a valley through which a stream was running (Fig. 3.) The



Fig. 3. Similar strata worn away by water.

result would be that as the bed of the valley was gradually raised up, the stream would be dammed back and its waters would have to keep rising apace with the obstacle before they could surmount it and continue their way to the sea. Thus we have a loch. And supposing further that this loch eventually attained an area of several square miles, and that



Fig. 4. The same upheaved under river bed, producing a lake.

another upheaval took place in its centre, the result would naturally be "an islet in an inland sea." Thus it is evident that these upheavals may be capable of producing practically any variety of scenery. I have here indicated merely the

main lines, but a little reflection will readily suggest a great many details that may result from the process of evolutions described. For instance, it may happen that some rocks, especially if they lie at some distance from the point of upheaval, may not be sufficiently pliable to yield to the upward thrust, with the result that they will crack, the portion that is more directly under the influence of the upheaval continuing to rise, while the other portion remains in situ, thus producing what is technically known as a fault. (Fig. 5.) Again if this happened during the process of



Fig. 5. On further pressure the rock to the right refusing to yield more produces the fault at (a), through which the stream may find a new exit.

damming up a stream, the latter would naturally find a new course for itself where the fault had occurred.

It is not to be supposed that these or any similar changes will be likely to take place in the course of a few years. fact geology does not deal with years. A century would be almost a microscopic unit of time for this science, as any event worthy of its notice can scarcely be said really to have taken place in such a short period, unless in the case of some sudden cataclysm. Bearing this in mind, we can easily understand that these upheavals may be taking place around us, or even under our very feet, quite in the normal way, without being in the least appreciable to us during the relatively short span of our lives. These forces move like the short hand of a clock—we cannot actually see them. moving, but from time to time we can ascertain, without any doubt, that they have moved. It is also quite easy toascertain that these upheavals I have been speaking of have been taking place quite recently. The east coast between Aberdeen and Arbroath shows this definitely, for in every other cove we find a crescent of marshy soil or gravel lying between the highest water-mark of the present day and the cliffs that have obviously been carved out by the waves at no very distant date. There are other parts of the world, such as some portions of the coast of Sweden and some of the shores of South America, where this rising is still more pronounced, while, on the other hand, the west coast of Greenland is gradually subsiding. It is chiefly to this cause that we owe the general elevation of the Highlands as well as a good many of their picturesque features.

(2) Probably the next most important agent in the formation of scenery is the denudation of the soil by rain and the other elements. Unlike the first, which is apt to be intermittent and casual in its incidence, this action may be said to be permanent and general. The effects of this process may be very plainly seen in our valleys. They are manifestly carved out by the slow corroding of the rivers which run through them, these rivers being practically the rains that have fallen within that river-basin assembling on their way to the sea. At first glance, it might seem that that quiet river murmuring on so peacefully would be totally inadequate to produce some of the results that we find, for our straths sometimes measure miles across, especially if estimated from top to top of the hills that have been sundered in their formation. We must remember, however, that there is really no limit to the ultimate effect of a persistent cause, given sufficient time. It is not, however, on the quiet, tranquil days of its life that the river does the most of its serious work, besides it is powerfully assisted by every flood and by every frost in widening the valley which it has once begun to fashion. Anyone who has any misgivings as to the corrosive power of water may easily put them to rest by a very innocent experiment with which I have amused myself lately. All that is necessary is to make a rough map of Scotland-or, for that matter, of any other place-with clays and soils of various degrees of cohesion to represent the varying toughness of different kinds of rock. This may be merely a ground plan without any elevations. Next get a watering can and let the rains fall ad lib. Presently there will be any number of burns, streams and rivers, all busy

cutting out miniature glens and valleys and producing great deltas of alluvial deposit beyond the original coast line. I do not say that this experiment will result in reproducing a model of the actual river system of country, but it is certainly wonderful how many of the rivers may be identified with the help of a little imagination, and the more faithfully one observes the actual structure of the country in the original cast, so much the more accurately will the rivers reproduce the details. Thus I found that a Moray Firth in the original always elicited a river Ness when the rains began. I do not pretend to attach any scientific importance to this little amusement, but it certainly illustrates very faithfully the play of running water on the surface of the earth. all the water will gather wherever there is a little depression in the soil, and, as soon as it has filled it up, will leave by the lowest point in its contour and pass on to repeat the same process with the next available depression. But as the water flows over the edge of these depressions it will gradually wear it down, until, instead of a succession of depressions, it forms one longitudinal cavity which we call a glen. The same process will be going on all round, and as all the rills are making for an identical objective-viz., a lower level-many of them are bound eventually to strike out in identical directions. So the various streamlets, each cutting out its own little glen, by uniting their efforts, are able as a full-fledged stream to carve out a broad strath and a valley that goes widening onward to the sea.

But, as I have said, there are other elements that play an important part in the formation of the valleys. Probably the most powerful of these is frost. Wherever there is a little crack or rent in the soil or in the rocks, there the frost will introduce its powerful lever. First of all, in wet weather these fissures will be filled with water, but some evening the clouds will roll away, the air will be clear and keen and all the stars quivering with scintillation; the homeward-bound, in greeting each other, will not fail to remark that it is "going to be frosty to-night," and so it will be. Then all the water that is caught napping in the clefts will insist on more elbow-room as it dilates into ice. Thus,

on the slopes, huge masses of earth will be dislocated and would be precipitated down the incline, were it not for the grip of the frost. And so with the rocks, huge portions of which may lose their equilibrium by being forced a few inches from a position of equipose. While the frost lasts all will be held together by the very force that is working for disintegration. But when the thaw comes there will be many a miniature landslip along the glens, and many a chip and block of stone will leave its native cliff for ever. Then when the rain comes again it sets to work at once, wearing down all the asperities left by the action of the frost. The tendency of the river is simply to cut out a channel for itself, and, if left alone, it would naturally produce a cañon or a narrow gorge with perpendicular sides. But the sharp edges resulting from this formation, being exposed on two or more sides, cannot long resist the disintegrating agencies that are ever ready to set them free to follow the law of gravitation that is constantly summoning them downwards. The detritus is carried away by the river according to its strength, and is used as an instrument for the further carving out of the channel, just as diamonds are polished with diamond dust. It is to the same process that we are indebted for the corries among the mountains, which constitute such a prominent feature in Highland scenery. They are simply the enlarged channels which the streamlets, wielding a power in proportion to their impetuosity, have cut out of the mountain-side. Strange as the statement may seem, it is to these excavations made by running water that the existence of our mountains is Were there no sun there could be no shadow, and there could be no mountains without the intervening hollows, but the whole surface would be one great table-land, whatever its elevation might be above sea-level.

(3) The next process which we have to consider is the deposition of sediment, which may take place in the sea, in lakes or in river beds. This sediment is merely the result of the denudation that we have been considering. All the matter that has been torn from the land in the formation of the valleys must be deposited somewhere. A great proportion of it is borne to the sea, where it eventually settles

to the bottom. The effect of this is the gradual deposition of soft material in regular strata, which, in the course of ages, will harden into rock, which, at some future time, may be again raised above the level of the sea to undergo a repetition of the same process all over again. On the other hand, when a river flows into a shallow sea, it often succeeds in filling up the latter with the sediment which subsequently emerges in the form of low flats of mud and ooze, which thereafter depend for their augmentation on the river which overflows them in flood, or adds to them at the edges especially in the case of deltas. Thus we obtain those level flats that are so often to be seen near the mouth of a river. The same thing may happen when the sediment is deposited in lakes; in fact lakes often disappear altogether in this manner, the cavities which held them being filled up by the sediment. Again the river may deposit the sediment in its own bed. This happens mostly in the lower stretches where the water has succeeded in carving its channel almost to the level of the sea. There it flows so gently that the solid materials get time to settle either at the sides or in the bottom. The result is those flat alluvial plains which often lie along the lower reaches of a river and so enhance the landscape with the products of their fertility.

(4) For our next point we have to go back many centuries to the time when this country experienced a climate similar to that of Greenland to-day. It is not within my province, and still less is it within my competence, to explain the cause of this strange departure from the normal condition of things. Though we ignore the cause, however, we are none the less certain of the fact. At that time more snow fell on our hills than the climate permitted to melt where it fell, so it accumulated till its weight was sufficient to impel it down the slopes in the form of ice-a form that snow always assumes after lying for a certain length of time. originated the glaciers which slid slowly and imperceptibly down the valleys in place of streams. The glaciers have long since passed away, but the valleys remain to give us a faithful account of what befell when the ice was passing. As these great, solidified streams moved on, everything that became V. S

detached above them, and everything that could be detached from beneath, became imbedded in their mass and were carried off. So they glided on, laden with whatever they could pick up by the way-splintered rocks, rough boulders, gravel, sand, mud, &c. When they reached a zone whose temperature was more than they could bear, those grasping monsters were forced suddenly to disgorge all the booty so assiduously gathered as they came along. To-day we find these piles of promiscuous rubbish just as it was yielded up by the melting ice, outwardly disguised and overgrown no doubt, but constitutionally still the same. It does not require much geological skill to enable one to discriminate between those moraines and the agglomerations of similar matter accumulated by running water. The water bears its plunder along chiefly by rolling, so that all the rough edges of rocks and stones are worn off by friction. The ice, on the other hand, carries things bodily, and so preserves them as it found them, except those materials that happened to form part of its under surface (as an Irishman might express it), which will be polished flat on the under side, and probably scratched by frequent contact with hard, sharp rocks. Another distinguishing feature is that water deposits the detritus in fairly regular strata, whereas a melting glacier must simply let go and allow everything to drop in an indiscriminate conglomeration. These moraines, as we might expect, are generally thrown across the mouth of a valley, and very often give rise to a lake within it, not only on account of the deposited rubbish damming back the water, but also on account of the valley having been more deeply excavated by the ice down to the point of its dissolution.

But the ice was not always allowed to behave in this orderly way. Sometimes, instead of melting on dry land, the glacier would slip down right into the sea. The seaward end would then be buoyed up by the water till severance took place, when it would float away as an iceberg. It would then drop its freight all over the bed of the ocean in proportion as it melted. Now, we have incontrovertible evidence to show that during the prevalence of the ice there

was a period when the land as we know it was submerged in the sea to a depth of about 2,000 feet. Consequently the greater part of our present country was then the bed of the ocean, and so received its share of spoils from the dissolving icebergs. This explains the presence of those detached masses of rock, known as erratic blocks, lying Sometimes great stranded far from home and friends. masses of a certain formation are found reposing in splendid isolation, scores of miles from any bed-rock of similar constitution. Such masses often form a prominent feature on hilltops, being frequently connected by popular legend with some lapidating scheme of the Devil's. These might easily be accounted for if we suppose, as seems very reasonable, that a floating iceberg had stranded and melted away on the hill-top which was then an island. If this theory be correct these blocks should generally be found at an elevation approaching 2,000 feet, but as to this I have not succeeded in obtaining any definite information.

Such, then, is a rough outline of the chief features left us as a legacy by the mysterious and highly interesting age when our land experienced all the rigours of an arctic climate. Fortunately there is not much more to add.

(5) Volcanoes sometimes contribute largely to formation of scenery. The characteristic features may be inferred from the nature of volcanic phenomena. result from an outbreak of the internal heat of the earth. The pressure of the imprisoned gases forces the rocks upwards until a vent is formed, and the escaping gases often hurl the remaining obstacles with tremendous violence into the air. These and the succeeding streams of lava or molten mineral matter fall around the vent and gradually form a cone. The familiar mole-hill is formed on on the same principle, with this difference that the materials ejected by the mole, lacking the viscosity which the lava imparts, fall around in every direction, not possessing sufficient cohesion to form a perfect cone. The lava and other volcanic matter often overflow these cones, or break out through them, and overrun the adjacent country in vast sheets, completely obliterating the former aspect of the landscape. At other times the molten matter flows, or is forcibly injected, into fissures of the rocks. This matter may eventually harden so that it is able to resist the denuding agencies that subsequently waste away the rock that formed the mould, thus producing the lava dikes; or again, it may prove to be less durable than the containing rock, in which case the original fissure will gradually reappear, keeping pace with the erosion of the intrusive substance. Instances of all these formations occur in a broad belt of volcanic predominance which stretches across Scotland from Fifeshire to the Firth of Clyde, and still more prominently in the islands of Bute and Arran, as well as in several points of the Hebrides. Sometimes again, the lava, in cooling, crystallises into polygonal columns, producing some very remarkable arrangements. The examples in Staffa and Mull, as also the Giants' Causeway in Ireland, are characteristic of this formation, and are so well known that it is sufficient to cite them in passing by illustration.

On the whole, it may be said that though volcanoes have been at times very active in this country they have not contributed what could be called a predominating feature to Scottish scenery.

Such is a rapid, and, I fear, a very rough review of the agencies which have been chiefly instrumental in imparting to our country the outlines which it presents.

# EXCURSIONS AND NOTES.

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OUR venerable honorary member celebrated his diamond jubilee as a parish minister in October last. The reverend gentleDIAMOND JUBILEE OF man was presented with a very handsome cheque, and Mrs. Forsyth with a silver kettle as a memorials of the occasion.

The most important event in connection with this club, which was inaugurated 1st February, 1906, was the climbing of Cairngorm on the May

THE ABERDEEN
TOURING CLUB ON
CAIRNGORM.

holiday. The Club drove to Glenmore Lodge from Boat of Garten where the company partook of refreshment previous to starting on the journey—most of whom were shortly to be initiated in the art of mountaineering. Mr. James

Cran Hendry, one of the Vice-Presidents, who has climbed several peaks in the district, acted as guide, the face being climbed under a burning sun. As we neared the summit the cold was intense, and after ten minutes our number was augmented by the appearance of Dr. Levack and Mr. Walter A. Reid, C.A., the former gentleman taking a photograph (which I regret to say got broken and proved worthless) before descending. The ascent from Glenmore Lodge was made in three hours and a half, and the descent in an hour less.

At some parts the snow was a few feet deep, and during the greater portion of the day a heavy mist hung over the mountain tops.

Mr. Edward Alexander is president of the club; and the writer is hon, secretary.—ROBERT MURDOCH-LAWRANCE, 71 Bon-Accord Street, Aberdeen.

THE first of these rambles was by a trio (J.J.W., W.P.S., and the writer.) We left Edinburgh on the 17th September by a forenoon train, with cycles.

TWO RAMBLES ON THE CAIRNGORMS.

Arriving at Ballater about 6.0 we crossed by the Gairn to Corgarff and slept there. Next day we climbed Ben Avon, having much trouble to find the top in the mist. We ought to have

"done" Beinn a' Bhuird also, but did not. Descending by An Sluichd, we returned by Inchrory to Corgarff. The following day we cycled down Donside to Aberdeen.

The second expedition was made on 5th October by W.P.S. and the writer from Edinburgh. We ought to have been at Broomhill at 4 a.m. the following morning, but a railway breakdown made it 7. We breakfasted at Nethy Bridge, then up the Strath to Loch Avon. We rounded the upper end, and after a bath in the loch made for Loch Etchachan with the intention of climbing Cairngorm of Derry. Unfortunately, however, we mistook for it the top (unnamed) immediately south of the loch, and between it

and the true Derry Cairngorm. To climb the latter would have added little, but time was important. We descended to the Luibeg burn between the slopes of Ben Muich Dhui and Derry Cairngorm. Prudence would have counselled a turn to the left to Derry Lodge, where we should have had a good road. We preferred, however, to keep to our plan, which would have been all right if we had not lost the three hours in the morning. Accordingly we turned right towards the Dee by Carn a' Mhaim reaching the river half a mile south of the Geusachan confluence when it was dark. From that point to the road at White Bridge may be about four or five miles, but in a dark moonless and starless night going is slow. Vestas lent some aid. Finally about 9 p.m. we reached our destination. Next day to Blair Atholl by Glen Tilt. Two very enjoyable days, but no real top. -J.B.

WE went to Coylum Bridge on August 7th last, and staved at the cottage close to the bridge, a few yards below where the Druie is formed by the junction of two streams, the Luineag from Glen

GLEN EUNACH.

A "CLOUD-BURST" IN More, and the Bennie from Glen Eunach. following afternoon a thunder-storm visited the

district, and the rainfall was heavy. In the evening we were sitting chatting, not having yet risen from the supper table, when we heard a sound of an unusual kind, but not much unlike the rush of an approaching motor-car. "Hark! what's that? Surely its not another car." Searcely had we begun to listen when loud cries from the other inmates of the house called us out to look at the river. The mysterious sound had rapidly grown in volume, and now declared itself as the wild rush of the greatly swollen Druie, foaming in full spate but a few yards from the door. Our hostess had heard the noise, had gone at once to the door and so had seen the front rush of the flood, and had called us. We hastily ran out, and looking at my watch I noted that it was 8.35 p.m. The Druie was big with dark water, and, swirling and foaming, was as impressive to the eye as it was insistent to the ear. Logs and tree branches were surging along, and what looked like the carcase of a sheep or

A little examination of the streams at the junctiou, in full view from the bridge, showed that the spate was entirely on the Bennie, and not on the Luineag. I went up the Bennie just beyond the junction, to a frail suspension bridge that swung across the stream. Here by 8.55 p.m. the water had risen so high that the broken billows were shooting across the middle of the bridge. This indicated a rise in twenty minutes of more than three feet. Numerous logs and snags struck against the bridge, and we expected at every stroke to see it break, but its elasticity saved it, and it seemed to suffer no damage. All through the evening could be heard not only the rush and roar of the water, but also the bumping of the floating timber, and the dull, hard thuds of big stones rolled along the bed of the stream.

The generally accepted explanation of the spate was that the thunderstorm rain had overfilled Loch Eunach and broken its sluice gates; this however proved not to be the case. The keepers went up the glen the following morning, and found the sluice all right. The spate was due to a somewhat local but unusually heavy rainfall.

I visited the glen myself, and went all round the upper region of it to see what evidence it bore of the rain-storm. There was nothing noticeable below the lower bothy except that the Allt Ruigh na Sroine had been running full. But beyond the bothy the drainage from the west face of Braeriach crosses the driving road, and here there was abundant evidence of the heaviness of the downpour. Some hundreds of yards of the driving road had been completely torn away by the rush of the water, and where had been a road was a gully in the ground, the material previously constituting the road bed having been carried across into the heather and bog of the lower ground. I was struck by the value of the coating of the vegetable growth as a protection against such denudation; the bare road had been torn up, but the adjoining plant-covered ground was comparatively uninjured.

In Coire Dhondaill there were no special marks of heavy rain, but on the other side of Loch Eunach, nearly all along the northern or lower section of Ross's Path, was evidence of a striking kind, more marked even than that on the driving road. Numerons burns come down from the crags and slopes of Sgoran Dubh Mor and Sgor Gaoith, and across the path on their way to the Loch. Each of these had been temporarily converted into a fiercely raging torrent. At each such crossing the path had entirely disappeared, and the deeply scored gully of the stream was bordered by great banks of rocks, gravel, and sand, which seamed the hill-side for hundreds of yards, and showed themselves far into the waters of the Loch.

From the relative positions of these two areas of destruction, the one on the driving road and the other on Ross's Path, it seems that the line of "cloud burst" crossed the glen obliquely from south-west to north-east, from the neighbourhood of Sgor Gaoith to that of the lower bothy. The condition of the hill-sides in the affected parts reminded me forcibly of the condition of Glen Dee near the Corrour Bothy after the cloud-burst of July, 1901.—C. G. CASH.

THE Club made excursions to these hills on, respectively, 21st July and 10th September last, both exceedingly successful and interesting events.

BEINN IUTHARN MHOR
AND THE
CROMDALE HILLS.

Ben Uarn, as the former is best known, is situated at the head of Glen Ey, and was reached via Inverey, the conveyances being left at Alltanodhar Shieling. Carn Eachie (2316) was the Cromdale summit selected, the ascent being made

from Inverchabet in Strathavon. This was quite a new district for most of the members, and was so much appreciated that doubtless the Hills of Crondale will soon be re-visited by the Club.

THE Eighteenth Annual Meeting of the Club was held on 21st December 1906, the Chairman, Mr. John McGregor, presiding. The President and

OUR EIGHTEENTH ANNUAL MEETING.

Vice-Presidents were re-elected. Mr. James A. Hadden was elected Chairman, and the Secretary and Treasurer were re-elected. The following gentlemen were elected members of Committee—

Messrs John Clarke, Robert Cumming, Robert Harvey, John McGregor, R. W. Mackie, William Porter, James A. Ross, James Smith, Alexander

Troup and George Wood. The Spring Excursion was fixed for Ben Ledi or Morven, and the Summer for Glas Maol. It was also resolved to have three Saturday afternoon Excursions. The following addition was made to Rule VIII.:—Members may compound future Annual Subscriptions by payments as follows:—Members entered before 20th February, 1890, £1 1s.; members of fifteen years and over, £1 11s. 6d.; ten years and over, £2 2s.; five years and over, £3 3s.; and new members, £5 5s., including entry money.

The meeting approved of a subscription of £1 11s. 6d. to the Scottish Rights of Way and Recreation Society, Limited, towards the repair of the Allt Bennie foot-bridge.

The following new members have been admitted:—Dr. A. R. Galloway Messrs. David Levack, Edward H. Marshall, George Murray, J.P., John A.S. Cameron, William Barclay and Hugh S. Ingram.

The retiring chairman, Mr. John McGregor, was thanked for his valuable services during his term of office.

year; (3) to fix the excursions for the ensuing year; and (4) to transact any other necessary business. Special general meetings shall be held whenever deemed necessary by the Chairman, or on a requisition by at least ten members of the Club. General meetings shall have power to deprive of membership of the Club any member who may, in the opinion of the Committee, have misconducted himself.

VI.—A Minute-Book shall be kept by the Secretary, in which all proceedings shall be duly entered.

VII.—The election of members of the Club shall be made by the Committee in such manner as they may determine.

VIII.—The entry money of members shall be 10s. 6d., and the annual subscription 5s. Members may compound future Annual Subscriptions by payments as follows:—Members entered before 20th February, 1890, £1 1s.; Members of fifteen years and over, £1 11s. 6d.; ten years and over, £2 2s.; five years and over, £3 3s.; and new members, £5 5s., including entry money. Members shall receive copies of all current issues of the Club publications.

IX.—The annual subscription shall be payable in January. Members not in arrear may retire from the Club at any time on sending notice in writing to the Secretary or Treasurer.

X.—The Committee shall have power to elect suitable persons to be Honorary Members of the Club. Honorary Members shall have no voice in the management of the Club, but otherwise shall have all the rights and benefits of ordinary members.

XI.—No change shall be made on the Rules except at a general meeting of the members, called on seven days' notice. Intimation of any proposed change must be made in the notice calling such meeting, and any alteration proposed shall only be adopted if voted for by at least three-fourths of the members present at the meeting.

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